Capstone Project Planning Document

Game Title

Awesome Super Fight Game

Estimated Total Time to Develop

40 hours

Intermediate Object-Oriented Programming for Unity Games Information

Total Time Spent Developing Wacky Breakout: 24 hours
Estimated Time or Actual Time?   Estimated
Followed Detailed Instructions (Yes or No)?   Yes

Awesome Super Fight Game Requirements Specification

Awesome super fight game is like any regular smash game between characters, except this time the characters are my close circle of friends.

How it works:
The player will select a character and then the fight against another character will begin. The other character will be controlled by some intelligence feature integrated on the game. Each character will have a health bar on top of the screen and when the health bar becomes empty, the character will die.

Features:
- Game features
  - Character selection
  - Difficult selection
- Features for all characters
  - Movement
    - Walk to the left
    - Walk to the right
    - Jump
    - Crouch
  - Fighting
    - Fight
    - Take defensive position
- Specific features for each character
  - Fighting
    - Throw some object into the air

Implementation:

1. Game – Difficult selection:
   a. Difficulty would be selected in an additional menu.
   b. Difficulty would be split into: Easy, Medium, and Hard.
   c. The algorithm that determines the next move of the AI will be limited by a search depth.
   d. In addition, a thinking map of the AI would be added to show the behavior (actions taken by AI given actions taken by player) of each difficulty level.
2. Game – Character selection:
   a. Character would be selected in and additional menu.
   b. This would set the sprite and animations for the player character.
3. Movement – Walk to the right
   a. Input Manager + animation
4. Movement – Walk to the left
   a. Input Manager + animation
5. Movement – Jump
   a. Input Manager + animation

6. Movement – Crouch
    a. Input Manager + animation
7. Fighting – Throwable
    a. Object inheritance will allow a more structured form to handle this feature
8. Fighting – Ultimate attack
    a. Event manager will aid listeners of the event to handle the invoke of an ultimate attack appropriately.

Additional:

- Menus
    - Main Menu – Contains buttons for: Play, Difficulty, Help or Quit
    - Difficulty Menu – Contains buttons for Easy, Medium, Hard or Return
    - Character Menu – Displays all the characters and allows player to choose one and provides buttons to Play, Return or Quit
    - Help Menu – Contains information about controls
    - Pause Menu – Pauses a game in progress and provides buttons to Resume or Quit
- Sound effects and music
    - Music played during menu selection
    - Different music played during fight
    - Effects played for fight actions