# 6 Testing Chapter

This Chapter will discuss why it is necessary to test, the tests that were carried out, and the feedback from them.

## 6.1 Usability Testing

The usability testing in this project was done on 4 different people with varying degrees of experience with gaming.

## 6.2 The Objective of Testing

Testing helps the creator of the game discover what they had not thought to include. There is just too many things to keep in mind when creating a game and there will always be human error. The reason testing is done is to make sure the majority of bugs are figured out before release. The creator of the game can easily tweek some values depending on how the feedback goes. For example, if an enemy is too hard to kill, the health points of the enemy can be reduced.

## 6.3 The Tasks

The participant was given two tasks to complete while they complete the main objective of completing the levels:

* Explore the world.
* Try to get out of bounds.

## 6.4 The Results of Testing

The First Test.

This participant has a lot of experience with gaming. They suggested that the attack range be increased as it was hard to attack the enemies without being in the enemy attack range. This was fixed immediately. They also suggested that there was a knockback on the player attack so that it would make it easier to fight them. There was not enough time to implement this, the only knock back that happens is when the player or enemy collides. They liked the movement of the character. They did not know there was a dash ability. This can be added as an NPC that explains how to use the dash ability. However, there was not enough time to add this. This participant managed to get out of bounds. This was fixed by making a kill box under the areas that the player can fall out of.

The Second Test

This participant had some gaming experience. They did not know how to attack or dash. This could be explained by one of the NPCs in the starting area. However, there was no time to implement this. They struggled with fighting the enemies but only died twice. They did not manage to get out of bounds.

The Third Test

This participant had some gaming experience. They figured out which button was the attack button by pressing most of the buttons on the keyboard and in the process figured out they can dash as well. This participant realised you can sometimes dash through walls if you are at a specific distance. This bug was known and can not be fixed within the time constraints of the project.

The Fourth Test

This participant had little to no experience gaming. They first used the arrow keys (Up, Down, Left, Right) to move around which was different to all the other participants who used the WASD keys. They didn’t know how to interact with the NPCs and were told how. They didn’t know how to attack either and was told how to.

## 6.6 Feature Testing

Main Menu testing.

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| --- | --- | --- | --- |
| Test | Expected Output | Actual Output | Status |
| Play Game button | Starts level 1 | Starts level 1 | Working |
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## 6.7 Results of Testing & Changes