Sprint 2 Requirements Artifacts

Team Number: 12

Team Members: Kai Achen, Andrew Mcferrin, John Newman,

Aiden Patel, Landon Pyko

Ordered by Requirement ID

1. Score Tracking

User Story:

PvE:

- A player can earn points by destroying another tank
- A player's points carry over between levels
- Their highest score is saved and displayed
- A player can no longer get points when they are out of lives

PvP:

- If it's a battle royale mode, the last player standing wins
- In a timed match, a player earns points by destroying the other players

2. NPC Functions

Moving:

- NPC tanks must be able to move around
- How they move can be dictated by the difficulty (i.e. they move randomly at Easy, and try to dodge bullets at Hard)

Shooting:

- NPC tanks must also be able to shoot, otherwise the Player will always win
- Different tanks have different ways of "shooting" (i.e. standard bullets, multi-shot, mines, etc)

Getting Hit:

- Regardless of level, an NPC tank should be destroyed once hit

3. NPC Types

Difficulty:

Easy:

- Moves at random, shoots at random

Medium:

- Tries to shoot the player, but doesn't have much reasoning for its movement

- More calculated shots but with more room for error

Hard:

- Moves with intent, paths towards the player and can dodge player bullets

- Calculated shots to hit the player more consistently
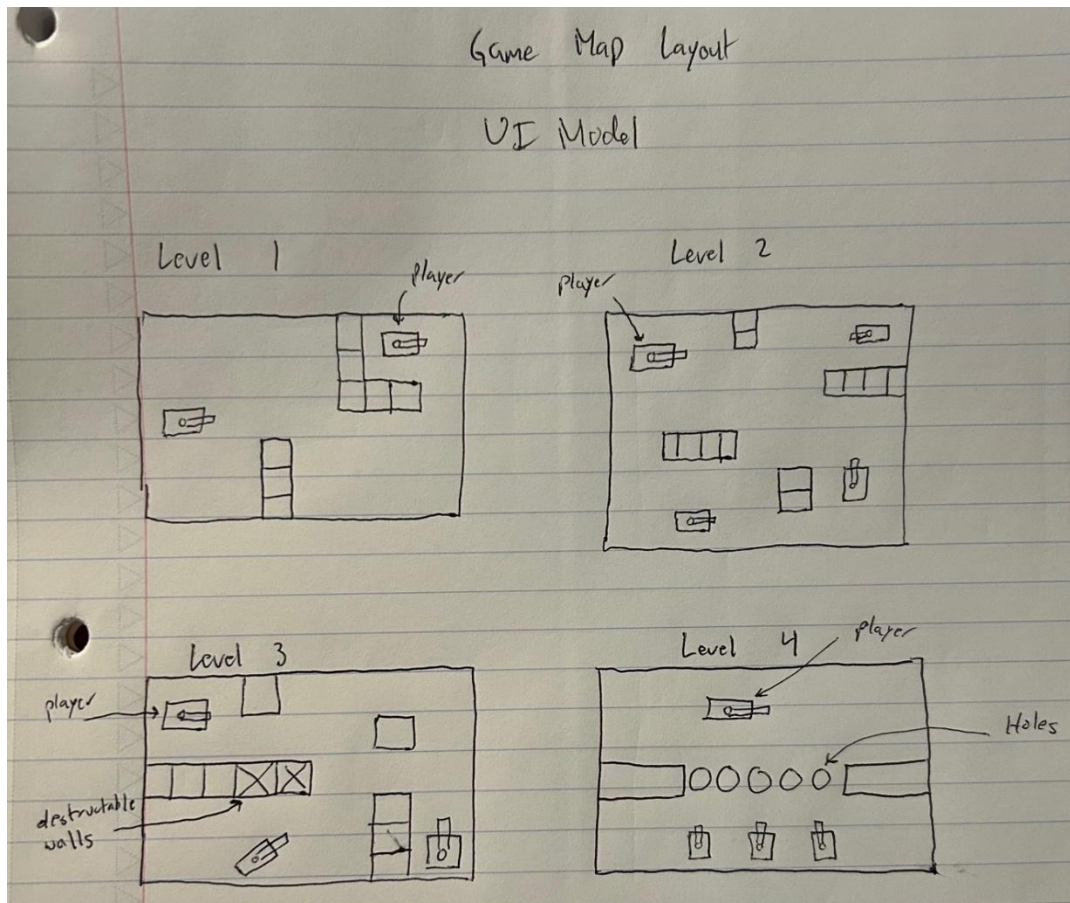
Tank Types:

- Red: Normal enemy tank. Shoots the same bullets as the player
- Yellow: Only places mines
- Pink: Shoots bullets very fast
- Orange: Shoots bullets AND places mines
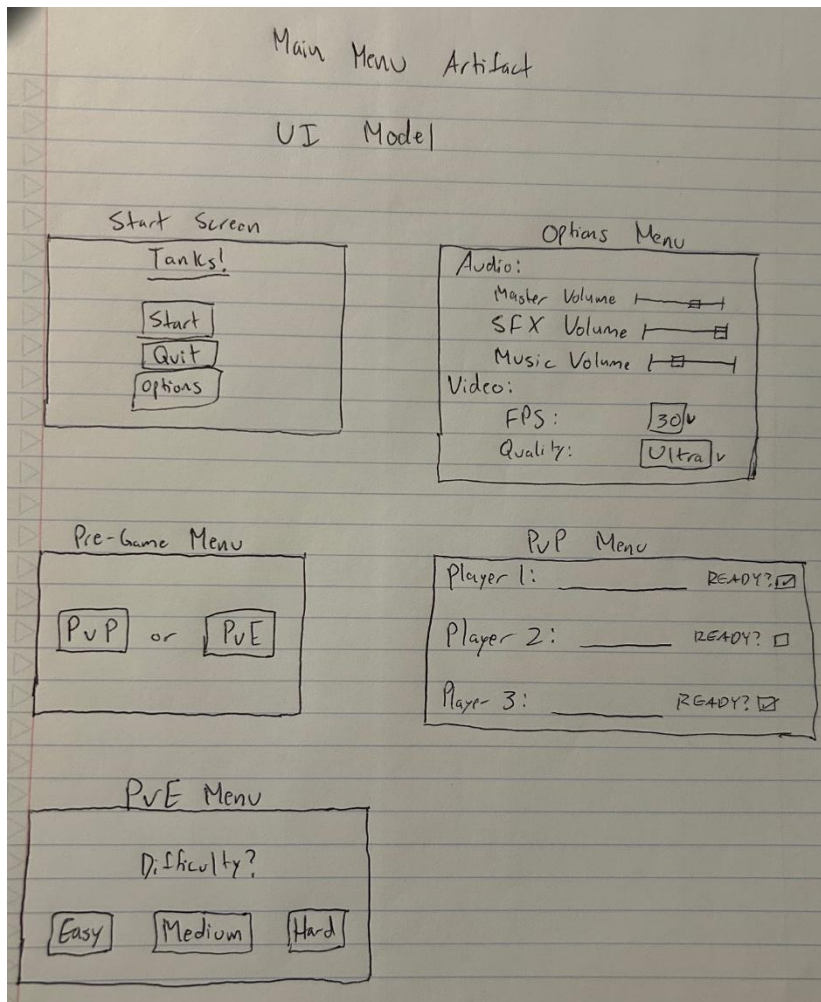
4. Game map art

Assets:

- Normal walls
- Breakable walls
- The floor, which is technically the background because it's top-down
- Holes

5. Game map layout

6. Main Menu

Main Menu Artifact

UI Model

Start Screen

Tanks!

Start
Quit
Options

Options Menu

Audio:
　　Master Volume
　　SFX Volume
　　Music Volume
Video:
　　FPS:　　　30 v
　　Quality:　Ultra v

Pre-Game Menu

PvP　or　PvE

PvP Menu

Player 1:　_____　READY? ☑
Player 2:　_____　READY? ☐
Player 3:　_____　READY? ☑

PvE Menu

Difficulty?

Easy　Medium　Hard

7. <u>Player art</u>

Tank color:

- Have a way to change the color of your tank

- Default is blue, but can be changed in the main menu

- Need to have different assets for each color for the tank

Bullets:

- Customize Bullets in the menu
- Could also be implemented, would just need assets to allow for different bullets

8. <u>NPC art</u>

Enemy Tanks:

- Color coded depending on what kind of tank it is

- Yellow if it places mines, blue if it just shoots, red if it needs to be hit more than once to be destroyed, etc.

- Assets for different NPC tanks

Enemy Bullets/Mines:

- Different color than player to avoid confusion

- Assets for different colored bullets and mines