**Work in Progress Report 2**

**David and Peter**

**Major Developments/Breakthroughs:**

* We created a options screen (without functionality at the moment)
* We were able to get ball to spawn with timers
* We were able to get balls to move after they spawn

**Major Challenges/Setbacks:**

* Incorporating images of a pokeball to replace the ball sprite when spawning, moving, and bouncing off of boundaries
* Getting the pokeball to move in a “random” direction after spawning
* Only one ball can move at a time on the stage

**Modifications to the Specifications/Release Schedule:**

* Changed the Indigo League to version 2.1 and changed Pokemopolis to version 2.2
* Added the PokeCentre to version 2.0 to add functionality to the options screen

|  |  |
| --- | --- |
| **Release Name** | **New incremental features of this release** |
| **1.0**  **(Pallet Town)** | **Design Menu Screen and sprites** |
| **1.1**  **(Pewter City)** | **Design Instruction screen** |
| **1.2**  **(Cerulean City)** | **Create instruction animation** |
| **1.3**  **(Vermilion City)** | **Create an options screen** |
| **1.4**  **(Celadon City)** | **Get pokeballs to spawn with timers** |
| **1.5**  **(Fuchsia City)** | **Get pokeballs to move after they spawn** |
| **1.6**  **(Saffron City)** | **Make pokeballs bounce off boundaries** |
| **1.7**  **(Cinnabar City)** | **Create “Masterball” which is the “boss”** |
| **1.8**  **(Viridian City)** | **Create losing conditions and screen** |
| **1.9**  **(Victory Road)** | **Create winning conditions and screen** |
| **2.0**  **(PokeCentre)** | **Add functionality to the options screen** |
| **2.1**  **(Indigo League)** | **Add “Survival Mode”** |
| **2.2**  **(**Pokemopolis) | **Make balls bounce off each other** |

**Scratch/Test code:**

* NewBall - to be used as an external class file. This file contains a simple ball for testing purposes.
* Ball - to be used as an external class file. This file contains a ball that is able to move using the ENTER\_FRAME event and is able to bounce off of walls.
* MasterBall - to be used as an external class file. This file contains a ball that follows the user’s mouse around with a delay.
* BallBouncing – created 2 balls on the stage using external class files and making them move using the ENTER\_FRAME event. The balls also bounce off the edges of the stage and stay within the boundaries.
* CollisionDetection – created 2 balls on the stage (a stationary one and one that can be moved using the mouse) using external class files. By using Pythagorean Theorem, when the moving ball comes into contact with the stationary ball, the text field changes from “Boo!” to “Hurrah!”
* SpawnWithTime – the purpose of this scratch program is to test balls spawning at random places with timers at certain delays. Before spawning, a warning ball which will indicate where the ball is going to spawn. After a certain delay the real ball will spawn and move around the screen. This program also includes a function that will stop the balls from spawning after they reach a certain quantity.
* SpawnWithBoss – the purpose of this scratch program is similar to “SpawnWithTime”, but this time the 10th ball with spawn as a ball that will follow the user’s mouse around with a delay (MasterBall).
* alphatest1 – the purpose of this program was to test changing the alpha off an image ( in this case a pokeball) and make it move after the alpha gets to a certain point
* physicstest1 – another way of making a ball bounce off the boundaries of the stage using arrays of borders. This program also has collision detection between a circle and a rectangle.

**Sources:**

* <http://2oi.sgrondin.ca/>
* <http://gamedev.tutsplus.com/tutorials/implementation/when-worlds-collide-simulating-circle-circle-collisions/>