# Escape Room Game - Testing Summary

**Group 4 - Luqmaan Baiyat, Hamza Shahid, Joshua Herman, Patrick Gundry**

As the *Escape Room Game* is becoming more developed, it is necessary to run various tests for the game to ensure proper functionality as well as inspect code segments from each of the group members to ensure all of the inspected code is up to proper coding standards. Luqmaan, Hamza, and Joshua ran different tests, as well as inspected code submitted from each of the two other members, here we will see part of the inspection from 1 other member.

Each test is identified by a unique ID number, ran by a single member of the group, and will either pass or fail. Each test has a set of instructions which correlates to its pass/fail criteria.
Here we show some of our tests:

| Test ID # | Name: | Date Ran: | Ran By: | Expected Result | Actual Result |
|---|---|---|---|---|---|
| 1 | Main Menu Buttons | 4/17/19 | Joshua Herman | Pass | Pass |
| 2 | Level Selection | 4/17/19 | Hamza Shahid | Pass | Pass |
| 3 | Player Movement | 4/18/19 | Luqmaan Baiyat | Pass | Pass |
| 4 | Wall Collision | 4/17/19 | Hamza Shahid | Pass | Fail |
| 5 | Level Progress | 4/17/19 | Luqmaan Baiyat | Pass | Pass |
| 6 | Game Timer | 4/17/19 | Hamza Shahid | Pass | Pass |
| 7 | Points System | 4/18/19 | Joshua Herman | Pass | Pass |

For code inspection, the following members submitted a significant amount of code to be checked by the other members listed.

1. Luqmaan Baiyat - Abstract Level Class
2. Hamza Shahid - Progression System and Hints
3. Joshua Herman - Level Puzzles

Some of the results of the inspection were the following:

### 1. Hamza Shahid

| **Contributor - Item(s)** | **Results** |
|---|---|
| Joshua Herman - Game Progression and Hints | The readability of the code was quite good and easy to follow. Clean code. Comments were placed in appropriate places throughout the code, to make it easy to understand. The function and variable names were meaningful |

| | |
|---|---|
| Inspection Performed on April 24, 2019 | and showed consistency with the naming. The data structure used for this was an ArrayList which was appropriate in this situation given that it made accessing elements of the progression & hints simple. |

**2. Luqmaan Baiyat**

| **Contributor - Item(s)** | **Results** |
|---|---|
| Hamza Shahid - Level Puzzles<br><br>Inspection performed on 4/17/19 | Good readability of code. Appropriate spacing and proper indenting. Comments were easy to follow and relevant. Function and variable names were meaningful and relevant. Usage of a Hash Table for Riddle Puzzle seemed unnecessary. Data structure usage for other puzzles comprised of Array Lists which had practical implementation for the puzzle applications. |

**3. Joshua Herman**

| **Contributor - Item(s)** | **Results** |
|---|---|
| Luqmaan Baiyat - Abstract Level Class<br><br>Inspection Performed on April 24, 2019 | The code is extremely readable as there are great variable and function names throughout. The code itself has good comments in most parts which aides in the readability, but it could use more. As far as comments are concerned, The first thing I notice missing for comments is a description of what this class does at the top. This would be a good addition to get an understanding of the class's purpose. There is a good amount of consistent comments throughout. Every function and variable name is descriptive and very good. I can understand what everything does by just looking at the variable name & function. For data structures he used ArrayLists for the levels. the walls, the rooms, & the doors. |

Communication was key throughout the course of this project. We knew from the beginning that we had to ensure all group members are aware of what they are suppose to do, and are available to help each other if needed. Hence, we had regular meetings amongst our group members where we discussed what things each of us worked on that particular week, any issues that each of us came across that needed to be addressed as well as what additions could be made for the next phase of the project.

One of the biggest challenges that we came across was being able to integrate everyone's additions without any issues onto the Git repository. It was essential for us to not run into any issues regarding merging and overwriting. We came across an issue where we accidentally overwrote some of the committed changes which then led us to go back and look at our previous commits.

Given the scale of this project, and the amount of people constantly making changes to the Git repository, we were expecting to run into issues like these which is why we were fully prepared on how to handle the situation when we did.