



Team Mango

“Game 2” Design Document

Game Name: Untitled

Target Playtest Date: October 2009

Target Peer Review Date: November 2009

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Development Started:

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Overview

“Game 2” is the second game by Team Mango, having released their first game “GravSheep” in May 2009. “Game 2” will be released on the Xbox Live Community Games platform. All code will be written using Visual Studio 2008 and XNA Game Studio 3.0, in C#.NET. A Windows port will be completed afterwards – the game must run on PC nicely at all times during development, but will be specific to the 360 gamepad until the port.

“Game 2” will take influences from three games: “Alien Breed” (Amiga), “Gauntlet 2” (Arcade) and “Xenomorph” (Amiga).

The game will be a top-down action arcade shooting game, with a few puzzle elements thrown in. I envision the tiles and sprites to be drawn from a fully overhead perspective, rather than an orthographic perspective, although this can change based on artist preference.

The Story

“Game 2” will begin when the main character’s small spacecraft makes an emergency landing on a small planet with a lone mining outpost. The name of the mining outpost will probably also be the name of the game. The mining outpost will have 10 levels, accessed by a central lift shaft, as well as the initial outside starting area.

Unable to make contact with the outpost before crash-landing, the main character will need to find out what’s going on (possibly through the discovery of journals on computer terminals?), and gather supplies to get his ship up and running again. The game will end when the main character resupplies his ship and takes off again.

Resupplying the Ship Becomes the Puzzle Element

To take off, the main character will need to find the following components:

- **10 replacement motherboards**
 - Each **motherboard** requires **4 chips** to be functional
 - Thus a total of **40** chips will be required
- **10 fuel rods**, one from each level.
- **Navigational data** (uploaded to the ship from the outpost’s central computer)



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Motherboards and **chips** can be found throughout the outpost inside anything electrical. I envision several objects which may contain motherboards and chips:

- Some doors
- The main lift shaft
- Automated gun turrets
- Room lights (?)
- Computers

This is where the puzzle element comes in. Any electrical object needs one or more complete motherboards. A motherboard requires four chips to be complete. The player may carry any number of motherboards and spare chips at a time. Some objects may have no motherboard. Others may have a motherboard, but may be missing one or more chips. The player can transfer motherboards and chips between an electrical object in the game and his inventory.

Therefore, the main character can resupply the ship by scavenging from the outpost. This results in a fox/chicken/grain scenario whereby the player has to choose which outpost objects to power down in order to get off the planet. The same goes for simply navigating through a particular level – the player may have to choose between an automated sentry gun and being able to access a door with power-ups behind it.

Fuel rods are scattered throughout the outpost, one per level. When the main character is carrying a fuel rod, he is exposed to radiation. When radiation is maxed out, the main character will begin to lose health. Once a fuel rod is deposited at the ship, the main character’s radiation levels will slowly decrease again.

The Tilemap

Each level will be made up of a multi-layered tilemap. I currently envision three layers plus one underlying parallax layer. In draw order (bottom to top):

- Parallax background – a large background that scrolls more slowly than the rest of the layers to give the impression of depth. This will not be used on all levels, but I can imagine on the lower levels for instance that there may be a chasm filled with lava with walkways built over it, for instance. I also imagine a level with corridors having glass floor sections looking down onto a lower section of the mine, perhaps lit by floodlights and showing machinery and rubble strewn around. This layer will be one large image, not tiled.
- The main background – anywhere the player can walk. Lots of metal walkways, grids, rocky surfaces, glass panels and so on.
- Midground – Anything in this layer obstructs the player. Walls, doors, rubble, chasms. I envision that the electrical objects (turrets, terminals etc.) will go here too. This layer will also be where the main character and all enemies are drawn.



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- Overhead – Anything that the player should be obscured by. Not quite sure how this will be used yet, but I can imagine details such as wiring conduits, arches to pass under etc.

The map will be drawn using a tilesheet method – one large image containing all tiles used. There may be one tilesheet per level or one for the whole game, depending on how detailed we get. Each layer will have its own tilesheet. Tile size is down to artist preference, and can be scaled in-game. Tilesheets will be in PNG format, and will make use of the alpha channel for transparent sections.

The “GravSheep” map editor will be extended to allow for editing of multiple layers and to provide placement of objects. Maps will be output in text format for reading in by the game.

Main Character

I’m thinking some kind of trained space marine/soldier, although this is perhaps a little clichéd. The main character will carry a single weapon, but there will be upgrades available throughout the base. I’m thinking 5 potential upgrades, which the player can switch between depending on the situation they’re in.

The character’s weapon will use some form of energy “ammo”, although the energy will only be used to power the upgraded weapon modes. When the player runs out of energy/ammo, the gun reverts back to its standard, single fire mode. Different upgrades will use energy at different rates.

Possible upgrades:

- Triple shot – gun fires three bullets
- Plasma – larger balls of energy that do more damage
- Bounce shot – like standard fire, but ricochets off walls and objects
- Laser – beam of light that cuts through anything in its path
- Rocket – projectile that explodes causing splash damage

The main character will have a standard health bar, refreshed by collecting medpacks. As mentioned earlier, the character will also have a radiation level bar, which decreases naturally when the player is not in possession of a **fuel rod**.