**2D Space Game**

**Description**

**What? (10 pts)**

This project is a simple 2D maze game, in which the player controls a circular object through a geometric maze using the arrow keys on the keyboard.

The goal is to the reach green square at the end of the maze without touching any of the obstacles,

and to collect as many points as possible. The points collected will be displayed at the game’s conclusion

**Why? (10 pts)**

The purpose of this project is to implement our knowledge of JavaFX and its versatility and compatibility and make a simple,

yet entertaining 2D game. We used what we learned over the course of the year to create a fun final project with plenty of expandability.

**How? (10 pts)**

Using Eclipse and JavaFX, we used XML files and multiple classes to create game objects and event handlers. Assign events to buttons

and keyboard presses in order to move the object. Use live movements as a score update, and create autonomous obstacles using JavaFX.

**Deliverables (10 pts)**

Deliver a fully functional 2D game that can be downloaded and played by anybody. Use interfaces (game controller),

inheritance (main extends application implements, obstacle inherits game controller), and generics (obstacles, constructor class

**Plan (10 pts)**

Week 1 (Oct 29 - Nov 5):

- Get project sketch and design done.

- Brainstorm ideas, and design some of the objects, menus, and level(s) we will be having.

- Create a general breakdown of concepts to be used, classes/libraries to be implemented (if any), and design general UI

Week 2 (Nov 5 - Nov 12):

- Work on level design and get it completed, as well as player/object/obstacle design.

- Bug fixing

Week 3 (Nov 12 - Nov 19):

- Ensure all movements are smooth and work correctly, and add more variation.

- Big fixing

Week 4 (Nov 19 - Nov 26):

- Create high score tracker, and add more obstacles.

- Fix any sort of clipping that may occur.

- Bug fixing

**Getting Started (10 pts)**

**Install**

List the steps to install your project

**Run**

List the steps to run your project

**Features (10 pts)**

List all the features of your application

1. Simple, clean interface that is easy to use

2. Unique object and level design

3. Easy to use keyboard controls

4. Main Menu, Start, and End Goal

5. Variation of objects to keep the game challenging and interesting.

6. High Score Display

**Demo video (20 pts)**

**Video has been uploaded to Git.**

**Team members (10 pts)**

* Aaron - Team Lead, head coder
* Anish - Bug Fixer, coder
* Saathvik – Bug Fixer, Documentation