**Results Draft**

**4.1 – Overview**

To measure how successful the project was at reaching its’ goals, the testing was carried out using a qualitative method. This was difficult, since it is hard to measure replayability over a short period of time. Therefore, testers were asked to talk in theory about how the project *could* improve replayability, to get an idea of how they felt the model’s structure could improve future gameplay.

Testers were given a link to a Microsoft Form to fill out, and all graphs are generated from Microsoft Forms, except for the sixth and seventh question since this was an open-ended answer as opposed to multiple choice, therefore the chart had to be created manually after analysing the answers. The results of all questions can be found below. Note, the first question in the form regarded consenting to the survey, therefore the “first” question is listed as 2. in the chart, etc.

**4.2 – Tester Past Experience Results**

The first section of the questionnaire was designed to get an idea of how much experience testers have playing platformers in the past, and how they felt about the levels within them. The results from the first question shows that all testers would agree that they have spent time in the past playing 2D platformers:

A graph with colorful lines

AI-generated content may be incorrect.

The second question showed more divided answers. Most testers said they did not regularly go back for a second playthrough of platformers after initially completing the game, whilst two felt agreed that they do:

A graph with purple and white lines

AI-generated content may be incorrect.

The third question showed that most players do feel 2D platformers generally have varied and unique levels, whilst one participant feels this was not the case:

A graph with colorful bars

AI-generated content may be incorrect.

**4.3 – Project Level Quality Results**

The next section of the questionnaire focused on asking players about their experience in the project.

The results of the fourth question showed that overall, players did feel that the level generation model was able to output unique and interesting levels:

A graph with multiple colored lines

AI-generated content may be incorrect.

The results from the fifth question showed that no players found any repeated levels:

A screenshot of a computer

AI-generated content may be incorrect.

The sixth and seventh questions showed that players played various numbers of levels, and most completed every level generated, whilst the others completed over half of the total levels generated. Note that this chart was made using Online Visual Paradigm [[Link](https://online.visual-paradigm.com/app/diagrams/#infoart:proj=0&type=GroupedBarCharts&gallery=/repository/1c8b3c02-0ecf-4da5-b56c-7399234e2445.xml&name=Grouped%20Bar%20Chart), 2025]:

A graph with numbers and a bar

AI-generated content may be incorrect.

**4.4 – Tester Comparison Results**

The final section of the questionnaire allowed testers to compare how they felt about the project with how they felt about other platformer games which they have played.

The eighth question showed that all testers did feel the project’s use of procedural level generation improved variation in the levels, when compared with the levels of other 2D platformers that they have played:  
**A screenshot of a graph

AI-generated content may be incorrect.**

The ninth question showed that testers felt the project’s levels improved their engagement within the game in comparison to the other 2D platformers they have played before:

**A screenshot of a graph

AI-generated content may be incorrect.**

The results of the final question shows that overall, the majority of testers feel they would be more likely to go back and play another playthrough of a 2D platformer if it used procedural generation. However, one tester felt that doing so would not have an effect on their original opinion of 2D platformers:  
A screenshot of a graph

AI-generated content may be incorrect.