Game Design IDD

Game Concept and Description

Defend your B-17 from incoming enemy aircraft! Shoot them down to score points and protect your bomber

Target Audience and Platform(s)

15-30 year olds, into military or arcade stuff, people who like to be challenged greatly
Windows

Unique selling Point

This game will feature realistic aircraft motion. There aren't really any games that I could find that let you take control of a gunner on a bomber.

Game Mechanics and Gameplay Overview

Enemy fighter and friendly bomber with realistic motion, and a simplified damage model to allow components like wings to break off
Fully functional fighter AI, utilizing PID's and the physics system to move it towards a target
A selection of hand made levels
Projectiles that leverage the collisions system
An additional mode for dogfighting with the fighters
Utilizes the FMOD audio system for enhanced audio processing

Levels, objectives, reward and progression system

You have 15 levels to choose from, and you get rewards for combat. Later levels require more skill which you can build up in the earlier levels. You will get score for hits, damage, and destruction of aircraft, and can compete against your own score.

User Interface design and Controls

Controls will be extremely simplistic, with only pointing and clicking on enemies. This will still be relatively complicated, however, as the player will need to lead enemy aircraft
The user interface will show a crosshair, a hit marker (where applicable), and menu navigation for settings, credits, levels, and exiting

Schedule with completion due dates for each feature/component
(weeks start at the first week of assignment)

Create enemy aircraft prefab – due 1st week
Create bullet prefab – due 1st week
Create basic player controller – due 1st week
Create bullet behaviour – due 2nd week

Create gun behaviour – due 2nd week
Create enemy behaviour – due 3rd week
Create player behaviour – due 4th week
Create GameManager behaviour – due 4th week
Add Audio – due 5th week
Create levels – due 5th week

References to any external sources or inspirations

War Thunder – flight and damage model idea
Ace Combat – enemy markers
Garry's Mod – destruction physics, things falling apart