

Senior Project Proposal

My intention is to create a 2d defensive-platformer targeted at the Android and desktop platforms; the goal is to create a template of a game which can be easily modified and extended in part from the simplicity of the assets. I would like to demonstrate the ability to create a game with a variety of different game modes and objectives; tying in the rapidly developed visual aspects that offers each level a style of its own for the sake of ease of production.

The technology I plan on using to build this application is Unity with C# in Visual Studio, Photoshop to create visual assets, Sony Vegas to modify audio assets. My main objective with this project is to develop an understanding of game design leading to a project which will be easier to expand in the future.

Advisor & Committee

Advisor: Dr. Michael Kowalczyk

Committee: Dr. Jeff Horn

Dr. Randy Appleton (pending)

Grading Scale

A – 80-72

B – 72-64

C – 64-52

D – 52-44

E – 44-0

Points

25 - 5 stages; 5 per stage (unique programming aspect per stage).

- “Escortion” level in which the player must escort a friendly to a given point without being caught by a pursuer.
- “Defense” level in which the player will protect a point from enemies until a timer runs out.
- “Brawler” level where the player will fight a horde until enough enemies have been defeated.
- “Collection” level in which the player must collect enough material dropped randomly by enemies.
- “Capture-the-Flag” level in which the player must reach a flag and return to a point without the enemy disarming them; level continues until objective complete.

10 - combat system with health/stamina.

- A system for combat utilizing weapons; controlled by dedicated inputs that enable/disable equipped arms. Integration of a health system that can deplete leading to a condition which ends or resets the stage. A stamina system which reduces with usage of attack and sprint actions; replenishes at idle state.

10 - interactive enemies.

- Individual enemies each with their own methods of handling a combat situation.

10 – dialog box/interaction system

- A system that lets the player communicate with a friendly NPC; this may be prompt for confirmation which may trigger a certain condition to proceed with a stage and/or allow for items to be exchanged.

10 - inventory system (equip/drop).

- An inventory attached to actors which will be used to store necessary items for a game such as: weapons, consumables, key items.

5 – loading screens, main menu, and pause screen.

- A selection of options for the user to control which stages are selected and pause the game while active. Intermediary screens prior to the beginning of a stage with a description of objective.

5 - save states.

- An ability to save progress such as collected items contained in the inventory; player progress and selected avatar.

5 - various player avatars.

- A choice for the player to select which avatar is actively used.

Total: 80 Points