Doug Russell

CS 3160

Final Project

4 December 2017

Report

**Link:** <https://drussell93.itch.io/bouncy-bird>

1. **Summary**
   1. The project is a JavaScript web-based html game. The purpose is to bring the bird from its perch to the nest while avoiding obstacles. If the bird reaches the nest, the next level is loaded. If the bird hits an obstacle, its position is reset to its perch. The user can click the left and right arrow keys to fly. The escape key returns the user to the main menu. To run the game, either visit the link above or simply unzip the zip file then double click the html file to run the game locally in a browser.
2. **Components**
   1. An assets folder that holds all the images and sprite sheets necessary for loading graphics in game.
   2. A js folder that holds all the JavaScript files for the application.
      1. Splash.js is the splash screen the user first sees when visiting the application
      2. MainMenu.js is the main menu for the application. It allows the user to start the game, play a specific level, or read the instructions.
      3. Level1.js, Level2.js, Level3.js make up the game.
      4. Instructions.js contains the instructions for the game.
      5. main.js collects the JavaScript files.
      6. phaser.min is the game engine (external library).
   3. index.html which loads the JavaScript files
3. **Modularity**
   1. The modules listed above are all determined inside of main.js. If a developer wished to add further modules to the application, it would be as easy as including that module inside main.js and index.html.
4. **Extensibility**
   1. The application creates objects for every visible entity. It is highly extensible in the sense that further additions can easily be made to the existing objects to manipulate their behaviors.
5. **Reusability** 
   1. The application modules all inherit from main.js. Levels and players can also be made to inherit base traits from main.js.