
31285 - Mobile Applications Development

Project Proposal:

Project Idea:

For this project, I plan to build a 3D arcade style game in which the player controls a tank. To complete a level the player must shoot other tanks and reach the end portal.

The following are a description of the game:

- The game will be played in a landscape format
- The camera will be placed above the level looking down onto the player
- The player will interact with the game through two virtual joysticks placed in the bottom left and right.
- The bottom left one will be used to move the players tank around the level
- The bottom right one will be used to aim the turret
- To fire the turret the player must tap on the bottom right joystick.
- The game will have enemy tanks that will move around and shoot at the player
- If the player takes damage the player will die and the level will reset
- The game will have traps on the floor that the player will need to interact with and avoid
- The levels will have walls to section off areas
- Bullets shot from the player's tank will bounce once off a wall and continue its path
- The game will have a level editor that will allow the user to build their own levels
- Players will be able to play with each other on a wireless local area network

Possible API game engines that can be used to build this game are jMonkeyEngine and libGDX. I have had some experience with libGDX before and so I will most likely use that engine. Additionally, the game will interface with googles play game services.

The intended target audience for this game is any android user with android version 2.2 or greater. Different users will have different tastes, but this game will be for those who want some challenge with short playtimes.

Originality:

This game is similar to two other games available, one on the Wii (Wii Play created by Nintendo) and one on the android and iOS app stores called Tank Hero. However, the following are differences from the base game idea:

- A built-in level editor for the player to create their own levels with.
- Additional traps and different floor tiles that players will have to avoid or interact with.
- Multiplayer over wireless local area network.

Further goals:

To improve the gameplay experience I would also like to add a database that players can store and share their levels that they have created. This online level sharing platform should also come with a rating system that allows players to reflect their opinions. To achieve this, I will most likely use an API such as Google's Firebase.

Wireframes:

