GTA2

Game Design

(1/9/98)

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OVERVIEW

GTA2 is a new generation of driving game, designed for a new generation of games players on the next generation of games platform.   The successor to GTA, GTA2 promises to be the fastest, most furious non-linear driving game ever created.

Set in an eerily familiar futuristic, evolving city, you are the lone gunman.   Out of cash, out of luck and definitely outside the law, you can take your pick from the thousands of vehicles jamming the dirty city streets. Law and order is breaking down, the city has been carved up by the ruthless gangs and crime syndicates leaving the police and government to fight an ever more savage rear guard action to wash the scum from the city streets.

The city is yours for the taking if you have the guts – and the brains.   The choice is yours: find a gang willing to employ your sorry butt or use your ruthless cunning to set the gangs at each other's throats, with you wiping out the last few survivors to emerge as king of the city.

The action takes place in a vast, dark, futuristic film noir style metropolis.   Huge buildings loom above the crowded, stinking streets.   The slums and inner cities are a mad confusion of people, vehicles and random crime which the rich and powerful have insulated and sealed themselves away from in luxurious, fortified housing schemes.   Rising above it all, victimising the entire city are the…

Gangs

The gangs are the ever-present menace in every area of the city.   A constant battle for turf, money, drugs, business and respect rages through every street, alleyway, freeway, plaza and road in this huge city.   Several of the gangs will kill each other on sight.   A few of the gangs have an uneasy truce that allows them to exist side by side.   But a wrong word here, the wrong corpse there and the whole situation could explode in an orgy of blood and violence that makes Grand Theft Auto look like a stroll in the park.

The Yakuza control most of the extortion, prostitution and illegal gambling in the city. Accepting only the best in everything – clothing, cars and weapons.   They demand instant respect from their victims and each other and pride themselves on their professional and businesslike attitude.

The Russian Mafia moved into the stagnating remains of the American cities just as soon as they could.   They now control most of the weapons trade and contract killings in the city. The latest high tech weapons, like those carried by the Yakuza, fetch top dollar back in Moscow.   The state of warfare between these gangs is total and relentless.   There are more Mafia and Yakuza corpses in the city than even the rats (or the very poor) can eat.

Making a welcome return in GTA2 are the Krishnas.   These cheery fellows dance around the city without a care in the world, sharing an unscrappable belief that they can save souls and right wrongs (like Batman without the fetish gear).   Or do they?   Is there a more sinister agenda behind the saffron wearing, tambourine banging forced cheerfulness?   Why do there seem to be more of them these days?

There are also several dozen other gangs, both large and small, all competing for the rich pickings of this colossal city.   One man can change the world with a bullet in the right place, but which man, and which place?

Of course, life is never that simple. Every move you make, every crime you commit is watched by the city's vigilant – and heavily armed – police force. The days of the local copper making his rounds to 'Protect and Serve' are long gone. Nowadays the police travel in pairs, respond with lethal force – even to littering calls – and consider Dirty Harry a bit of a nonce. The good old days of GTA, where the Police might chase you a bit, if they think you've run over one too many pedestrians are long gone.

Tactical Response is the norm these days. Epic police chases and shootouts are what the boys in blue do best now – and it doesn't stop there. The Police now have allies and associates who are only to eager to bring a fledgling crime career to a messy, sticky and rather bloody end. If you can keep the Police off your back while racking up crimes against humanity then the local rozzers will call in the SWATs. These fully armoured and fearsomely armed riot police travel in vanloads (8 of them together – what fun) and have a pile of new equipment to hunt, catch and kill the player. Roadblocks, stingers (spiked roadblocks) and machine guns mean that these guys are pretty much the end of the road for the slow and stupid criminals out there.

For those with slightly more criminal intent the SWAT teams are not the end of the line. The SWAT teams can call on the Government's specially trained elite crime busting forces. A cross between the CIA, the ATF and the MiB, these guys take no prisoners. They will pursue the player until death – theirs or yours. If you're good enough to evade these guys then the issue of catching you goes out the window and the military are called in. Platoons of marines, armed to the teeth and each following the order – Seek and Destroy! If the sheer numbers aren't enough to drop you then the jeeps, armoured personnel carriers and tanks will finish the job off.

Good Luck.

Although that's probably not gonna help…

SETTING

The Time
The game will be set slightly in the future (ref: *Max Headroom*'s "20 minutes into the future") to give more artistic freedom and scope for features.

The Place
A corrupt megalopolis such as Los Angeles, with a wide range of districts - varying in prosperity, housing, industry, retail sites, docks, "green" areas etc. We won't base it on one particular real life city because the game fails in comparison, but we can take inspiration from LA's various districts – upper class Beverly Hills, seedy Hollywood, shopping areas of Venice etc.

The Look
The look will be dark retro-future (ref: Frank Miller's *Hard Boiled* and Terry Gilliam's *Brazil*) for a moodier and more atmospheric look and feel. It will not be sufficiently dark to warrant real-time lighting however. It is strictly evening, not night.

TERMINOLOGY

- This game is called "**Grand Theft Auto 2**" or "**GTA2**".
- The **game** is set in 1 large **city**
- The **city** has 3 **maps**
- Each **map** has 25 **missions**
- Each **mission** has 1 or more **tasks**
- A **map** can be exited once the player has achieved a target **score**
- **Score** is awarded either by completing **tasks** and **missions**, killing someone, stealing a car, destroying a car, etc etc.
- There are no **levels**.

THE CITY

Each map can be up to 256x256 blocks, and eight blocks in height (although the bottom block will always be water, and the top block reserved for explosions and special effects). This allows buildings to be a maximum of six blocks high, or alternatively, slopes can be used to good effect for hilly parts of the map.

Water
Water is a lethal hazard to both pedestrians and vehicles. Pedestrians will sink and die on contact with water. Vehicles will simply explode. It must never be possible to walk into water – it should always be (or appear to be) a level below so that everything always falls into water. We should have two types of water – channelled water and static water.

Roads
All roads in the city will be horizontal or vertical, hence all corners must be 90 degrees and junctions must be either T-junctions or crossroads.
All roads will generally be set up to allow computer controlled vehicles ("dummy cars") to travel along them obeying certain rules (see cars).

Gravity on sloped roads. Currently switched off (ala GTA) because the gravity proved too annoying, we could switch it back on, but with a lesser force. Would be nice tohave a stationary car bumped, and it could then roll down the hill as if the handbrake had been knocked off.

Traffic lights
All traffic lights in the city will be at the same state (as in Playstation version of GTA). Therefore, we should avoid having two junctions with traffic lights on screen at once. Generally, traffic will stop when traffic lights are at red.
Pedestrians will be able to use traffic lights to safely cross roads – they will wait at the side of the road until the appropriate light has turned red, a few seconds later they will be allowed to cross. If they are still walking across when the lights turn Green, they will run across the remainder of the road.

Bridges/walkways
Will be created using the three gradients of slopes we have available: 7°, 26° and 45°.

Dummy cars can use bridges in the same way as any other road to traverse part of the city. Bridges can be made over any part of the city (height permitting) – roads, water, other bridges, buildings, grass etc.

Walkways will generally be used for dummy peds to cross wide roads.

Buildings

Collision blocks are blocks of 64x64, so most building blocks will be square.
Buildings are completely solid – neither peds, cars or bullets etc will pass through a building.
For inaccessible areas, there will also be pyramid and diagonal block shapes to provide a wider visual variety for rooftops etc. Because the collision blocks will remain as cubes however, these will be placed where nothing can collide with them.

It will be possible to destroy buildings in GTA2. Leaving a bomb under / next to a building will cause it to explode and crumble to the ground. The most likely way of doing this will be to repeatedly chop the top planes of a building until it reaches ground level. Accompanied with suitable audio, screen shaking, flying debris (shrapnel, glass, building contents etc – which may in turn injure/kill others), smoke and explosions will prove very rewarding to the player. The remnants of the building will either remain blocked - as a pile of rubble, or as pavement which peds can traverse.

We can use this to greater effect in opening/closing access to areas of a city – a bridge collapsing blocks the only road into an area, or blowing up a block of buildings creates a clear road to give access to previously inaccessible areas. The dummy car routefinding will be aware of this and can be changed accordingly.

Different buildings/map areas may include: church, docks (complete with car sized crate with slatted roof for picking up / dropping off cars – perhaps get a ped trapped in the crate as well), red light district, financial district, park area, shopping area/mall, ice rink, storm drain, fire station, police station, hospital, slum, tenement building, cinema, bank, bingo hall, train station, morgue, gunshop, bombshop, scrapyard, car showroom, military base,markets etc.

We can have animated tiles to give us lighting effects, flags waving in the wind, shop signs animating etc.

? Glass windows. Would be nice to have sheet glass windows on the bottom row as shop fronts, just to provide things for the player to smash. Can't have vertical alpha'd tiles, but it could be difficult to show the differences between small and large panes of glass at the bottom of the map.

For cost values, see SCORING.

Mines Shop
For a cost every time a player drives into a Mines Shop, that vehicle is given a Mine.

OilSlick Shop
For a cost of every time a player drives into a Mines Shop, that vehicle is given an oilslick.

Spray shop
For a cost the player's police wanted level will be reset and vehicle damage will be repaired upon entering a Spray Shop. Each spray shop will have an associated colour and every remappable car will be sprayed that colour – regardless of whether or not dummy cars driving around can be generated with that colour. No response to a ped entering.

Bomb shops

For a cost when the player drives into a Bomb shop, the vehicle will be given a car bomb. Trying to get a second car bomb will not be allowed.

Pavements

Whilst dummy cars will not drive on pavements if they can avoid it, pavements will effectively be the same surface as roads and can be used by the player to avoid traffic.
We will experiment with giving the player the impression of hitting a kerb (mainly audio, and a marginal adjustment in the cars speed and direction).

Pavement features

Each of which may react differently on collisions with peds or vehicles.

- Fire hydrants. Obstruction to peds or slow cars. Fast cars will knock them over, shooting water into the air for a limited time. The water won't "lie" anywhere, but peds will avoid the water shooting up with appropriate comments, and driving a car over the "geyser" may give the effect of lifting it into the air.
- Boxes. No reaction to peds, but will scatter when hit by a vehicle.
- Litter. Reacts to peds and vehicles, relative to their speed.

Cranes

Pivoting scaffolding-type cranes (with concrete block to balance short end of pivot) with the arm able to extend slightly. Base of crane doesn't physically move, crane can only rotate and extend. Base of crane needs to be collidable, the rest the player can never interfere with.

Magnet

Extendable part.

Base

Concrete Weight
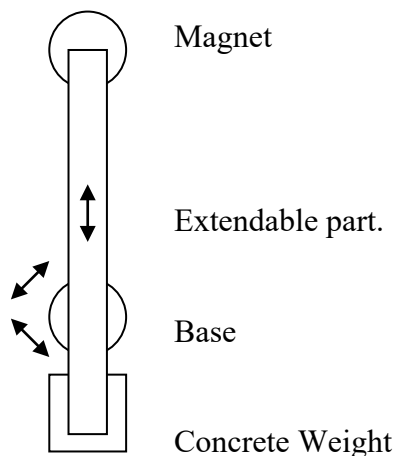
Three purposes :
- Lift a car out of the players control onto/into somewhere in return for points – ala the docks in GTA.
- Lift a car out of the players control into a crusher for it to be crushed into a tiny metal block in return for points or respect from a gang.
- Remove cars from transporters. There are vehicle transporters driving around with desirable cars on them – the only way to get these cars

Road features

We will have the option of using any of the following to provide extra variety on road surfaces. Although all could react to cars, it is not expected that any would react to collisions with pedestrians.

- Manhole covers. Mainly to create a 'clunk' sound when driven over.
- Drains. May have slight smoke effect to add depth to city.
- Traffic cones. As in GTA. Slow car down slightly and get dragged along underneath cars when hit at high speed.
- ? Bumps/Dips. Similar to kerbs, these may affect car handling by a marginal amount.?
- ? Speed bumps. When hit at too high a speed, gives momentary loss of control and impression of being airborne.?

Zones
In the editor it is possible to select a rectangular area of the map and assign it a zone name.
This can be used in the game to define gang areas, ped density, car quality, area names – even individual street and building names if they are significant enough.
Zones which are just areas of the map over a certain size should display N,S,E or W in front of their name as appropriate.

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COLLISIONS

Vehicles with:

Peds

Very low speed	Peds nudged/jump out of the way
Low-Medium speed	Peds thrown up in the air (unconscious on landing)
High speed	Peds squashed

"High Speed" should be a speed practically every vehicle can reach (except really crap ones like the Isetta..?)

The following vehicles should always squash peds at anything above very low speed : Tanks, buses, trucks, fire trucks and trains.

Any vehicle travelling at any speed colliding with an unconscious ped should squash him.

Wish List : It may be possible to give a bonus for crushing peds against walls – hitting them at low speed from the opposite direction to a nearby wall.

Wish List : Recognising that a vehicle has side-swiped someone – should always send the ped flying, and needs to give some kind of reward / bonus.

Wish List : "bump and grind" – getting a ped knocked unconscious by hitting it, and then squashing him while unconscious. Award mega-bonus.

Wish List : Super high speed collisions should have a zit-bursting blood particle spray for extra effect.

Wish List : Wheelspinning on top of dead peds should spurt blood out the back of the car.

Wish List : Different effect (probably audio) for hitting/squashing different types of peds.

? On PC version, every time a ped is run over, attach a blood particle object to the car to give the impression of the car being splattered with blood. ?

Walls
Buildings, solid fences etc are all immovable. They will not react when hit by a vehicle travelling at any speed. The vehicle will either be stopped dead, bounce off, or scrape along the wall depending on the vehicle's angle and speed of collision. When scraping along walls, the particle engine should be able to provide spark effects to accompany a grinding noise. It should be possible to make the sparks the same colour as the car's remap to give the impression of paint being scraped off.

Vehicles
Other vehicles will be treated as movable walls – the other vehicle may be shunted back depending on the relative masses, speeds and other obstacles in the way. Assuming no movement, the collision will be similar to hitting a wall.

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Objects

- Immovable. Car reacts as though it has hit a wall. ie Trees. It may be possible, that when a car hits a tree, to have a few particle leaves falling down.
- Movable. Car will not be stopped, although speed and direction may be affected. Object may remain stationary, be thrown elsewhere, and/or go through an animation to illustrate the collision. All movable objects can have a specific weight so that a certain mass/speed to collision is required to move the object.

Possibility of using object collisions as sub-games - football - knock a bin out of one end of a street, 10 pin bowling - knock over 10 bins just by skidding into the first one, pinball, and other dubious but remotely possible effects for bonuses/secret things.

Air

Vehicles can travel through the air – by going over the edge of buildings, bridges etc. Whilst airborne, car control is ineffective and some form of gravity / slowing down will be applied. Assuming the vehicle lands on a solid surface, its damage will be depleted relative to the height it has fallen. If it lands on peds they will be squashed. If it lands on objects, they will react as if they were hit at a high speed. Landing on another vehicle or water will destroy the vehicle.

Peds with:

Peds

Dummy peds will not collide with one another.
The player ped and mission/gang peds will be slowed down by collisions with any other ped.

Walls

Walking straight into a wall (at 90 degrees to direction of travel) will stop the ped on the spot. Colliding at an angle with a wall will allow slight movement to the appropriate side to avoid the "stickiness" of walls associated with GTA.

Vehicles

As with walls.

Objects

- Immovable. As with walls.
- Movable. Object may react by movement or animation, and ped may be slowed slightly.

Air

When a player is in the air (likely to be from walking off a building/bridge, or exiting a falling car), the forward speed is reduced to zero, and gravity will be applied until the ped hits solid ground. The peds health will be affected relative to the height fallen, as follows :

Falling one block :   No damage
Falling two blocks :   16% Damage
Falling three or more blocks :   100% Damage

Objects with:

Each object has a set of info -
- simple 'type', eg basic, animating, movable, movable+animating
- collision info, eg noncollidable, semi-collidable, collidable
- reaction to collision eg kill ped, kill ourself, goto 'next state', animate, play sound effect, do *something*
- 'next state' - when we finish doing this state, we proceed onto the next one.

Semi-collide is a new 'collision state'. Any object with this state *doesn't* get 'spotted' by cars/peds for collisions. But *it* still can look up for collisions - this saves a lot of processing time doing things this way. The animating rubbish uses this state. The "collision reaction" will eventually have a varied selection of possible outcomes that 'affect' the game in some way.

Here's an existing example

Rubbish:
> This consists of three states:
> 1 - basic, semicollidable, with a reaction of "goto next state"
> 2 - animate once, noncollide, "goto next state"
> 3 - basic, noncollide, do nothing.

So, the player walks over the rubbish. The rubbish object 'spots' this collision & switches itself to state 2, where it animates once through its frames of the rubbish 'breaking up'. When it's finished, it switches to state 3, the final frame of animation, and goes into a 'basic object', which does almost next to no processing - saving time in game.

The individual states don't care what graphics they have, what 'model type' they are - it's all preprogrammed to behave depending on the various states. So you could mix & match states without any (forseeable) problems. What can we do with this? Already we can have collidable objects that animate, something that wasn't possible in GTA...

Peds and objects
Object will become stationary

Cars and walls
Object will either become stationary, or bounce off, depending on its initial speed.

Air
Object will fall directly down to become stationary on contact with solid ground.

Water
Object will "sink" and be destroyed with a splash.

<u>**Projectiles with:**</u>

Peds and cars
Their damage will be affected appropriately.

Walls

Depending on how different walls/fences/signposts etc are set up in the level editor, projectiles can either collide with particular walls (causing explosion / spark / whatever) or pass straight through.

Objects

As with walls, some objects will not obstruct projectiles, others will.

Projectiles

Projectiles will not collide with each other.

SPECIAL EFFECTS

Explosions

Caused by excessive damage to vehicles, or blowing up a building. Because we have an extra layer of map to use solely for explosions, they will be more varied and impressive. They will also be alpha-mapped to make them more visually impressive.

We will retain the ability to cause chain reaction explosions between adjacent vehicles, but not for buildings – to avoid players wanting a single bomb to decimate the entire city!

Particle Engine

The particle engine will give us massive scope to add an extra touch of feedback polish to the players actions. We expect to use it for:

- Muzzle flashes
- Smoke trails from rockets
- Smoke/steam rising from manholes and pipes
- Water from water cannons and fire hydrants
- Vehicle collides with vehicle: glass, metal.
- Vehicle collides with structure: glass, metal.
- Vehicle scrapes along vehicle, wall, structure: sparks.
- Ped crushed beneath a vehicle: blood (depends on vehicle size).
- Punch ped: blood, sweat.
- Shot hits ped: blood.
- Shot hits vehicle: sparks.
- Shot hits structure: sparks, dust.
- Smoke from guns following, say, 30 shots of continuous fire.
- Smoke from vehicle should emanate from the engine.
- Shell cases (well pixels) from guns.
- Splash when ped or vehicle collides with water.
- Spitting.

Transparencies

The engine will be capable of displaying translucent effects, if we decide to use them.

~~Video Wall~~

~~We can create a "screen" showing the action happening in another part of the map if required. This could be used in a "Big brother" style mission, or just as a feature such as a drive-in cinema.~~

USER INTERFACE

Viewing

As with GTA, the "DMA News Helicopter" viewpoint will be used. The screen will scroll so that the player's character always remains in the centre of the screen.
The screen will zoom in and out of the map depending on the speed the player is travelling.

On occasion, the player will lose sight of their character. Namely when:

- The player's car comes to an abrupt halt next to a tall building, and the autozoom takes a short amount of time to reach the correct zoom level. This is accepted.
- The character is under concrete – when inside a building or under a bridge – unless a better alternative is discovered, an arrow showing the player's direction will be used again. However, use of wide bridges should be kept to a minimum to avoid disruption.

Control

The player's character will start with four lives, bearing in mind that he also has a four stage health level which must be depleted before he is killed – very similar to having the armour in GTA. We may need a way of topping this up with a visit to the hospital, or a gang member with 'healing hands'.

The basic control interface from GTA will be kept. Allowing the following actions:

As a ped:
Rotate left / right
Forwards / backwards
Jump
Enter vehicle
Select weapon
Use weapon
Special (spitting!)

As a vehicle:
Steer left / right
Accelerate / brake
Handbrake
Exit vehicle
Select weapon
Use weapon
Special

In addition, we will experiment with a strafe key (Shift + Right will strafe right and Shift + Left will strafe left) and evaluate whether it makes the game too easy.

Control

As per GTA, people should be able to click on either a Default or Classic button to get the settings listed below, or select their own configuration.

GAME	DEFAULT	CLASSIC

Left	Left	Z
Right	Right	X
Forwards	Up	U
Backwards	Down	I
Brake	Space	P
Enter / Exit	Enter	W
Attack	L.Ctrl	9
Previous Weapon	Z	L.Shift
Next Weapon	X	Tab
Special	Tab	S

The following 'function' keys are constant:

F1 - retune radio down
F2 - retune radio up
F3 - volume down
F4 - volume up

F5 - hide gang arrows
F6 - pause
F7 - repeat briefing
F8 - Bob

F9 - display area name
F10 - remote control(debug) / multiplayer messaging
F11 - player control mode(debug) (was F1)
F12 - camera control mode(debug) (was F2)

Jumping. The jump key should constantly work – so that the player can jump over objects if he desires. Trying to jump over a truck will make the player crawl under it – although under any 'abnormal' combination of circumstances, we can just make the player jump over trucks as well.

We will be able to jump gaps of one block (ie across rooftops), but not over any fences. Just when an appropriate obstacle is in the way (ala GTA)? What happens if jumping into a truck, so that before the jump is over, the player needs to crawl under it?

Instruction
There will be several methods employed to convey instructions to the player about how to progress through the game.

Arrow

The basic arrow which leads the player around the map to complete missions etc will be kept. Various other methods of guiding the player were investigated, but none have the immediacy and simplicity of the arrow. It will probably be more of an instrument than an arrow to give it a look of some sophistication.

Mission delivery

Will remain as text overlaid on screen in the guise of physical conversations, calls at phone booths, etc. The amount of text used will be minimised to avoid complications at late stages in the game and in localisation. Simple audio key-phrases accompanying each mission delivery could be used ("go waste him", "fetch, boy", "bring it back in one piece" etc etc). We can imply conversations in different ways : person to person, over a normal phone and by mobile phone.

The pager from the first game will not be used – instead messages will be conveyed using overlaid text or audio. Secrets can be revealed by leaving vehicles in incongruous places, or in hard to reach areas.
Timers will probably work best as simple overlaid text in the top left of the screen.

Adding a '#' character will cause all following characters to be remapped blue, until another '#' changes the colour back. For example,

[123] go and get the #Krishna# car

Would be displayed as:
go and get the Krishna car

Score

Will rotate as in GTA, but could also be done as a car's speedometer – effectively just boxes round each font character. We should try putting a dollar sign in front of the score to help reinforce the idea that money is points and points are money.

Ingame Options

When the game is paused, the user will be able to change :
- Music Mode
- Music Volume
- Sound Volume

Purely having these in-game may be too restrictive, so they could be added to the PC's Bob, and to the PSX's option screen.

User Display

Whilst the game is running, the screen will always display :
- Respectometer
- Score (with dollar sign)
- Multipliers
- Lives
- Health

And when relevant, will also display :

- Weapon selected icon (with numerical display of ammo remaining)
- Powerup held icon (most recent) (with numerical display)
- Weapon / powerup most recently collected – description of.
- Area name (needs textbox?)
- Car name (needs textbox?)
- Police Heads
- Mission briefing
- Mission briefing icon (phone, face, mobile, pager)
- Large text – 'Wasted', 'Busted', 'Toasted', 'Mission Failed' etc etc.
- Arrows (missions, kill frenzies, end of map etc)
- Gang arrows

SAVE GAME

Response to GTA indicates that GTA2 will be better received if we can create more save points and let people take breaks from the game at more frequent intervals. In order to try and hide the clumsiness of loading and saving options, we should implement the following :

In each map, there will be around three 'save-houses' which the player can use to save the game. These can be used at any time during the course of a game (outside of a mission), but once a save-house has been used it cannot be used again. This allows the players the flexibility of spreading their saves out equally over the course of the map, or saving them for more difficult missions towards the end.

Although the player can use these at any time, after the player a specific number of missions have been attempted (whether or not they were successfully completed), they will be given an appropriate brief and pointed towards an available save-house. If the player chooses not to save the game, triggering the next mission will deactivate the save-game arrow (although the save-house is still active any time outside of a mission).

Each save-slot has one save game status – starting the game from the front end with the same slot will give the choice loading the save-game - starting from the one and only 'save', regardless of map, or erasing the slot allowing the player to start from the very beginning of the game.

The save houses should be distinctive (ie a brothel) and need to have two states :
- 'Save' mode – lights are on, implying emptiness. Entering it saves the game. The lights are then switched off.
- 'Saved' mode – lights are off, implying occupancy. Cannot be entered.

On the PC, the save game should be as transparent as possible – possibly represented by some audio and a fade out/in to represent your spending a night in the brothel.
On the PSX we will minimise the disruption of the save-game menus. Saving the game should also cost the player 10,000 points in order to reward those who do not save the game.

The following details must be saved:
- Status of all missions – passed / failed / unattempted.
- Score
- Lives
- Multipliers
- Weapons held
- Gang relationships
- Crime statistics
- All other triggers – kill frenzies, bonuses, etc.
- Position in script
- Player's location
- Player's health
- Status of save slots
- (Map changes)
- (Wanted level)
- (Triggered, but uncollected powerups)

- (Last few cars – PC only.)

Initial calculations show that storing all this data will take up less than 8K which means it will only take up one slot on a Playstation memory card. PSX will also need to allocate one save-slot for storing high scores, settings, perhaps summaries of save-games, as well as up to four save-slots for specific save-games.

- Ditched possibilities for how to save game:
- Only after each map – as in GTA.
- Save key – allowing player to save at any point.
- Mission specific – after certain missions, players are given the option of saving.
- Point specific – every 500,000 or so the player is given the option of saving. This would be inconsistent between maps though.

- Possibilities for save-house buildings :
- Hotel – good for Vacancy / No Vacancy neon sign.
- Brothel – ties in with costing the player money and time passing.
- Lady-Boy club. Good for humiliation : "only poofs use save-game".

Each level designer will be in control of the number of save-points in each map, accessible from the start – leaving the player responsible for when (if) they want to save the game.

After each save, the game will simply continue – earlier plans for the game resetting and loading in the save game are no longer feasible.

On saving the game, we may need to do a brief fade-to-black and back to represent time passing and to cover up cars/peds being deleted.

Save-game slots should only be found in non-gang areas, so that a player isn't dumped in the middle of a gang that hates him.

Upon successful completion of a map, the game is automatically saved.

Assuming we have four save-slots, the Playstation will use up one memory slot for each save-game slot, and one for general game details – high scores etc.

Technical Definitions
- "save games" are the details I'm saving out for the purpose of 'restarting' a map in the middle of a game.
- "player data" is the info used by the front end - ie high scores, crimes committed on each map, what maps the player has access to, 'current' total score etc. Different to save games.

17/08/22

LOAD GAME

Also see Load Game Front End Design in GTA2 Front End Design.doc

As the player has the capability to go back and re-attempt earlier maps in the same game, we should keep track of the details for the highest scoring level. This allows people to go back and improve their overall score, without the risk of losing what they already have. Re-completing an earlier map would have to automatically save the player details, but the save-game details would remain as before so any half-complete map could easily be continued.

VEHICLES

All cars will have automatic gears and unlimited fuel to focus the game on the fun parts of driving.

Approximately fifty different vehicles will be available in the game, most of them having palette remaps to allow them to appear in a variety of different colours. Each of them will have unique handling tailored to give most vehicles some kind of an advantage over others.

The Playstation version will not be able to have as many remap palettes as the PC version does, so will have to be careful when cutting down the car remap list. The following should not be cut (and Keith will need to given a list of these):
- remaps used by a mission
- remaps used by a sprayshop
- remaps used by gang cars & other special cars

For each zone of the map we are able to define the density and 'quality' of the cars.

In order to add to the impression of the car falling from buildings, or jumping off a ramp, sprite scaling will alter the size of the car to heighten the feeling of perspective.

We have the ability to implement four-wheel drive vehicles as well as two-wheel drive. It will be tested and used if it benefits the game.

For the faster vehicles, it will not be possible to turn all corners at top speed – attempting to do so will cause the back end to slide out and skid. Resulting in lots of smoke, and frightened onlookers.

It is possible to cause cars to skid by turning too quickly at high speed (relative to the ground surface). Skids will vary on:

- Roads. Leaves black, tyre rubber skids.
- Grass. Leaves muddy skids.
- Pedestrians. Leaves bloody skids.

Pedestrians will be scared by cars being where they're not supposed to be – pavements, parks, pedestrian precincts etc.

While colliding with most buildings will not have any effect on the building, we are able to create surfaces which react in a specific way:
- Large glass windows. As found in shopping malls, car showrooms etc. When cars hit these, the glass can shatter injuring nearby peds, and if required, cars and peds would be able to pass through where the window was. This would also need to react to being hit by weapons.
- Flimsy fences. Which when hit by a car, get knocked down so that cars and peds could walk over the fallen fence.

By holding down the footbrake and accelerator at the same time while stationary, it will be possible to rev the engine, and do wheelspins in high powered vehicles (lots of smoke,

squealing sound and the backend slipping slightly). We may want to add the facility to race someone over a short distance if you rev your engine while stopped at traffic lights.

When cars have a collision with walls, immovable objects or other cars, they will suffer damage. This will affect the car's performance, and will be noticeable both by the audio changing appropriately, and damage being applied to the relevant areas:

- Front Left
- Front Right
- Windscreen
- Rear Left
- Rear Right

Excessive damage will cause the car to explode. The damage should be more dramatic and much less subtle than in GTA.

Attach "explosion" values to different vehicles to dictate the size and duration of explosions for different vehicles - to indicate the material it's made from, or its contents.

All vehicles have working headlights and brake lights. All cars that have their engine running will have their headlights on. Only cars that do not contain anyone because they were placed on the map in the level editor, or were properly parked and left by their driver will not have headlights switched on. Only when the player steals a parked car (which doesn't already have its engine running) will there be a slight delay and sound of ignition. Damage to a part of the car with a brake/head light should stop the light from working.

Semi-transparent alpha sprites will be displayed underneath and to one side of the cars to give the impression of a shadow – when the car is in the air this should move out to the side, and get smaller the further the car is from the ground.

? When the car 'jumps' through the air we have the choice of either scaling the car graphic up to make it look closer to the camera, or scaling the rest of the city down.

Parked cars may also have car alarms that sound and flash lights for a limited time to give the player an extra reward. Whether or not a car is alarmed will be determined by level design as they place the parked cars. The alarm gets activated when the car is unoccupied and someone tries to steal it, an explosion happens nearby, or it is hit reasonably strongly in a collision. The alarm causes the lights to flash and should make a noise as well

Brake lights will come on whenever a car is braking. This does not include coasting (when neither accelerator nor brake is pressed). When in reverse, brake lights will only come on when forwards is pressed.

All lights will only function if the relevant region of the car has not been damaged.
Lights will not affect anything else – they will not light up parts of the road, other cars, pedestrians, objects etc.

When the player is controlling a car, it will have a degree of autocentering to avoid over-complicating the steering interface.

When a certain level of damage has been done to the front of emergency vehicle, the siren will sound warped.

For each vehicle, all of its doors will be available for use by the player ped, or any dummy peds. Before car doors can be opened, checks to be done for buildings AND certain objects being in the way.

It will not be possible to shoot normal weapons from vehicles. Exceptions to this are special vehicles (fire engine, riot control van, tank etc) and special weapons (see weapons).

One of the special vehicles is likely to be a combine harvester that can be used to maximum effect in a shopping mall or pedestrian precinct.

In the car types, we'll be able to define whether a car will run over and splat a ped (ala GTA), or just throw them into the air and leave them lying on the ground. They'd need to be driven over again to kill them.

The range of performance of vehicles will be increased from GTA. The availability of vehicles will vary between zones in GTA2 – "expensive" cars will be more common in financial districts, areas with expensive houses etc. It will be more difficult to steal the better cars – they may be less likely to stop, or the driver is more aggressive when pulled from the car and either tries to pull the player out, or shoots after him.

The less popular vehicles will generally be more available and found parked more often.

RADIO CONTROLLED CARS
There is no need to use a specific graphic for these, as we can use any vehicle graphic and simply scale it down to be used as a radio controlled car. These will then be able to be loaded with any weapon (car bomb, landmines etc) that a normal vehicle can have. They will go 'under' other vehicles, but will collide with other radio controlled cars, pedestrians and walls and scenery as normal.

We can get them to use the chase code, and should be able to have variable powered explosions when they detonate as a car bomb.

TYPES

ENGINE POWER SMALL, AVERAGE, LARGE
MASS LIGHT, AVERAGE, HEAVY
DRIVE FRONT, REAR, ALL
ENGINE POSITION FRONT, MID, REAR
ENGINE TYPE PETROL, DIESEL, ELECTRIC
SHELL WEAK, AVERAGE, STRONG
FEATURES **HORN:**
        CONTENTS:
        SECURITY: HOW DIFFICLUE TO STEAL?
        MARKINGS: STRIPES, DIRT…
        CONDITION (RELIABILITY):
        COLOUR:
CAPACITY ? PEOPLE (EXCLUDING DRIVER)
FORWARD ACCELERATION LOW, MEDIUM, HIGH
FORWARD TOP SPEED **LOW, MEDIUM, HIGH**
REVERSE SPEED LOW, MEDIUM, HIGH
BRAKING POOR, AVERAGE, GOOD
TURNING **POOR, AVERAGE, GOOD**
GRIP POOR, AVERAGE, GOOD
TYPICAL DRIVER ?
NOTES ?
QUALITY BAD, MEDIUM, GOOD

BASIC RULES
DEFINE the relationship between the terms – what affects what and how
DEFINE any relationships between vehicles (well, drivers), eg: Cop Cars tailing Securicars
ALL front-wheel drive vehicles have front-mounted engines
BEST HANDLING comes from rear-wheel drive with rear-mounted engines
AUDIO CONSIDERATIONS engine (tone, volume, slipping fan belt), reversing (beeps, engine, gears, speech), brakes (air, squeaky), surfaces (affects on sound and handling), collisions (vary according to solidity, eg: shots, walls, vehicles), stereo systems
VISUAL CONSIDERATIONS dirt, rust, different colour panels, stripes, sunroof, chrome
GEARS all automatic but the change should at least should be more apparent with larger diesel-driven vehicles (slight plateau with acceleration plus audio; perhaps smoke on trucks)
TURBO on one vehicle at least – effectively an unlimited top speed; the turbo kicks in when a good speed is reached; bonus points are scored whenever the turbo is active
PERFECT cornering should be rewarded with a slight speed kick
THIEVES should be attracted to certain types of vehicles
DOORS should not be locked while a vehicle is in motion; a the player should be able to exit the vehicle at any time
EACH AREA determines how dirty the vehicles are
EACH CITY needs to have distinctive vehicles

MISCELLANEOUS buying and selling drugs (drug-o-meter); gang symbols and colours

ALARMS are built in to most cars – but purely for effect; the player can steal any vehicle; an alarm will automatically turn itself off after 30 seconds

HORNS encourage most peds and vehicles to move out of the way if possible; strict exceptions are law enforcement vehicles, taxis and trucks

SIRENS encourage all peds and all vehicles in the way to move out of the way - if possible

LAW ENFORCEMENT the only way anything other than a cop car is seen is when the player is wanted; law enforcement vehicles cannot be stolen unless the occupants are dead

GANG vehicles always contain weapons

MILITARY vehicles should look more like traditional military vehicles, ie: camouflage in sandy or green and brown or grey or white and black

QUALITY is used for the types of cars to be created in different areas of the maps.

Omissions

Dodge Charger (Dukes Of Hazzard) with white stripes and numbers

standard van

remote control car, eg: dune buggy

- combine harvester
- car with fins
- VW camper van
- caravan
- mini (LOSE IT)
- riot control vehicle (LOSE IT)
- hearse (LOSE IT)

Details on each of the vehicles contained in 'GTA2 Vehicles.doc'

NB : RELATIVE SCALE OF VEHICLE GRAPHICS NOT CORRECT

DUMMY CARS

Will:
- Overtaking to pass slower moving vehicles
- Turning at corners / junctions
- Using the correct lanes for junctions
- Stopping for traffic lights at red
- Negotiating round or stopping for other vehicles that are blocking the road
- Normally stopping/swerving for pedestrians in the road
- Attempting to clear the way for emergency vehicles using their siren
- Showing a reaction vehicles using their horn – normally getting out of the way
- Being able to reverse and perform turns if needed

Vehicle Audio

For the audio for all vehicles, the vehicle sound will be modelled as a combination of various parts of the car – engine, gearbox, exhaust and tires – to provide maximum realism and variation between different vehicles and speeds.

When some cars are involved in accidents, their horn may become 'stuck' on for a period of time.

Attention will be paid to the audio collisions – hitting trees, buildings, and different vehicles should produce different sounds.

Although there will not be any convertible cars in GTA2, we may want to be able to hear the car radio of certain cars when they pass.

PEDESTRIANS

There will be just one pedestrian graphic model. There will be a number of animations to give peds different gaits and the impression of hurrying / fear / indifference etc. The graphics will be remapped to provide a variety of coloured clothing and hair, and implying male/female and wearing t-shirts and jerseys. We will add a shadow built-in to each of the animation frames (except jumping/falling) to give the peds more height in the game.

All pedestrians will have a health level – this may vary depending on the area / type of the pedestrian, but adds much more skill to killing pedestrians with weapons. As a pedestrian's health deteriorates, they may start to bleed and limp to illustrate this.
However, being in a car when it explodes, getting run over, etc will kill immediately.

Peds walking over corpses will leave bloody footprints for a small time.

A shadow will be drawn into the actual animation frames to add more depth to peds walking around. There probably won't be a shadow for jumping/falling animations.

When the player is driving a vehicle, it will now be possible to jump out when the vehicle is moving – the higher the speed it is travelling at, the more damage done to the player – but this gives the player an extra option in various scenarios.

When trying to enter/exit a vehicle, if the driver's door is blocked, the character will automatically use the next most appropriate door.

Each vehicle will be able to contain an appropriate number of people – two per sports car, four per family car, twenty per bus etc.

Groups of peds can walk around together – as couples, families, guys on a pub crawl etc – to make the pedestrian areas appear less sporadic.

Each map will be divided into a number of zones, the density and types of pedestrian can be controlled in each area – lots of slow bustling peds in shopping areas, ambling families in parks, lone hurrying peds in dubious parts of town, etc.

The player as a ped
The player will exit the car and control the main character as a ped for three main reasons:
- To get access to ped only areas – those blocked off with bollards, rooftops/trains stations/bridges only accessible by stairs.
- To change vehicles.
- To use the majority of weapons.

The player will never be stunned – jumping from a moving vehicle or being punched may affect health, but not render the controls ineffective.

Dummy peds
Pedestrians are characters as opposed to the "dummy" peds in GTA. Every character in GTA2 will be behaviour driven, with their actions dependant on the attributes set up by level design, and their high awareness of surroundings.

Each ped has independent levels of: intelligence, aggressiveness, morale, health, fatigue and shooting skills. With their actions varying on each characteristic, the player will get the impression that each character has a personality. This means GTA2 has :

- Muggers - randomly choose someone to "mug", punches them, and runs off. If the mugged ped is aggressive, they could decide to punch, or shoot, in return. If muggers are trying to find dummy peds with money, can we keep track of (roughly) how much money the mugger has – and then the player could mug him?
- Random dummy peds who throw out money (coins) when punched – reward for running around punching everyone.
- Psychopaths - run around with guns trying to kill as many people as possible. Attracts the police, and may not be looked upon favourably by gangs.
- The ability to steal cars (including mission cars). This gives us joyriders, who simply steal cars for the sake of it, and the ability to have peds whose target is a long distance away, steal a car to get there faster.
- Stopping moving cars - some thieves may choose to run out into the road to try to stop a car in order to steal it.
- Intelligent routefinding - Paths, parks, alleyways, bridges etc will all be used to allow peds to reach their destination as quickly as possible.
- Fear - able to identify threats (certain gangs, you, psychos) and attempt escape from them.
- Assassins - ruthlessly follow and kill specific people - including, and probably especially, you.
- Guards - Defend something/someone with varying degrees of conviction.
- Public transport - ability to intelligently use trains, buses and taxis as appropriate. Train stations will get busier just before a train arrives, queues form at bus stops, and peds hailing taxis stand at the edge of the pavement.
- Intelligent use of all vehicle doors - while the player will always control the car regardless of which door he enters, a group of four peds returning to a car will use all four doors, peds using taxis will use the rear doors
- More interesting panicking - running into road to be hit by oncoming cars, cause pileups
- Groups of peds - couples, families, "mini-gangs" - anything where it'll add more depth not to have just individuals walking around
- Variable ped density - for anything from deserted gang-ridden areas, to extremely busy shopping centres.
- A "buddy" - someone that follows you around (either as a passenger in your car, or in another car) and helps you to complete your task.
- Wait in groups at junctions for traffic lights to change before crossing roads.
- Walk / run round the city as though they each have an individual objective
- Enter and drive "their" car in order to reach a destination
- Queue for cinemas / ice cream vans
- Perform demonstrations / parades in the street
- Fight back when ejected from their car – either by shooting or trying to steal their car back

? Vomit - when dummy peds see people getting shot
? Urine - People slashing up against a wall round the side of a pub

PROGRESSION

How features / aspects are introduced as the player plays through the game.

Training

Play begins in the Downtown map. The player is in a park standing next to a lone figure who immediately speaks:

"Hi, I'm Johnny. Let me tell you how it is..."

"I know everything and everyone - but I don't work for no-one. You fuck with me, I'm outta here. You don't wanna hang around, that's fine by me - I'm outta here."

"Things ain't what they were. Three mobs run the show now, and respect between 'em don't run high. You wanna know more about the gangs, try the 'phones in their areas - the arrows show the way."

"A smart guy chooses his friends real careful. You wanna see what I mean, try wasting different gang members and find out what that does to their respect for you..."

And continues to explain as many key points as are necessary.

"Oh, and watch yourself, kid. The Law don't like it when anyone other than the bad guys start wasting innocent people."

"I took the liberty of bringing you some wheels and a weapon..."

The player could be given a simple reward for bothering to listen (chances are they haven't played before).

>>>The player has hit Johnny; Johnny runs away.<<<
"Fuck you, buddy. I'm outta here."

Player is told to drive around the city (using the conveniently close parked car if he chooses), with Johnny dishing out directions/ instructions / information via pager/mobile phone.

If the player drives off anyway, no worries: Johnny's never seen again.

ZAIBATSU INFORMATION 'PHONE
"Welcome to the Zaibatsu Corporation helpline. Jobs are always available for anyone who earns our respect, particularly those who keep the Loons in line." ETC...

LOON INFORMATION 'PHONE
"They call us Loons but we know we are the sane ones. We find the Yakuza disturbing. We would like to play with you - but first we must respect you." ETC...

YAKUZA INFORMATION 'PHONE
"We are Yakuza. We are strong. We have no time for Zaibatsu. We have no time for you unless you prove yourself." ETC...

Powerups
All powerups will be available throughout all maps.

Vehicles
See GTA2 Vehicles.doc for details of which vehicles are available in which city.

Weapons
In the Downtown map (Willie) available weapons are :
- Punch (ever present)
- Pistol
- Machine gun
- Flamethrower
- Rocket Launcher
- Molotov Cocktail
- Silenced Gun
- Oil Slicks
- Machine Gun car (hidden bonus)

In the Residential map (Steve) available weapons are :
- All from Downtown map
- Grenade
- Stun Gun
- Shotgun
- Land mines

In the Industrial map (Billy) *all* weapons are available.
(this is all from Steve and Willies map plus Electro-Shock and Dual Shot pistol)

WEAPONS

Instead of the crates from GTA, weapons can be picked up in the following ways :

- Killing a ped carrying that weapon (particularly gang members) – the weapon then appears on top of the corpse. The weapon will only appear for a certain time, after which it will be deleted – whether or not it is still on-screen.
- From inside of a car – we will have certain vehicles that always carry certain weapons.
- Picking them up on the street / building roofs etc – unknown how we'll do this though – probably needs to be animating to stand out from game graphics.
- Specific buildings – ie Crazy Bob's House of Guns. There is an ever-regenerating selection of weapons behind every Crazy Bobs.

Most weapons will have some form of muzzle flash as it's fired.

The player effectively has one generic weapon all the way through the game – what they pick up is the various types of ammunition for this weapon.

Weapons denoted by "Car:" are vehicle-only weapons and can only be used whilst in the vehicle used when the weapon was awarded – ie the player cannot carry them around.

The player must be able to select ped weapons while driving.

DEFINITE
- **Punch**. Always possible, not strictly a weapon but never mind. For punching dummy peds see Bonuses.
- **Pistol.** Fires a single bullet at a time.
- **Machine gun**. Fires bullets continuously, perhaps taking time to reload every x shots to fire short bursts.
- **Rocket launcher**. Fires a single rocket causing explosion on impact. Smoke trail behind rocket, possibly heat haze. Possibly set anyone behind you on fire.
- **Molotov Cocktail**. Thrown in trajectory, explodes/bursts over area on impact. To experiment with ability of changing distance thrown.
- **Super-Taser**. Short range electric shock (like a *big* stun gun) - should affect health and stun rather than an outright kill.
- **Car: Landmine**. Dropped. Explodes on contact with peds / cars.
- **Car: Oil slicks**. Dropped. Causes other cars to skid on contact.
- **Dual Shot Pistol**. Able to fire two bullets every few seconds, possibly without autofire to make the player feel physically more in control.
- **Silencer Powerup**. To sneak up behind people and pick them off without other peds realising - no panicing.
- **Taser.** Cut down version of Super-Taser - only affects one ped at a time.
- **Shotgun**. Fires multiple powerful devastating short range shots. Poor long range.
- **Flame-thrower**. Shoots burst of flames. Flaming peds run around screaming until they burn to death. The longer you press the fire button the further the flames go (until they reach their max range) so a quick press would give a little burst, so you would need to keep your finger on fire to get a longer shot.
- **Grenade**. Throws a single grenade in a trajectory over obstacles. Can be treated as a movable object before it explodes.

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- **Car: Water cannon**. From fire engine / riot van. Used to knock-back and stun peds. Works on same principle as flame thrower.
- **Car: Tank cannon**. From tank - rocket launcher.
- **Car: Machine-gun capability.** Strictly mission controlled.

For grenades / molotovs:
The player should be able to vary the distance they are thrown by the length of the keypress. This means just a tap will throw a grenade right in front of you, holding it down will let you throw it further. It should only ever be thrown as you release the keypress (so that you can run around with it 'primed', so to speak).

The maximum distance should always be on-screen (or at least the majority of the bounces), and the maximum time shouldn't be more than 3 seconds.

The fuse is lit as soon as you depress the fire key – the grenade will go off in 'x' seconds from that moment, regardless of how far you've thrown it, or even if you're still holding it!

'WISH' (prioritised)
- **Binoculours.** Allows player to move camera within defined zone to see off-screen.
- **Sniper Rifle.** Gives player controllable cross-hair which can be used to pick off peds at long distance.
- **Microwave gun**. Cooks all peds in vicinity of where it is aimed. Takes a few seconds of 'charge' time, and then pings as ped(s) in vacinity explode. Spark effects if it hits a car.
- **Dummy tracker.** Multiplay only. Attached to another car or character, leads other players to that car/ped instead of you for a limited time.
- **Tear Gas**. Fired in a trajectory and disorients peds with an alpha'd smoke cloud effect. Likely to be single player only to avoid the dullness of obscuring a players view. Effect subject to experimentation.
- **Car: Stinger**. Drop from back of car and any following cars have their tyres burst - handling gets screwed and clunky metal, rubber flapping sound effects.

For how weapons are introduced throughout the game see Progression section.

For bomb shops, weapon shops, etc see Buildings in CITY.

CONFIDENTIAL

POWERUPS

Powerups will appear as icons which the player can pick up by either walking or driving over.

These can either be placed by level design (typically, next to phones for use in specific missions), or awarded randomly upon killing a specific type of ped / stealing a specific type of car ie body armour when stealing a SWAT van.

Score multiplier (additive, and multiplier halved on arrest)

Extra Life

Health boost

Body Armour – as GTA, allows the player to take 'x' damage before health is affected – 1:5 chance of being awarded when stealing a SWAT van

Get out of jail free key - 1:10 chance of being awarded when stealing a police car. Kept even in the event of death.

Police Bribe (resets player's wanted level)

Invulnerability – 1:20 chance of being awarded when killing an army ped. Lasts 20 seconds.

Double Damage – 1:50 chance of being awarded when killing a gang member. Lasts 40 seconds.

Double fire-rate – 1:50 chance of being awarded when killing a gang member. Lasts 40 seconds.

Player 'electrocutes' everyone on touch. Lasts 20 seconds.

Respect (as if the player has just killed X members of gang Y)

Invisibility. Lasts 20 seconds.

- Temporary "gang" to help the player. Lasts 40 seconds.

Unless other specified, all powerups are lost on death.

DAMAGE LIST

The player, all gang members and all levels of police started with one hundred health points. All dummies start with fifty. Upon reaching zero, characters will die.

Pedestrians	Health Points subtracted
Punched	10
Hit by bullet (from pistol, shotgun or machine gun)	20
On Fire	10 per second
Taser	10 per second
Hit by water cannon	NONE
Hit by car at slow speed	NONE
Hit by car at high speed	ALL
Caught in centre of explosion	ALL
Falling one block	25
Exiting moving car at double 'safe' speed	25

Vehicles work in a completely different fashion – all have a damage value of between zero and 32,000. Where zero is maximum performance and 32,000 results in the car exploding.

Damage is applied using the formula :

200 x Vehicle Mass x Vehicle Speed x Vehicle Strength

Strength is the parameter we can set at various levels to ensure some cars are 'weaker' than others ie setting it at zero would result in a vehicle being invincible, ten being incredibly weak.

Other damages are applied as follows
(Health Points will be multiplied by Vehicle Strength):

Vehicles	Health Points subtracted
Punched	NONE
Hit by bullet (inc. each shotgun shot)	2,000
On fire	1500 per second
Taser	3000 per second
Falling one block	10,000
Falling on top of any other vehicle	ALL
Caught in centre of explosion	ALL

MULTIPLAYER GAMES

Owing to the nature of the game, the maximum number of players cannot be extended past four without severely affecting the speed the game runs at.

The main focus of multiplay will be the deathmatches. This entails every player trying to kill every other, with 'frags' allocated for a kill and taken away for someone kill themselves. A separate map will be designed for these, with areas becoming available only when there are three and four players.

We will also test various ways of balancing the gameplay in multiplay – encouraging periods of cars chasing each other, discouraging 'camping' with rocket launchers behind trees (perhaps by having a gang armed with pistols that go after players on foot) etc.

Players may also be given the option of toggling the police presence, ped density and car density in deathmatches. Allowing gangs to work in multiplay throws up the possibility of people being able to see more accurately how the gangs operate – probably to the detriment of the game.

Possible alternative multiplay games include:
- Tag. Described below.
- Cannonball runs, as in GTA. A race through several checkpoints.
- Lap racing. A race around several laps.
- Capture the flag. Free for all / Co-operative.

Allowing gangs to work in multiplay throws up the possibility of people being able to see more accurately how the gangs operate - probably to the detriment of the game.

It will be possible to multiplay using the following protocols:
- IPX
- TCP/IP
- Serial
- Modem

With up to six players across IPX and TCP/IP.

The game should default to IPX if available, if not the default will simply be the first protocol available.

Tag

The aim of this game is to simply become the 'hunted' and stay alive for the longest overall time. Very similar to flag games except there is no actual token or flag to pick up. These games are perfect for the larger maps and bring all the players together to make a more frantic game.

Whoever hosts will choose the length of play, either 5, 10, 15, 20 minutes or no limit at all. The host can choose to nominate the survivor (hunted) or to let the game randomly choose someone.

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When another player (hunter) kills the survivor he will then take his place and become the hunted, which will start his timer. All player times should be visible on screen in place of the points. If a survivor kills himself or is pushed in the water then the nearest person to him at the time will take his place as survivor.

When a player becomes a survivor they cannot pick up any weapons and any they had will be lost. All you have is a stronger punch, which won't kill the other player but will whack them a fair distance away, buying the player a little extra time.

Once the game time limit has expired, a screen with a breakdown of the times should be displayed. There could also be some more stats here or comments on players, (like Worms and Goldeneye) like most boring or most vicious.

Hunters should only ever have one arrow on screen – pointing to the hunted. The hunted should have arrows to all the hunters.

OBJECTS

Object Type	Notes
Traffic cone	Tumbling animation
Bin lid	Spinning animation
Bin base	Tumbling animation
Rubbish	Scattered animation
Roadblock barrier	Tumbling animation
Concrete Bollard	Immovable. Single Frame.
Tyre	Single frame.
Bush	Tumbling animation.
Fire hydrant	Single frame.
Fire hydrant 'lid'	Getting knocked off animation.
Molotovs	Throwing/tumbling animation.
Grenades	Throwing/tumbling animation.
Rockets	Single frame.
Bullets	Single frame.
Landmine	Single frame.
Football	Rolling animation
Cardboard boxes	Tumbling animation
Seats/benches	Tumbling animation
Crates	Smashing animation
Oil Barrels/ Gas Canisters	Tumbling animation.
Newspaper dispensers	Tumbling animation.
Switch	on¥off states (used to open doors, gates etc.)
Briefcase	Single frame.
Generic box/package	Tumbling animation.
Explosive Package	Single frame.
Ghetto Blaster	Tumbling animation.

Although there aren't any restrictions on sprite size, or number of animations, memory space on the Playstation is at a premium, so it is expected that most objects will fit well within a 16x16 and animations will not use more than 8 frames. All objects can use 256 colours and there are no palette restrictions. Colour zero is transparent.

REWARD TYPE OBJECTS

- Precious Stones
- Ancient Artifacts, eg: Statuettes
- Cases (Boxes) - Briefcase Alternative
- Gold Bullion
- Krugerands
- Dollar Bundles

Money (coins)
Drugs (white packet?)
Briefcase - can be anything

17/08/22

Shit ideas:
Keys
Passes
Steering wheels
Furry Dice
Hypodermic Needles

17/08/22

EMERGENCY SERVICES

All emergency vehicles should have snazzier flashing lights - patterns, colours, flash length variations etc.

Law Enforcement

Committing any crimes raises your wanted level. Once it reaches a certain point, the police start to actively chase you. As you commit more and more crimes, they become increasingly persistent and drastic in their attempts to catch you. Again, we will use the Spray Shop principle from GTA, although it is more likely to be a conventional garage where you have to physically change cars.

Police Types

There will be four levels of law enforcement. As the player's wanted level increases, more levels will be brought in. These are:

Police

The police are the city's ever-present crime stoppers, appearing on every map of the game. As with GTA, there will be a number of police cars that patrol the city:

Normal city residents (dummy peds) will commit occasional crimes (running red lights, hit & runs, shootings, joyriding etc) that the police will also pursue. Eg. The player might be in a sensitive situation, and a dummy ped kills a handful of people with a machine gun – a barrage of cops turning up isn't going to help matters…

Chasing after gangs committing crimes – will add a lot of tension driving around when the player can never be sure the approaching police cars are actually chasing him.

Crimes committed in full view of police will attract their attention – although possibly only while they are still able to "see" the player. Certainly the player won't get away easily from crashing into a police car.

As well as patrol cars, there will also be policemen on foot patrol specific areas of the city –shopping streets, financial districts, certain gang areas etc

As with GTA, the main method used by police to apprehend criminals is to force the criminal car to stop and giving chase on foot – touching the criminal arrests them. For high wanted maps, they'll use their pistols to stop dangerous criminals and set up roadblocks to bring cars to a halt. One of the police force's highest priorities is not to harm innocent civilians.

? Should police have less interest in your killing of a gang member than a dummy ?
Bear in mind that the game will only pay attention to one restart point at the moment :

Police restart points.

Are needed for the police to regenerate to dump you off after being arrested, and work in the same way as player restart points - The game will pick the nearest restart point off-screen from where the player dies, with no other players in close proximity.

When arrested, the players status is affected as below:
- All weapons lost (unless Get out of Jail Free).

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- Multiplier subtracted by one (unless Get out of Jail Free).
- All powerups lost.
- Points not affected.
- Lives not affected.
- Respect not affected.

SWAT

Once the SWAT teams are brought in to deal with someone, they're in for a hard time. They'll first appear on high police awareness on map 1, and become a standard feature from map 2 onwards.

Most of the time they'll attach themselves to police roadblocks – using machines guns and stingers to bring the criminals to a halt. Encountering a roadblock is very likely to be the last time that you'll be able to use that particular car.

If you manage to be particularly adept at avoiding roadblocks, they'll also try to hunt you down in their Transit vans – co-ordinating with each other to force you off the road as soon as possible. Each van contains a team of six SWATs who jump out (2 from front, 4 from back) and try to mow you down with machine guns.

Special Agents

The Special Agents are the force the police employ to catch criminals with a degree of discretion. The player will first encounter them on high police awareness on map 2, and from map 3 onwards they become a standard force for the police to employ.

Driving around in black sedans, the Special Agents will use more forceful techniques than the police to stop criminals – boxing cars in, herding cars towards police roadblocks, and certainly much more difficult to lose than police cars.

On foot they'll resort to using shotguns if they can't catch their target, but will be reasonably careful not to harm civilians.

When they start chasing someone, play a brief animation of the flashing light being placed on the roof Kojak style.

Military

Once the player manages to get through to map 3, a high awareness will activate the military.

The military have a virtually unlimited arsenal at their disposal - bazookas, gas, machine guns, stingers etc – none of which they'll hesitate to use to make sure your crime spree is brought to an end. Civilian safety is a low priority.

They'll set up roadblocks with tanks - trying to trap you into blocked off streets, chase you around the city in jeeps, and transport high number of ground troops in trucks to encircle you.

Police Ped Graphics

Police peds will look much tougher than in GTA. They will have a black look, with body armour.

Police Radio
Police radio reports will only be heard in certain vehicles - those equipped with a scanner. The reports will include all crimes going on in the city - not just player crimes, but in particular will provide rewarding feedback for when the player wipes out small gangs, blows up buildings, blocks roads with stolen cars etc.

Police Generation
Police cars are generated offscreen on roads so you wont see any if you drive around a pavement track.

If you are driving on the road the police cars are generated offscreen in the opposite direction of the arrow you are driving on.

Ambulances
Ambulances will be created just off screen when required, as in the Playstation version of GTA. They will work the same way, with one medic getting out and applying a magic sponge to injured peds.

Medics will not heal gang members.

Hearses
When a ped is dead, rather than injured, a hearse, rather than an ambulance will collect him.

Fire Brigade
Fire engines will come along and put out car fires, as in GTA.

WANTED LEVEL ("POLICE HEADS")

For every crime the player commits, it increases their wanted level by a number of points. For every 600 points, a police head is added. The points system is :

Firing a weapon	20
Killing a dummy	100
Killing policeman	300
Killing a gang member	50
Pulling someone from a car	50
Bumping a vehicle	0
Shooting a vehicle	50
Destroying a vehicle	100
Panicking peds by driving on pavements	0

GAME STRUCTURE

What drives the main character in the game is greed. After the first game, the main character went out and blew all the money on gambling/drugs/whores/fast cars/slow death. But now he wants to do it all over again – and this time there's a metropolis and some serious cash to be made.

In GTA the aim was to complete all three maps. However, in order to provide more replay value and longevity of the game, we can implement the following game structure :

The ultimate aim of the game is not simply to get through all maps, it is to complete every mission, find every secret, trigger, bonus etc. However, this will be the hard-as-nails-sad-obsessive-type game ending.

We'll also need recognition of getting through all the maps – this we can do by throwing bonus weapons, missions, tasks at the player, as well as effects – scripted parades providing the player with fifty peds in a neat row to mow down, people walking/driving backwards for a while etc etc.

This means there are two ways of the game ever ending (terminating play)
* Dying – losing all health, all lives etc.
* Completing the third map.

At the beginning of a map, the player should be told what the target score is for them to be able to complete the map, and possibly *why* the player has to amass such an amount – obvious possibilities are:
* I think the gambling debt just has to be used; it's a classic; it's dramatic. And probably should be tied in with buying your way out of the city (it's the only way The Man is going to let you leave).
* Buying my sister out of prostitution... Perhaps even my entire family.
* Buying a new identity from the Zaibatsu, must be low-key enough to not expect special treatment from Zaibatsu gang, or any graphical depiction of the new identity.

Upon attaining the predefined score, the player is allowed to exit the map – progressing to the next one. (possibly as some recognition of success in the area – "buddy, you just about bled this part of town dry. You might want to move on to Billytown". Etc.)

For each save-slot there will be an overall game score (essentially adding up the map scores and the sub-game scores), as well as storing the individual scores for maps / sub-games etc. Each map and sub-game will require it's own high score table.

At the end of each map, the player's overall score should be topped up arcade style with the number of multipliers, lives, ammo etc, they have retained. (award *x* points for each multiplier etc). Extra lives should be awarded every *x* million points to give the feeling of watching a score tally up and wondering if you're going to get your extra live.

Once the player has seen all the maps/police/vehicles/weapons, there are still two quantifiable objectives to aim for:

- Number one in the high score table (for the whole game, as opposed to the level high scores in GTA). This should be a difficult task, and will carry a reward relating to the cut-scenes – likely to be freeplay on them all.
- Uncovering all hidden bonuses – as described in Rap Sheet.

These should appeal to the perfectionists in people and encourage much more competition and play time than GTA. Admittedly, there are markets that simply play games to completion and never touch them again. These people will still be able to play through all the maps, but for the fanatics the above will add an extra layer of playability.

SUB GAMES

Because of the open-ness of the game, story-telling cut-scenes relating to the game are extremely difficult, and in order to prevent conflicts with missions passed/failed, characters being alive or dead, need to be very generic.

However, a cut-scene is simply a reward for the player having completed a map.

A better reward would be to offer the player a brief retro gaming opportunity ('sub-game') – using the GTA2 'toys' – after every map completed. A wide variety of classic games could be used to let the player rack up bonus points without affecting the game.

Which sub-game is determined by the score achieved on the map completed :

Complete all missions in map	- Sub-game three
Collect 50 tokens	- Sub-game two
Pass a map	- Sub-game one

Because the player is able to repeatedly play the same sub-game, the highest score amassed will be the one stored and used as part of the overall game score.

Any games that have been accessed whilst playing the game will also be available from the front-end. There will probably be a screen where the player selects which map or which sub-game they wish to play.

Pacman example.

The player completes map one.

The player is placed in a single-screen map, closed in by walls on all sides. There are fifty pedestrians running panicking, and the player has a single car available to squash as many peds as possible within a time limit – if all are killed, an extra award can be given.

Others:
Frogger, Bomberman, Galaxians, Robotron, Duckshoot, Centipede / Krishnapede, Track and field, Pong, Commando, Massacring a parade
Race against other peds to get to arsenal of weapons
Golf – get a ped to land in a bin by ramming him with a lorry.

The play-time would be very short – 30 seconds or so, perhaps tied into the number of lives or multipliers the player completed the map with.

For timed sub-games where the player simply has to complete certain tasks as quickly as possible, level design will need to assign points based on the time remaining / time taken.

If the player reached number one in the high score table, the 'GTA2 Arcade' is opened up, and the player can play any of the games as often as they wish.

After you've played any of these, you get a screen showing you the score you got, and you get the choice of playing it again, or moving on to the next level (or end of game screen if

after level 3). Only your most recent score is saved, so it's a gamble whether you risk playing it again.

Once a bonus game has been opened, it should be accessible from the front end in the same way a normal level is (bear in mind that more than one bonus game can be opened at the same time - in which case give the player the highest game ie 2 or 3), and if they want to play bonus game 1 later they'll have to manually select it from the front end.

Rap Sheet

Contains bars representing the levels of various statistics the player has achieved :

GBH (peds killed any way other than squashing)
Roadkills (peds killed by squashing)
GTA (cars stolen)
Cops killed
Missions complete
Kill Frenzies
Score

We would set values for each which would be very difficult to reach.
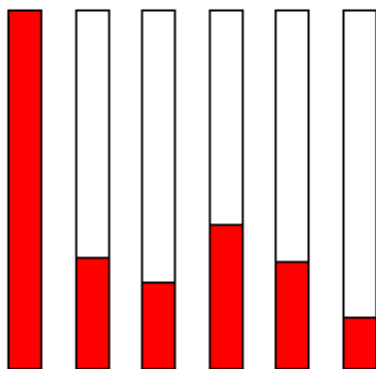
Here, this would represent the player having killed enough peds to hit the top of the bar, with the additional information of the star lighting up.

Each 'star' represents a previously unavailable bonus (new weapons, vehicles, temporary invincibility, unlimited ammunition, police being oblivious, silly modes – scaled up/down vehicles, driving backwards etc). The player is then free to use these bonuses to help complete missions – all bonuses are temporary, whether in time, ammunition, or the damage done to a vehicle.

In theory, on map one, it is possible to reach any values set for all bars except for missions and kill frenzies – which are specific things spread across all maps. The choice here is whether to let the player do this – if they are prepared to do nothing but steal cars for hours on end. Or to break up the bars into sixths, and the player must reach the maximum point for every stat, on every map. This would probably necessitate the inclusion of some way of the player checking their progress in the middle of a map.

The stars probably shouldn't appear until the player has gone through the three maps for the first time – and from then on, the stars are displayed lit up or greyed out as appropriate.

Any additional cheats could be made available Goldeneye style when the player complete specific missions under a certain time.

Stat Sheet

The player should still have access to a stat sheet (ala GTA) if they want to see a complete breakdown of their crimes ie

Joyriders killed :
Cabbies killed :
Bus drivers killed :
Truckers killed :
Red lights run :
Krishna's killed :
Yakuza's killed :
Peds with green jumpers killed :
Cars destroyed :

Kills with machine gun :
Kills with rocket launcher :
Kills with front of car :
~~Kills with side of car :~~
Indirect kills :

Etc
Etc
Etc

Misc

We won't allow the player to option of choosing their player character – we will force our Bruce Willis / Solid Snake blokey on them. However, to let everyone relate in their own way to the character and personalise the game, the player's name should be redefineable, and should appear in some of the in-game text. There will be a restriction of the number of characters to prevent too many formatting problems.

Another remote possibility is once we have finalised all the mission text, we see if we can identify any words or phrases that could be automatically changed en masse in order to provide a little variation in the text on separate attempts to do the same mission.

High Score Tables
We will need a high score table for overall scores, as well as for every map and every subgame. References to "the high score table" are to the overall scores, unless otherwise specified.

The overall high score table should be filled with fictional characters and should take an advanced player to beat the top score although almost everyone should be able to beat the lowest score after an hour or so of playtime. It should also be complemented by as many stats as we can think of. Players should also be able to put in small comments/ taunts next to their scores and these files could be saved and passed over the Internet. Could be feasible for Take 2 to maintain a Top 20 on their web site and organise some kind of competition.

CITY AREAS

Area names:

Russian - Industrial
Azeri Heights
Krimea
Lubyanka
Pravda

Krishna - Industrial
Vedic Temple
Tabernacle
Narayana
Maharishi

Zaibatsu - Residential
Cayman
Xenoton
The Village

Rednecks - Residential
Mobile R.V. Park
Tabasco
Guntersville
Redemption

Scientist - Residential
Xanadu
Dominatrix
Largo
Stromberg

Zaibatsu - Downtown
Zarelli
Omnitron
Romanova

Loonies - Downtown
Sunnyside
Azimuth
Barking
Fruitbat

Yakuza - Downtown
Funabashi
Ukita
Shiroto
Kyabetsu

GANGS

General

Allocated a specific area of each map, which never changes. Three gangs per map. Each gang's turf is identifiable – perhaps scarves from lamps (cribs + bloods idea). Gang members will be distinctive – their peds and vehicles stand out from civilians.

The gangs are integral to the overall plot of the game and cannot be wiped out.

All of the missions will be gang oriented, with the result that the player gains or loses favour with gangs which can affect the difficulty of completing later missions.

- **Russian Mafia** : Arms dealing, car jacking, misc. killing, messy.
- **Zaibatsu** : Futuristic drugs company (ala Robocop's *OCP*). Money no object. 'Own' police.
- **Krishna's** : Vengeful , kidnap and brainwash people off streets, exponential growth of gang.
- **Rednecks** : Christian nationalists. Terrorise all companies, churches. Hate everyone.
- **Yakuza** : Drug dealing, cool calculating professionals.
- **Loonies** : They've taken over the asylum and have a penchant for bizarre (and typically pointless) missions.
- **SRS**: Cult scientists that have broken off from the Zaibatsu, dedicated to the cause of human cloning.

Detailed information on each of the gangs, and their primary members is contained in n:¥gbh¥docs¥gangs

Gang Colours

Russian Mafia	Red
Yakuza	Blue
Krishna	Orange
Zaibatsu	Grey
Rednecks	White / Blue
Loonies	Green
SRS	Yellow

These colours should be used as much as possible in the gang areas to constantly reinforce the idea of the area being gang-riddled. Ped remaps, gang car remaps, banners, area signs (on the players screen), graffitti (using their logo as well?)

Interaction

- Left to their own devices, each gang will function in their expected role –
- Drug pushing. Small groups of gang members will wait around street corners "selling" drugs to various people that approach them. Very likely to attract psychotic 'customers', and at regular intervals a gang car will drop off additional supplies of drugs.
- Deals. Suspiciously meeting with members of other gangs and "dummy" characters to trade drugs / arms / porn / corpses / sports cars etc

- Hits. Gangs may want to take out a specific character, or just do some serious harm to another gang (or police) – ranges anything from two gang members shooting someone as they walk down the street, to half the gang hijacking military vehicles and trying to wipe out dozens of members of a rival gang with grenades.
- Turf patrols. Walking/driving round the boundaries of their turf, chasing rival gang members, common criminals and sometimes police off an area. Can use force as appropriate. A soon as they lost/killed you, they'd return to their area.
- Guarding. Warehouses that are particularly valuable, gang boss houses, main entrances to their turf etc.
- Hijacking. Tracking down a particular character, bundling them into a vehicle, and using them for ransom / target practise / brain washing etc
- Gang members cannot kill each other – although the player will be able to kill anyone, including gang members that are working with him.

Gangs will typically hate each other – chasing and attacking rival gangs on sight. However, some missions carried out by the player can cause some gangs to become extremely hostile to each other – actively seeking each other out, or conversely, become temporary allies – on the pretence of teaming up against someone else, getting bulk discounts, bringing peace to a long-troubled area, etc.

They will normally shun the police – preferring not to carry out illegal activities in plain view of police, not committing serious crimes in close proximity to police stations, occasionally helping the police catch someone on their turf etc

Gangs will be able to 'give' you gang members to help you complete a mission. These will follow you round until the mission is passed or failed, shooting at anything you shoot at. If you enter a vehicle, the appropriate number of them will also get in – if you give them time ie four in a family car. If there are a dozen of them however, you would have to steal a bus or similar.

Gangs are simply instructed to react in a certain way depending on your relationship with them. For example, it is possible to entice one gang to follow you into another's area. Then, we could have :-

- Both gangs go after you
- Gangs go after each other
- The "new" gang purely goes after the gang chasing you(Keystone Cops)

Gang blokes could chase you until :
- You are dead
- You are out of sight / off-screen
- You are outside a perimeter – their turf, an specific area they were guarding etc.
- They get scared – of you (perhaps by killing some of them) or another gang.

Normal peds should not react differently to gang members walking around - we can reduce their density in dodgy gang areas to make the few that do walk around seem 'harder'.

To complete all missions, the player must change allegiances between the different gangs - perhaps wiping out people they had previously worked for ala Fistful of Dollars.

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Once you have completed all the missions for a gang, you get no more missions and are forced into looking elsewhere (with a change of respect) for money.

Gang Structure

Every gang has :-

- Boss – Godfather. Probably never appears in-game, used for textual references "kid, I'd let it go, but the godfather says you gotta suffer"
- Boss's right hand man – hands out hard missions. (only on max respect)
- Lieutenant – hands out medium missions. (only on medium respect)
- Soldiers – hand out easy missions. (on the slightest bit of respect)
- Grunts – need to come in a variety talents and should accompany their respective boss – the right hand man's grunts are top marksmen, but a soldiers grunts are pretty poor shots. These variations we can call A's, etc for simplicity and reference – in-game, there should be no distinction between them, other than the A's generally having more chance of killing you than the B's and so on.

The grunts are essentially the dummy gang members which will be created by the game to follow patrol routes, or be found wandering around their turf. All the other gang members (above) will be created by the mission scripts, and it is down to level design discretion whether the player will come into contact with these – with the obvious possibility of being able to kill them. If a "mission dealing" gang member is killed, any unattempted missions should not be accessible – the player should learn the consequences of killing important characters – at least while they still have missions to hand out. Because of this it is unlikely (m)any mission dealing characters will be available to the player.

Each gang should have at least one "character" - someone that was memorable for being funny/tough/easy, and is stereo-typical of their gang.

Base
Some gangs will not have a single building or area that can be called their base – the members will just be found carrying out their activities at various points around the area.

Others, like the Russian Mafia will have definite key buildings at the docks that will be substantially more defence oriented, and be the focus of your interaction with them.

Vehicles
Gang members will be identifiable by the cars (and colour remap) they drive – see GTA2 Vehicles.doc

The vehicles which are used as gang cars will not be used as dummy cars elsewhere in the city.

What they do:

Get created 1 in 'x' when driving around that particular gang's area. To appear as though they are patrolling.

If blown up, reduce respect appropriately - just base on model number as this model will only ever appear as a gang car.

If you pull the driver out, he acts aggressively and shoots at you / tries to steal it back. Respect should also go down marginally.

If they "see" you and you are on negative respect they should give chase in the car.

Gang Boss
The Boss may have a special vehicle, possibly a fancy limousine or sports car.

Mission Scripting
Gang parameters and relationships will be defined in detail using the mission scripting language.

Gang layouts
Downtown -   Corporation, Yakuza and Crazies.
Residential -   Redneck, Corporation and SRS.
Industrial -   Krishna, Russian and Corporation.

A gang's turf is defined as a physical area of a game map – within that the player can expect to find members of that particular gang. A gangs turf may further be divided into increasingly "tough" zones for somewhere the player can aspire to being allowed to reach – in theory the player can physically walk/drive almost everywhere, but the tough zones may have dozens of guys with machine guns stopping anyone who hasn't acquired enough respect from them.

Gangs operate in a similar fashion to the police, so it is worth bearing in mind that the police are effectively just another gang – but with jurisdiction over the whole map instead of just one predefined area. We may want lower (or higher) police presence in specific gang areas.

In order to exaggerate the "gang-run" feel of the city, some of the gang turfs in later maps could have lower police presence. Normal peds should not react differently to gang members walking around – we can reduce their density in dodgy gang areas to make the few that do walk around seem 'harder'.

It is also feasible to have small gangs occupying a few buildings or blocks to add even more variety to the maps. Although these gangs could be set to attack the player on sight, the gang will not be able to dispense any missions, or hold any actual respect for the player.

Mission ideas / Ways of Gangs to make money
- Corruption of law – bribes – judges, jurys, law officials.
- Smuggling illegal immigrants
- Distracting the police while a gang member makes a getaway
- Hijacking car/person from within a police escort.
- Have to lose a gang car tailing you – use nifty driving/shortcuts
- Lead members of one gang into another gang area to provoke big fight
- Borrowing members of one gang to kick hell out of another
- Steal one gang's "preferred" car for another gang – for a setup.
- Plant something on a gang – car full of drugs for the police to find

- Act as chauffer for important gang members – gets attacked by another gang
- Kidnaps peds for the Krishnas to convert
- Mission to damage, but not destroy a particular car
- Rescue someone from a gang base
- Dubious alcohol – moonshine, Irish poteen (pawcheen)
- Security Van Heists
- Graffiti spraying / tag teams
- Nicking artics with various consignments
- Diesel truck full of dissolved Cocaine ala Licence To Kill
- Ram Raids
- Hits
- Money laundering
- Prostitution / Pimping
- Protection Rackets
- Smuggling copies of "GTA" into Brazil
- Bank fraud
- Cutting cocaine – paranoia about being caught True Romance style
- Breaking people out of jail
- Corruption within gang – having to take out someone you previously completed missions for
- Punishment inside gangs – Yakuza cut off their own fingers – Rednecks shoot apples off each others heads
- Wiping out people previously worked for ala Fistful of Dollars.

What do gangs spend their money on:
Nightclubs
Stripclubs
Brothels
Casinos
Yachts
Villas
Cuban Cigars
Cars – on display
Swimming pools
Sports car dealership – they're only interested in buying top sports cars
Sushi restaurants
Laundromats
Off licences / pubs / distillers
Scrapyards – smelting processes (to turn scrap car metal into guns)

Variations between Gangs
- Size – the geographic area they cover.
- Speed – of response to 'intruders'
- Reload – some gangs should have a slower 'autofire' than others. Perhaps also applies to punching – some could use both hands for punch?
- Frequency – the density of gang members in their turf.

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- Weaponry – what weapons they use.
- Cars – what car / car remap colour they prefer to drive. Must be distinctive.
- Accuracy – of shots.
- MO – Yakuza's tend to send in a couple of guys to pick you off, Krishnas send in dozens without caring how many you take down.
- Health – variable levels between gangs.
- Relentlessness – how much stop/start you get when being chased.
- Respawn speed – how quickly can they send in reinforcements after being killed
- Area – road types, general feel, gang colours/graffiti
- Locality – distinctive buildings
- Colours – each gang ped should be remapped a distinct solid colour
- Trade – what they do to make their money
- Vocals – both in audio and textual accents / phrases / terminology
- Music Style – each gang should prefer a style of music

GANG RESPECT

Inter-gang relationships ("gang reactions")

What happens when two gangs 'see' each other - whether they both attack, give chase or run away. In code terms, this is probably just a flag to signify either Hate or Indifference. This should be set up in the mission scripts and changeable only in the scripts - ie for Billy, he would set all gangs to always attack each other. Iain may include police as a gang to allow varying gang reactions to seeing the police.

Gang-Player relationships ("gang respects")

This allows us to give the impression of specific hatreds between gangs - irrelevant of gang reactions. ie A hates B, although B can be indifferent to A. This hatred is used purely to calculate the player's respect ratings and does not affect the fact that both A and B's reaction to each other is to fight. The player's respect rating will only be changed when he kills gang members. Attracting police to a gang area, stealing their cars etc etc does not directly affect the respect.

How this affects the player

If the player kills a member of gang A, the respect gang A has for the player will decrease. However gang C hate gang A and because you killed a member of gang A, the respect gang C has for the player will increase.

The same will also apply when doing missions for gangs – if one gang "awards" the player respect, it should be deducted from the appropriate enemy gang respect. This will give a nice balance between being in favour with particular gangs, and out of favour with others.

Scenario

A hates B, B hates C, C hates A.
All gang reactions are set to fight on sight.
Gang respect varies from -100 to +100, always starting at 0.
Killing a gang member reduces their respect one point, but increases respect of other who hated that gang.

Example

START	A=0	B=0	C=0
Player kills 20 C's	A=0	B=+20	C=-20
Player kills 10 B's	A=+10	B=+10	C=-20
Player kills 20 A's	A=-20	B=+10	C=0

Each of the gangs in the city will hold a certain amount of respect for you – the player will see it as varying between –5 (hate) and +5 (love) with zero being indifference. (For precision the game will treat it as being from –100 to +100). We'll need some form of Respect-o-meter onscreen to represent these values.

Gangometer

Russians

Rednecks

Krishnas
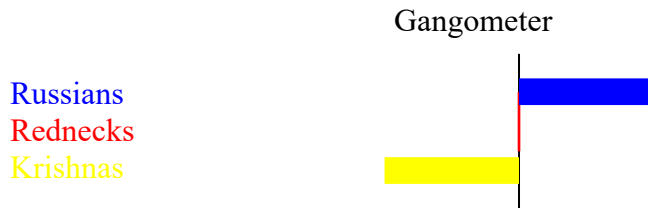
Alternatively, we could assign wording to each level of respect which can be referred to in mission briefings ie 'fuming', 'pissed' etc etc. This should probably be colour coded as well (green for respected, red for not respected ?). This allows for briefings such as "kill rednecks until they are pissed".

At the start of the map you have no respect from any gang - you are neutral. We need to give the player an arrow icon, but the player has no respect to allow us to point at any phones.

Instead of pointing at the phones we point (using the three arrow icons and three gang colours e.g. Zaibatsu's gang colour is grey and their icon is a big Z) at three information phones, one in each gang zone.

Information phones.
  - These will be used to give the player information, clues or hints. You answer the phone and you are given a brief and then after a short while the phone is re-enabled. This allows the player to access the information again at a later date.

The player can now follow one of the arrow icons towards one of these phones. When the player enters one of the gang zones the arrow icons stay the same colour. It does not change colour (when respected the arrow icon will change colour). The player now locates the phone and answers it, this will give a brief telling the player he lacks the respect of the local gang and hint at ways of earning their respect (killing a few of the krishnas).

Different arrows (gang arrows will be referred to as arrow icons for the rest of this document) for different gangs.
  - This will need 7 icons for the gangs, and the normal arrow for other uses, e.g. kill frenzy's, end of map.

For the Russian Mafia, we could tie in recognition of having various levels of respect:
0   : Nobody
+1/+2 : Connected
+3/+4 : Wise Guy
+5   : Made

Your respect should never be "reset" :
– Even if you die
– Even if you get arrested
The only way to change the respect is by playing – killing members of a gang, doing missions for someone, stealing from a gang, killing police on someone's turf etc etc.

You can increase a gangs respect for you by successfully doing missions for them or by causing havoc in their enemies turf. Their respect for you will decrease if you cause havoc in their turf, or by doing missions for another gang.

This way, the easy missions (repect > +1) can be on the outskirts of gang turf so that if the player is hated, he gets warned not to come back without respect or he'll get wasted. The medium missions (respect > +3) are deeper into the gang area where the player would run into reasonable trouble if entering without respect and the hard missions (respect = +5) are in the centre and it'd be pretty well impossible to enter there without respect.

Each gang dispenses 3 easy missions, 3 medium and 2 hard missions - giving us 24 missions per map. Plus one "map completion" mission which involves the three gang bosses being sent after the player.

Although the weapons used and the aggressiveness would probably be the same, more hassle can be easily simulated by just having more and more gang members going after the player.

Answering phones.

When the player gains the respect of one of the gangs (russians). The other two arrow icons (krishnas, zaibatsu) will disappear, leaving the arrow icon from the gang (russians) , pointing towards their gang zone (should be pointing at a position right in the middle of the russian gang zone). The player can now follow the arrow towards the gang zone. When the player enters the gang zone the arrow icon changes colour and begins to point towards the phones (rather than at the middle of the russian gang zone) that they have the respect to answer.

Different levels of respect needed to answer phones.
- +1 respect – easy phones (in outskirts of gang area)
- +3 respect – medium phones (central to gang area)
- +5 respect – hard phones (in heart of gang area)

The reason the colour of the arrow icon changes is to show the difficulty of the phone currently being pointed at.

Different coloured arrow icons pointing at phones with different levels of difficulty.
- Easy – green
- Medium – yellow
- Hard – red
    - The phones will also be colour coded to represent their difficulty, using the same colour guide as the arrow icons.

As the player earns the required respect to answer the medium phones another arrow icon will be added to the previous green arrow icon pointing at the easy phones (same gang arrow icon) this one being yellow and pointing the player towards the medium phones. The same will happen when the player earns the required respect to answer the hard phones. Another arrow icon will be added to the previous green and yellow arrow icons (same gang arrow icon) this one being red and pointing the player towards the hard phones.

If the player at any time leaves the gang zone, (russians) and is still respected. Then the arrow icons will disappear and be replaced by the gang's arrow icon in the gangs (russians) colour and point towards the gang zone (at the middle of the russian gang zone, not at the phones). The player would need to re enter the gang zone to be pointed at the phones again.

We may want to use some type of markings on or around the phone to indicate the respect rating required to be given missions - number of banners/flags hanging from nearby window.

Respect from multiple gangs.

If the player is respected by two gangs, at the same time (russians, krishnas). We will check to see if the player is inside one of the gang zones (russians, krishnas).   If the player is outside both gang zones then two arrow icons (different for each gang) in the gangs colours will appear (russians, krishnas) and point towards the middle of both gang zones (should be pointing at a position right in the middle of the russian and krishna gang zones). If the player follows one of the arrows into a gang zone (krishnas) then both arrow icons are turned off and the process explained in '**Answering phones**' applies.

If the player at any time leaves the gang zone (krishnas) and is still respected by both gangs. Then the arrow icons will disappear and be replaced by the gang's arrow icons in the gangs (russians, krishnas) colours and point towards the gang zones (at the middle of the russian and krishna gang zones, not at the phones). The player would need to re enter one of the two gang zones to be pointed at the any of the phones again.

In short, if you are respected by a gang. You will be pointed towards their gang zone. The only time you are pointed towards the phones is when you enter the gang zone.

All phones will ring regardless of the respect that gang has for you. You will not be pointed at phones if you do not have the required respect, but you can answer the phone. If you don't have the respect of the gang, you should be greeted with an extremely pissed off gang boss telling you to get off his turf, and don't come back until you have earned his respect.

If you don't have enough respect, you should be told either to kill some of their enemies, or complete easier missions (if available).

If a player has a negative respect rating (hated) with a particular gang, he will get attacked in their area. The deeper into a gang area he goes (or possibly, the longer he spends in it – obviously it takes longer to get into the centre) the more hassle he gets – perhaps a –1 rating in the centre gets similar attention to a –5 on the outskirts.

On zero or positive ratings, the player will not be hindered by gangs at all, and can have access to all areas of their turf. We can set up specific areas which are difficult to get in regardless, but this is not gang related.

SCORING

<u>ACTION</u>   <u>POINTS AWARDED</u>

DEATH

Dummy, with weapon	200 - Varies on weapon (inc. punch)
Dummy, with vehicle	100
Dummy, on train tracks	500
Police, with weapon	2000 - Varies on weapon and police type
Police, with vehicle	1000 – Varies on police type
Police, on train tracks	5000 – Varies on police type
Gang member, with weapon	500
Gang member, with vehicle	200
Gang member, on train tracks	2000
Ex-driver, with his car	7xVehicle death score -dummy, gang etc
Anyone, caught in explosion	200
Anyone, drowning	500
~~Anyone, accidentally by police~~	~~500~~
Anyone, accidentally by dummy car	200
Passengers in bus/train/taxi	100 for each passenger
Elvis – by any means	10,000

DESTRUCTION

Vehicle, % Damage	10
Vehicle, Destroyed	250 - Varies on vehicles
Dummy, pulled out of vehicle	100

MISDEMEANOURS

Taxi, carrying passenger per second	1
~~Cranes, delivery of car~~	~~1000 - Varies on vehicle & damage level~~
Car being in the air for > 5 seconds	2000
Stealing train	1000
Blowing up a fully-loaded bus	5,000

COSTS

Repairing vehicle	-10 for every 1% of damage repaired
Respraying vehicle	-5000
Arming vehicle with bomb	-10,000
Arming vehicle with a mine	-2000
Arming vehicle with an oilslick	-1000

? Can we award points depending on *how* we run a pedestrian over - driving straight over, reversing, skidding, crushing against walls etc ?

? Could award different points for specific dummy types – car thieves, muggers, psychopaths etc ?

BONUSES

Special case bonuses will also be available to players that take the time to get to know the game well. These are:

- ~~Bus queues – ala GTA's Gouranga. Every person in a bus queue must be killed within a certain time of the first kill.~~
- ~~Cardboard Crunch. In the cardboard boxes found in alleyways, there'll be the occasional homeless person – the boxes won't appear any different, but smashing through the box will give the bonus.~~
- Elvis. As a very occasion bonus, Elvis will make a special appearance – playing a Elvis-esque samples to ensure recognition. Killing him gives an "Elvis has left the building" bonus, awarding 10,000 points.
- Grand Theft Auto. Delivering one of each type of car to a particular crane. Details unknown at present.
- Secret bonuses – *ala* GTA's Kill Frenzy (see below). Hidden triggers that activate a very rewarding (and often violent) task – kill a certain number of police, race to a specific point, cause x amount of damage etc. These can be activated by entering specially placed cars, killing a specific person, entering a particular building etc.
- Terminator. Silver remapped ped that is impervious to normal weapons and vehicles. Add weight to him to cause massive damage to vehicles ala Superman. Suggestion of Corporation sending it after you if you screw up too many missions. Probably best as a secret "kill frenzy".
- Taxi Drivers Must Die. The CD Track which would be superb for a 'hidden' bonus. The track is part of the normal radio station playlists (albeit only played very occasionally), and when it comes on the player is given a bonus if he kills 10 taxi drivers before the song ends. Two possibilities : The song continues playing whether or not the player is in the car to allow taxi drivers to be pulled from cars. This would mean new missions are not allowed to be triggered. Alternatively, for the duration of the song bumping into a taxi will immediately cause the driver to get out – giving you the perfect opportunity to kill him.
- Evil Knieval. Your car is airborne for more than 2 seconds (ie it's just come off a big set-piece ramp).
- Japanese Photographers – occasionally get a group (ie not in a line!) of peds taking photographs (click, click, flash, flash). Killing them all within 2 seconds gives a "Sushi" bonus. (and 10,000 points).
- Punching dummies. Random peds will throw out coins when hit – first three times you get a single coin (10 points) (which magically flies straight onto the player – and added onto his score), when you kill these guys by punching, you get many coins. (100 points).

Others mentioned so far:
- ? Kill 10 peds in a row with 10 bullets ?
- Steal a police car and use it to run down it's driver 10 times in a row
- Destroy all trains in the city
- ? When on 5 police heads drive only in reverse for 5 mins without getting out. ?
- "Expeditious execution!" - 50,000 points. Murdering 20 people with a maximum time of 15 cycles (0.5 sec) between each pair (ie ten seconds in total)
- "Genocide!" - 100,000. Murdering 1000 people - no time limit
- "Cop Killa!" - 50,000. Destroying 20 police cars - no time limit

- "Car Jacka!" - 20,000. Stealing 100 cars - no time limit

? How about a Lethargic bonus or Cancer bonus for just standing smoking a fag for x amount of time. It'd be cool if the player left the game running, went away and then came back to be rewarded with this bonus (only once they pressed a key, so the text doesn't appear when they're not there). We could award something like 10 points...?

? The extra kill frenzy score display (I mentioned yesterday) could also be used for awarding bonuses...it could briefly appear and count up the bonus total...this way the player will realise exactly how much points they are receiving.?

KILL FRENZIES

Kill Frenzy icons (skull and crossbones) will be placed on the maps by the level designers. The scripts will then check for when the player has stood on that spot, trigger the relevant Kill Frenzy (bringing up large font "Kill Frenzy!") and remove the icon.

If the Kill Frenzy involves controlling a radio controlled car, an icon indicating this will appear on screen. The player will then be given an unlimited number of cars (one at a time) to complete a certain task within a time limit.

- Kill x amount of particular coloured peds in y seconds
- Kill x amount of particular gang peds in y seconds
- Kill x amount of police officers in y seconds
- Kill x amount of car thieves in y seconds
- Kill x amount of taxi drivers in y seconds
- Kill x amount of bus drivers in y seconds
- Kill x amount of train drivers in y seconds
- Kill x amount of particular coloured vehicles in y seconds
- Kill x amount of particular gang cars in y seconds
- Kill x amount of police cars in y seconds
- Kill x amount of particular models of vehicles in y seconds

All of the above can be done in several different ways as well :
- Using any method
- Using a car
- Using a particular model of car
and
- Allowing any other type of ped/car to be killed throughout the duration
- Only allowing the stated car/ped to be killed. If anything other than this is killed, the kill frenzy is failed.

Additional (scripted) bonuses from GTA were :
- Insane Stunt Bonus (SA)
- Gratuitous Violence bonus (SA)
- Bitch Slapping Bonus (LC)
- Crazy Bastard Bonus (VC)

MISSIONS

In order to complete each map, the player must amass a certain amount of points (money) – which can be done by any available means. Simply travelling round, committing murders and car thefts, arbitrarily stealing cars for gangs, causing explosions, instigating gang wars etc will eventually raise the necessary points to progress to the next map.

However, for each map there will be a series of missions (75 missions in the whole game) which the player can choose to take on – these will each be in the form of around six tasks each and can be based on:

- Stealing and delivering a particular type of car
- Stealing a specific car – normal cars, police vehicles, gang vehicles etc
- Killing a particular person
- Blowing up a particular building (a bank, a prison, to help inmates break out)
- Leading one gang to another's headquarters
- Starting fights/wars between gangs
- Kidnap a particular person (with your own buddy/bodyguards/gang to help)
- Take out X members of a particular gang
- A race across the city (starting with revving engines at traffic lights)
- Lose someone tailing you (as you drive off, a parked car's lights come on and follows you)

Mission triggers will be three dimensional, so a mission can be started from any position and height.

MISC
Certain types / colours / company names of lorry trailers could be found in different areas.

Player could "discover" lorries with various items and delivering it to the appropriate gang gets reward.

To minimise the number of missions, each map will have three main gangs which require missions. Each gang will have 3 easy, 3 medium and 2 hard missions. There will also be an end of map mission (which could involve being pitted against the gang bosses) - giving us 25 missions per map. The save-game should dispel any complaints from the Yanks, so other than it being the same as GTA, there shouldn't be a disadvantage of doing this.

What is a GTA2 mission?

A **mission** is a grouping of one or more [tasks](). Although the [tasks]() can branch to allow variation in **missions**, there is always a path (with one start point and one end point) through all the [tasks](). There is no physical limit on the number of [task]() branches, but branching should be done with care to maximise the level designer's time, and minimise the amount of testing subsequently required. It is expected that in all the missions on any map, there will only be a handful of branches.

Every **mission** must give a reason for being – it has to be explained to the player why they should complete the [task](s) that follows.

There are three types of **missions**:

- Normal – Given out by gangs, the player is expected to complete all of these. While a normal **mission** is in progress, the triggers to all other normal **missions** are switched off (alternatively, they could simply be disabled with the player getting a "come back when you ain't so busy" message instead). Only one normal **mission** can be active at any one time. The availability of normal **mission** triggers may vary on the respect a particular gang has for the player.
- Hidden – Could be triggered by entering a car, picking something up, walking on a particular spot etc. Could be linked to a specific gang, or could be gang-independent. Attempting a hidden **mission** does not affect other hidden **mission** triggers. If a hidden **mission** is triggered, with a hidden **mission** already running, the original one is stopped, flagged as failed, and the player can continue with the most recent hidden **mission**. There may be some hidden **mission** triggers which become available only after another **mission** (normal or hidden) has been successfully completed, or upon re-entering a specific map.
- Final – When the player is given the opportunity to exit the map. Activated once the player achieves a pre-set target score (which will probably be different for each map), there should be a constant check to see if this **mission** should ever be deactivated – if the player ever drops below the target score. If so, the **mission** would be available when the target score is achieved again. There is only one final mission per map. The player is still allowed to attempt any remaining missions before exiting the map.

In summary, it is possible to have one of each **mission** type active at the same time, but not to have two (or more) of the same type active at any time.

Missions (or tasks) cannot be 'suspended' – they are always either active (ie currently running), untriggered, completed or failed.

Normal **missions** and hidden **missions** will always have a physical trigger on the map– regardless of whether it is "answering a phone", having a "face to face" conversation with someone on the street, entering a specific vehicle etc.

The final **mission** could be triggered at any location, as soon as the map completion trigger is activated.

A **mission** can end either when there are no subsequent tasks for the player to attempt (signified by a MISSION COMPLETE statement), or when a fail condition is unrecoverable.

An unrecoverable fail condition is one where the [task]() (and **mission**) is immediately failed. (ie the player blowing up the car they were supposed to collect.). The player should then find the next **mission** to attempt. Upon failing some **missions**, it could be possible to point an arrow to the next **mission** trigger.

A recoverable fail condition is one where the player is allowed to continue the task (ie the player dies on route to collecting the car. Upon being regenerated, the player still has the opportunity to collect the car.) All task and **mission** status should remain as they were to allow the player to continue the task from where it was left off.

There must be pass or fail conditions for every eventuality (typically, for every pass condition there will be several fail conditions), it is down to level design to decide which fail conditions are recoverable and which are not.

Rewards can be given for completion of individual tasks or for entire **missions** – see tasks section.

Example of mission:-
A car has been dumped. You have to retrieve it and put it in storage.
- Task 1 - Find and enter car.
- Task 2 - Take it to specific location.
Congratulations – hands over lots of cash.

Fail conditions in example **mission**:-
- Task 1 - Player dies before entering car.
- Task 1 - Car is destroyed before entering it. UNRECOVERABLE.
- Task 2 - Car is destroyed on route. UNRECOVERABLE.
- Task 2 - Player exits car before correct location.
- Task 2 - Player dies while out of car.
- Task 2 - Player turns up at the right location with the wrong car.

Time pressure could be added by having the police looking for the car as well – if they find it before the player, the task is failed (unrecoverable fail condition). The mission difficulty could be ramped in numerous other ways eg :
- Placing the car in an enemy gang area.
- Increasing the distance between car and storage location, or others.
- Giving the player an instant police wanted level.

So, what is a task?

A **task** is always part of a **mission** – it can be part of a multi-**task mission** as in the example, or it could be a one-**task mission** such as a Kill Frenzy, or being sent to the end of map trigger. As there are three types of **mission**s, in theory three **mission**s could be active at once, which means three **tasks** would be active at once as well.

A **task** does not need a specific physical location to trigger it – although in practice, most **tasks** will be started at a known location - getting a car to a specific location, getting to a specific location, etc. But if the player simply has to kill someone, escape from someone, etc, then the location (of where the player begins the next **task**) will not be known.

A **task** starts with the instruction text, instructing the player what they have to do in order to complete the **task (**ie "go to the docks and meet Fat Freddy"). There are two types of **tasks** :
- Arrow **tasks**. Where the player is given an arrow pointing to the first objective ie normal **mission tasks.**
- Non-arrow **tasks**. Where the player is not given an arrow ie GTA Kill Frenzy.

Upon starting a **task**, as well as the instruction text, the player could also be given some assistance to complete the **task** :
- Weapons
- Vehicles
- The player's own gang : a group of gang members who will follow the player for the duration of the **task** / specific time duration / anywhere within a given area. They should attack anyone the player attacks, as well as attack any assailants.

A **task** can only end in two ways :
- An unrecoverable fail condition - in which case the **mission** is also failed
- Successful completion of the **task** – in which case the player is given the next **task** in the current **mission**.

If there are no more **tasks**, the player has completed the current **mission**.

A **task** ends with more instruction text – telling the player why the **task** was failed, or congratulating the player on completing the **task**. The **task** end text can often be combined with the **task** start text of the subsequent **task**.

In addition, the player may be rewarded upon successful completion of a **task**. The most likely rewards are :
- Money (Points)
- Higher Gang Respect Rating
- Weapons
- Vehicles
- Etc etc.

AUDIO

Music

The car radio style CD tracks from GTA will be retained. Each track will be a different style, and in the main, different styles from GTA. With specific cars being prevalent in different parts of the map, we add even more depth to the gang feel of the game.

Current Ideas include:
- Cheap '70's porn complete with 'mmm', 'uhh', 'ooh', 'aah' etc.
- Severe dance remixes of GTA tracks
- Twin Peaks: Fire Walk With Me
- Eerie, fucked up electro-ambient spooky chick music. Ref Portishead, Massive Attack, Craig Armstrong, Cocteau Twins, Girl Eats Boy
- Brass band Music - Acid Brass/ Black Dyke Mills Band
- Female angst folk rock - tori amos / sarah mclachlan / beth orton
- Japanese style techno /rap / whatever
- Hammond organ / James Taylor Quartet
- Crappy 70's TV cop shows - kojak, streets of san francisco, ironside, persuaders, z cars
- Krishna FM - wholesome music - carpenters, simon + garfunkel, cliff richard, roxette, abba
- 80's synth pop   - jan hammer, miami vice, axel f, harold faltermier (sp?)
- Mexican ballads - mariachi, dusk till dawn, el mariachi, flamenco
- Russian crap rock - dodgy heavy metal
- Gay anthem - Culture Club / Jimmy Sommerville
- Reggae
- Pop punk - greedn day / presidents of the usa
- Folk music - accordians, Corries
- Britpop - Oasis, Blur etc
- Indian / Arabic - sitars, wailing taxi drivers
- Beach boys
- Take Hart "the gallery" music
- And some of Steve Banks' bizarre fusion of styles stuff
  > 80's synth pop in a drum'n'bass style
  > electro jazz
  > arabic hip hop
  > funky isaac hayes style using 303's

And in the maybe list :-
- Get Carter soundtrack
- Tom Waits - Earth Died Screaming
- John Carpenter - see Precinct 13, Fog, Halloween
- Mafia owned Italian opera station
- Leonard Cohen
- Industrial

Overview:

Grand Theft Auto (GTA) introduced a unique system of music playback that used the in-car stereo as the source of music within the game.   Seven different radio stations were created each playing a different style of music and assigned its own track on the CD.   The result was an interactive music environment, the music changing depending on what type of vehicle the player used.

Although this was a feature unique to the game and well received by the players and press alike we have identified a few improvements that could be made to enhance the system

This document aims to explain how music and sound will be used in Grand Theft Auto 2 (GTA2) both in concept and technically.

See separate document, audio.txt, for specific audio list.

The Differences:

The main things we will be changing are as follows:

Scalability

Everything should be 'scaleable' to allow sounds to be played at a high or low quality depending on proximity to the player, and volume. The user may also be able to choose between audio quality levels to ensure the game runs well on lower end machines.

Streamed WAV files instead of CD audio:

One of the most unfortunate problems caused by our interactive music solution in GTA was the game pausing briefly whenever you entered or exited from a vehicle.   This was caused by the CD player seeking to a new track on the disc.   The solution we will be implementing on GTA2 is to stream the audio as a data file from the CD to a memory buffer.   Although the audio quality is not as high the pause is all but eliminated.   The lesser audio quality can be reasoned away with the use of AM and FM radio transmitters.

AM/FM Radio Stations:

Because the music for GTA2 will be streamed WAV files (see above) instead of CD audio there will be more space available on the CD.   This should allow us to store 2 versions of each station, one at AM quality (11,025Hz, 16-Bit, Stereo) and one at FM quality (22,050 Hz, 16-Bit, Stereo).

Identity of Radio Stations:

In GTA we had 6 radio stations each with 3 songs plus the Country & Western channel with only the one track.   We plan a similar sort of set up this time: 5 of the stations will be gang related, that is they will broadcast music associated with each type of gang.   The other 2 will be generic 'chart' stations playing commercial music.   At this time we have made no firm decision about the styles of music that will be covered by the other 5 channels although we have discussed 60's Surf Guitar (Dick Dale style), Punk (New York) and Reggae as

possibilities. We will make more definite choices once the gangs themselves have been better defined.

Choice of Stations determined by location:

GTA used the type of vehicle to determine the station that would be playing when the player entered the vehicle for the first time. This way it was easy to associate Rock music with American muscle cars, Hip Hop with the open-top jeeps and Pop with the taxis. Although we still intend to use the cars for this purpose to some extent (see below) we also want to introduce another factor - the player's location within the city. Within any area of the city there will be 3 stations available at FM quality (the 2 chart channels and the gang radio for that area), however there may be more available at lower AM quality (see above).

Radio Station also determined by vehicle type:

The type of vehicle the player enters will determine which of the 3 (or more) channels available in that area of the city is actually playing when they enter the car. For example certain cars may be associated with the gangs and these would always have their radios tuned to the gang stations.

More emphasis placed on reception quality:

Although the 2 Chart stations will broadcast at FM quality over the whole city the gang stations will only be broadcast at FM quality over their turf. Moving outside of the transmitter range will cause loss of FM reception. However it will still be possible to pick up the station on the AM transmitter but at extreme distances it will not be possible to pick up the station at all. This has the potential to be used as a game element by attracting the attention of rival gangs if you drive through their turf with your radio tuned to an enemy gang's radio station.

Random Station Idents:

The radio station idents were included on the CD tracks in GTA. This did not allow for any random elements in the radio stations. This time by streaming jingles from the hard drive (on PC at least) it may be possible to have more varied jingles chosen randomly from a suitable bank.

Destroying Radio Station Transmitters:

Since the radio stations will be graphically represented in GTA2 it would be fun to be able to blow them up. Doing this could be used as a game element, a mission to destroy a gang's radio station for instance. It is also an interactive way of turning the music off. Instead of having a switch on the front end that turns the music on and off it puts the choice in the game: if you blow up the central radio station all radio is lost over the whole city. Getting in a car tuned to a radio station that is not broadcasting will result in static being played over the car stereo. The radio can be re-tuned or the volume turned down.

The radio transmitters would only be able to be destroyed as part of a mission.

News Flashes

After completing certain "high-profile" missions (such as blowing up a large building or murdering a gangland member) we aim to implement a system of news flashes as in-game rewards. Within a few minutes of the crime being perpetrated every radio station will be interrupted with the news flash which the player can listen to.

More interactive police radio:

Although crimes were reported in GTA and then broadcast over police radio it was done in a very basic way. This time around we aim to not only broadcast crimes committed by the player but also to let them know where the police are looking for them, what type of vehicle they're driving, the direction headed and so on.

Intermissions

- Number channel transmissions ("seven......fourteen......thirty eight...")
- Recipes
- News Flashes
- Police reports

Conclusion:

Implementing all these points will provide for a much more absorbing and believable world for GTA2 to take place in.

SONY PLAYSTATION EXCLUSIVES

Dedicated Playstation team
The whole game is being designed from the ground-up with Playstation in mind. Compared to GTA, the game will run significantly faster, with many more cars and pedestrians available at any one time.

Soundtrack
The Playstation audio will be considered at every point through the development, and extensive use will be made of the CD audio that is continuously available ingame. The pumping soundtrack will feature different genres and styles of music created by the team responsible for the award winning GTA soundtrack.

Control
The game's complex physics model, combined with the flexibility and feel of the Playstation pad, accentuates the extreme Hollywood style driving and allows a greater degree of control than ever before. Screaming round a corner pulling a 180 with the handbrake will be so natural you'll forget what a footbrake is for.

Special Vehicles
Throughout the game, the player will encounter a number of vehicles designed especially for the Playstation.

Additional Cityscape
The Playstation allows the creation of additional areas of cityscape throughout the game. These areas can then be used for additional missions, gangs and hidden areas – unique to Sony.

Dynamic Visual Effects
The Playstation hardware will allow a number of visual effects such as – enhanced explosions (with resulting real-time lighting effects), fog, smoke, steam and other transparency effects. These will be used to enhance the atmosphere within the city and show exactly what the Playstation is capable of.

Special Guest Stars
The Playstation game will feature a number of exclusive 'Special Guest Stars' who will appear somewhere in the city and can be used to trigger large bonuses.

SETUP UTILITY (PC only)

'Bob' is the setup and configuration utility which will run alongside GTA2 in order to minimise the options ingame. Where possible, any options changed will affect the game when it is returned to. The remainder will take effect the next time the game is run. Designed as a simple MFC program, it is a series of tabs as follows :

Main
- Show GTA2 logo
- Run GTA2
- Copyright and Credits
- Quit

Display
- Window / Full Screen
- Resolution
- Hardware Card Accelerated – choice of different cards

Control and languages
- Redefine all keys (except for 'system' keys : Quit game, Display last message, Send messages between players). Show any key conflicts.
- Use joystick / SideWinder pad
- Languages – Choice of six : English, Japanese, German, Spanish, French and Italian. Selection by country flag.
- Text Speed – slow / medium / fast

Installer
- Allows installation (game still requires CD to run), and for network games (without CD, no single player, ability to join servers only)
- Sets up Uninstall

Development only tabs

Debug
Allows selection of maps, scripts, text files and debug tests to be run.

Vehicle Physics
- Allows tailoring of all aspects of vehicle physics while simultaneously running the game.
- Change current car – to avoid having to search for each vehicle in game.
- Save/Load settings for each/all vehicles out

INSTALLER (PC only)

Autoplay
If the game hasn't been installed, launch installer which should come up with a "This will install GTA2 – Proceed / Cancel" dialog.

If the game has already been installed, Bob should automatically be run. (Check for game already running, if so do nothing – window name is "GTA2")

Manual Play
Start menu should be : Programs – GTA 2 – GTA2
Where the second GTA2 is a shortcut to our setup program 'bob'. (default position, should be user-configurable). This means that if people have GTA and/or GTA London installed, all games appear sequentially on the start bar. This directory on the start menu should also contain an Uninstall shortcut ("Uninstall GTA2"), a link to a readme in the appropriate language ("View readme") and a shortcut to the GTA2 website ("Visit the GTA2 website").

Data
The installer needs to install enough of the game to play multiplay games without the CD being present. However, single player games still need the CD to be present.
There will be just one install size – the user will not be given a choice in this. The game must install from the CD, not from Hard Drive.

Install Directory
By default, should be C:¥PROGRAM FILES¥GTA2
Although the user can change this to any other valid directory they wish. A warning message should be displayed if a directory has to created for this.

Warnings should be given if there is not enough available disc space to install the game (current install size unknown – current guesstimate 60Mb). Also take into account that the game may be installed to a different drive from DirectX, so may need two size checks performed.

Uninstall
Can be selected either through Settings - Add/Remove programs, or through the Start menu.

Languages
All install/uninstall text will need to be localised into all six languages :

- Europe SKU   - English (UK), Spanish, German, French and Italian
- US SKU   - English (US) and Spanish (same version as Euro SKU)
- Japan SKU   - Japanese and English (US)

If possible we should default the language to whatever country settings the user has, but if not, the default language (where applicable) is the first in each list. Selecting a particular language shouldn't force the keymappings of that country onto the player, instead it should always use the Windows setup keyboard location. Eg Apparently a lot of French players have a UK setup PC, but obviously want to play games in French.

ie Automatically bases the language on the language ID of Windows – the user can always change it later through Bob.

DirectX
DirectX6.1 will be on the CD but should not be installed automatically by the installer. If the user has an older version of DX, the user should be prompted whether or not they wish to install DX6.1

It is expected that DX7 will ship prior to the game being complete, if this is the case, then DX7 will need to be included on the CD.

General
Bog standard InstallShield installer with all appropriate information, warnings, errors, progress indicators.

Apparently, we have the capability to play a movie whilst the game is being installed – do we have a use for this? It would have to be no more than 3Mb to avoid overly delaying the installation of the game purely to play a movie. (AP: It is best used to provide an animation area on a larger background)

Artwork
Size, position etc of artwork to be defined.

? Splash screens, logos etc from different publishers / distributors unknown ?

TESTING

Mission Clarity

- Was it clear what had to be done?
- Was it clear why it had to be done?
- Was it clear how it had to be done?
- Was it clear where it had to be done?
- Was it clear how the mission was part of the whole structure?

Mission Content

- How many attempts did it take to complete the mission?
- How long did it take to complete the mission (all attempts)?
- How long did it take to complete the mission (successful attempt)?
- Was the mission too easy (boring) or too hard (frustrating) or just right (fun, satisfying, rewarding)?
- Which aspects of the mission (eg: tasks) appear to contribute to the mission's strengths and weaknesses?
- Was the mission too long or too short or just right?
- Was there sufficient incentive to perform?

MISC

Style files – to have a separate style file for each map. Each style will have 1024 tiles, but it is expected that around 75% of those will be the same across all three, with the remaining few hundred used to exaggerate the differences between the cities.

Frame Rate – cap frame rate at 30fps. Anything lower should run the game at the same speed, but show fewer screen updates.

~~? PC hardware accelerated only. Reflections in the water. The surrounding map area could be flipped and alpha'd over the water to create a reflection, the area directly under a bridge may have to simply be a dark shadow as there is no corresponding tile there. Wish list.~~

? Vertical sprites. We could get (animated) vertical sprites added if required - they weren't used in GTA, but could let us add scorch marks / deformation of walls. Nothing from ordinary bullets though! Simple effects like flashing bank alarms can be done with animated tiles.

? interact with shops - smash front window, glass goes over road ?

? Road rage - pull you from car ?

? Meat wagons for dead bodies ?

Bonuses
~~Scottish – people with orange hair playing bagpipes. Get a "hoots man" bonus.~~

Streaker bonus – Every so often you get a naked ped (skin remap) that runs around screaming if manage to kill it you get the streaker bonus. (same as the elvis bonus).

~~Shaun McGetTheShitKickedOutofMe bonus~~

Street Happenings
- Bobbies on the beat.
- Police chasing someone – subsequently arresting, do they then find a police station and drive through it to drop them off?
- Police interrogating someone on the street
- Drug deals going wrong – someone ending up getting shot
- At respray shops, could see a queue of cars that are waiting to be remapped to gang colours
- Guys pissing up against the sides of walls – award Piss Points
- Drug deals – one person hanging around a street corner, another walking up. Pause for a few seconds, then walks away.
- Dealing / smuggling arms etc from boats – imply people carrying items into lorries etc.
- Chases – five gang members chasing one dummy bloke, one gang member with machine gun chasing five dummy blokes.
- Gang car mowing down five dummy peds.
- See a bank robbery / off-licence holdup take place. Perhaps killing the perpetrator gives you the money they stole.

Peds carrying a miscellaneous generic objects to represent what we want? If killed, the object would fall to the ground and be an actual object.

Modified anim and audio for breaking into parked car? Smash glass, open door, disable alarm, start engine. For a moving car, open door, pull driver out – engine already running.

Wish List
- ~~Ability to place mines as a ped~~
- ~~Get the tow-truck to work in exactly the same manner as the artic. The graphic could be modified to have hooks hanging from the back which could be the non-collidable 'section', and you could reverse it into any normal car to 'tow' it?~~
- ~~Sniper rifle~~
- ~~MGS-style radar to show line of sight on peds~~
- ~~Allow designers to place gun-turrets - the gunjeep's gun / tank turret as an object on the ground.~~

QUESTIONS

How many missions per city?
25 - 8 per gang plus one 'final'.

How many kill frenzies in each city?
As many as you can do in 3 days. This includes all hidden stuff, bonuses etc etc.

What will happen with cars with guns etc bonuses?
Wish list. If we get it, it can go in as map completion bonuses, or just very well hidden stuff.

Will we get retro games to play?
Yes. Not sure which ones though.

Will we get wrap around and the ability to flag previous passed missions?
Assume no.

Will we get the score table we talked about?
Yes. Without wraparound it won't be as meaningful, but it's still a nice idea.

Will the city be played in one go or will it be split into levels?
Played in one go.

How many, and what shapes can we have?
You now have all you're going to get.

What's happening with multiplayer in regards to maps, missions etc?
All Mr Dobson's department.

Will the player ped jump a whole block eg jump between buildings?
Yes.

What weapons have been set in stone?
Pistol, Machine gun, Rocket launcher, Molotov Cocktail, Super-Taser, Car: Landmine, Car: Oil slicks, Dual Shot Pistol, Silencer Powerup, Taser, Shotgun, Flame-thrower, Grenade, Car: Water cannon, Car: Tank cannon

Is line of sight going in?
Yes.

Are pagers and mobile phones dropped?
No - although all the messages the player gets will be through the main message text at the bottom of the screen. We can have different graphics for phones/pagers/face to face etc etc.

Do we rely on face to face and phones only for mission instructions?
No - mobiles/pagers can be used.

Are the Australian gang definitely staying?
No. SRS are now definitely in.

What powerups are we going to have?
See [powerups](#) section.

The vehicle stuff we done with Penn... will this happen?
We'll have to prioritise it depending on how the physics goes, but at the moment I'm hoping to have pretty much all of it.

Will we be using pre-shaded tiles?
Assume no, currently waiting on information from others.

Can we have audio attached to tiles / objects, or both?
We can attach audio to objects – to get the effect of tile-attachment, we would just place on an object on the required tile.

Can we have cars slowing down on grass?
Yes – it'll be much, much simpler if all the grass tiles are in the same position across the three style files.

Will the game automatically do shading on all sides?
Yes.

Can we rely on the dynamic lighting being in software / PSX versions?
Unknown.

How are the cars split up between the different cities?
See [GTA2 Vehicles.doc](#)

Is there a limit to wedge shapes or invisible objects?
Yes, currently unknown.

CREDITS

Keith Hamilton :	Lead Programmer
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Iain Ross :	PC Programmer
Graeme Williamson :	PC Programmer
Dan Leyden :	PC Programmer
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Paul Farley :	Level Designer
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REVISION LIST

- 30/4/99   SteveB's bonus ideas put in, notes on high score tables changed
- 25/5/99   Installer notes updated
- 26/5/99   Progression section added, Japanese Photographer bonus moved to Bonus section, Dummy peds dishing out coins when hit added to Bonus section
- 31/5/99   More particle types listed (special effects), police generation notes from IainR, spitting replacing farting on player's special key (user interface)
- 9/6/99   Gang car notes updated, some Bonuses deleted and/or amended
- 16/6/99   Game Structure updated to include player being told target score at start of each level.
- 21/6/99   Arrested notes added in Police section
- 22/6/99   Tag notes added to multiplayer
- 30/6/99   Kill Frenzy notes updated.