

Design Document

A first person shooter is a genre that has a lot of potential. Hat Catter is no exemption. This document will go over the initial design ideas, and concepts that will be either be built on, or implemented into the final product.

World

The world will be based on certain Melbourne stations, with the entry of the game being based on the station design of Southern Cross. When loading into stages, the player will be set inside of a moving train, this train will move briefly, then stop at the selected stage, with an announcement from the train stating the stage that the player has arrived at. The doors of the train will open, with the addition of the door opening sound effects, at the selected stage. Stages will follow the player as they go through hordes of enemies, progressively getting harder as the stage progresses. Platforms will contain the “yellow line”. This will prevent the player from dropping onto the tracks, and getting hit by other trains. Stages will be completed by reaching another station, and getting on the correct train at the correct platform. These “correct” trains will be displayed on the Player’s user interface. There is no specific theme to the stations, they will be based on the actual station design, and the surrounding area.

User Interface

The user interface will display the health, stamina, items, trains to catch, and a map of the surrounding area. Health and stamina will be displayed at the bottom left. Health will be displayed in 3 – 5 red hearts, and stamina will be displayed in a light blue line. When the player is damaged, a percentage of health will deteriorate, and that will be demonstrated by an animation that will make the damaged heart move around in “heartbeats”. When stamina is regenerating, the empty area of the stamina line will flash black and slowly regenerate with the same light blue line from before. At the top of the screen, will be the correct train that the player needs to try and catch. This train will be coloured depending on which train line its on, and will display which platform the player needs to get to. All UI elements will be angled inward towards the center, similar to video game, ULTRAKILL. UI elements will have a pixel style, and will be animated with that style.

Enemies

The enemies in the game are different depending on where the stage is. However, enemies may also carry on from previous stages. The amount of damage these enemies will do is different depending on the enemy. When an enemy attacks the player, the player will be able to dodge the attack if they time it correctly. If an enemy successfully attacks the player, the player will have their health deteriorated, and a visual effect will display on their screen. If the enemy gets attacked by the player (and they don’t dodge the attack), the enemy will not bleed, and instead will have particles appear around them, and a sound effect will play.

Weapons

Weapons will be guns that shoot out bullets. These bullets will only damage on contact, if they miss, or go too far, they will lose the damaging effect. Some weapons may contain certain attributes, and these attributes will be displayed to the player. Weapons will either have a reload mechanism, or a cool down per shot. This will make the player have to plan out each shot, and make sure they aren’t wasting bullets. The bullets will bounce off of the enemy on impact, however, it will not damage any other objects.

Multiplayer

By default, players will connect to the main multiplayer servers. This will ensure that they will play the base game, while also making it easy for players to play. When in multiplayer, the players client will send the data to the server, and the server will send that data to other players on the server. The server will also make sure that everything is synced correctly, and that there is no advantage when players have better internet connections.

Server Software

Player’s will be able to run their own servers using the server software. This means that local games, or modified games, can be easily ran by the players. This software will have custom attributes, and will allow players to change them as they like. The main servers will use the same software, modified to fit the use of most of the players.

Statistics

During the player's play-time, the game will keep track of certain aspects of the game. Every kill that the player makes will be tracked, every time the player dies will be tracked. The player's weapon usage will be tracked, and the playtime of the player will be tracked. Every time the player completes a stage, it will add a win to the player's statistics.