**Capstone Project Planning Document**

**Game Title**

Wacky Sparrow Platformer

**Estimated Total Time to Develop**

40

**Intermediate Object-Oriented Programming for Unity Games Information**

Total Time Spent Developing Wacky Breakout: 28

Estimated Time or Actual Time? Estimated

Followed Detailed Instructions (Yes or No)? Yes

**Wacky Sparrow Platformer Requirements Specification**

The platformer game is a classic side-scrolling platformer. Platforms and enemies enter the game from the right, moving to the left. Enemies enter the game with set chance. The player (sparrow) can move left and right, jump, sit(you can`t move while sitting) and kill the enemies by jumping on top of them. If the player reaches the left/right edge of the game, they can’t move left/right any more. Obviously, if the player isn’t supported by a platform, they fall to their death (and lose a live)! Enemies (crows) shoot at the player, and the player loses health on each hit. When the player’s health reaches 0, they lose a life. After each respawn player is invulnerable for a set period of time. The player has 3 lives to lose before they lose the game.

There are several different powerups enemies drop randomly (of course, nothing may fall out) when they’re killed:

1. Worm. Increases the player’s health by a set amount
2. Boots. Makes the player move faster for a set period of time
3. Seeds. Makes the player able to shoot for a set period of time

The game keeps track of and displays the player’s score (the player earns points when they kill an enemy) and the number of lives the player has left.

The game ends when the player loses all three lives. At that point, the game pauses and displays a message showing the player’s score. Player can either restart or quit to main menu.

The game lets the player select a difficulty level (Easy, Medium, or Hard), then starts a game with the given difficulty. At harder difficulties, the platforms move faster and the enemies spawn more often.

The game has the following menus:

1. Main Menu: Lets player pick play, help, or quit
2. Difficulty Menu: Lets player pick Easy, Medium, or Hard for the game. You can open this menu by clicking “Play” button
3. Help Menu: A single page that displays brief game instructions
4. Pause Menu: A menu displayed if a player pauses a game in progress. Provides options to resume the game or quit to the main menu

During gameplay, sound effects are used to indicate when the enemy or player (when bonus is active) shoots a bullet. Also when bonus is picked up some sound should be played. Gameplay sound effects also indicate when an enemy is killed and when the player loses a life and loses the gamest and the game is lost. The only menu sound effect is a click when a menu button is clicked. Game also has a soundtrack.