Testing to inform evaluation – User Feedback

With the feedback given by users, I can now analysis and apply it. In this document I will briefly describe the overview of the replies to the feedback form in order. This will then allow me to react to this feedback and reply to them, giving reasons why the game has given such feedback and possible advancements for the game due to this feedback.

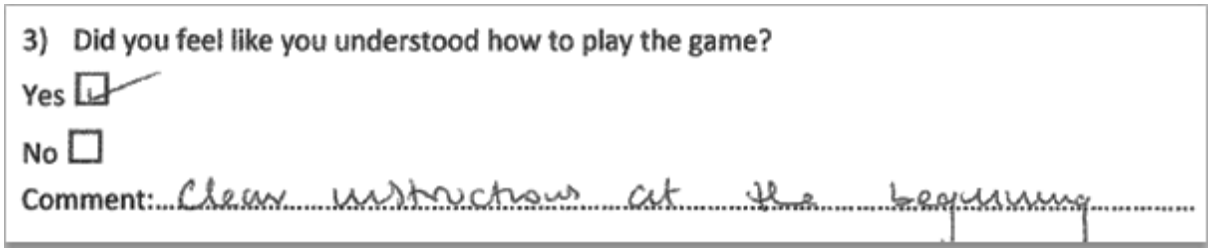
While my usability testing only uses 21 students; this beta testers used classes of computing students (as they should have an insight into programs and provide critical feedback with experience on how to find flaws that I would overlook). These tests were done with the permission of the appropriate teacher and the identity of each participate is unknown (to myself).

Questions 1 and 2

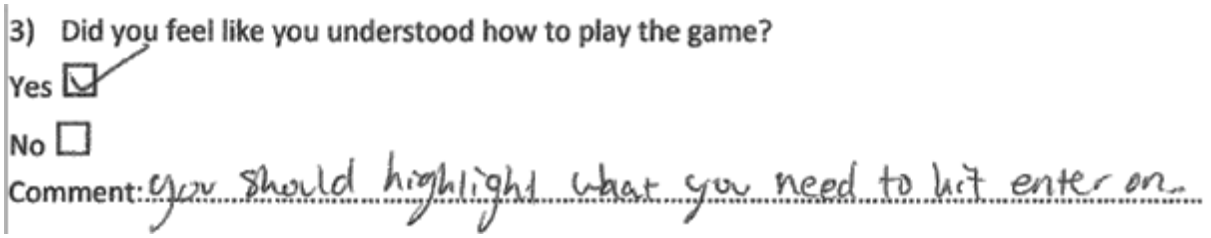
The first two questions can be skipped, there is a spectrum of ages and genders. This breaks down to the older the student (and therefore the greater exposer to science and also video games, the more critical their feedback).

Question 3

The first question I will be discussing asks the users if they feel like they understood how to play the game. The majority of users checked the yes box, with a lot of them stating that the controls were easy or simple to use. On the other hand there were examples of users who replied with no. This almost always concerned itself with the enter button and the mechanic of talking and interactions.


3) Did you feel like you understood how to play the game?
Yes ☑
No ☐
Comment: Clear instructions at the beginning

As explained before, this is because every object can talk. For those that down, they still follow the mechanic. This means that you press enter once to interact with them and the second time to stop interacting with them, I feel like this may have to be better explained by the tutorial kiosk. Even more concerning, a noticeable sample of the users did not identify the object floating over the kiosk's head as an enter key, leading to immediate confusion. To combat this, I will develop and quick instruction guide highlighting the buttons and explaining some of the features and mechanics.


3) Did you feel like you understood how to play the game?
Yes ☑
No ☐
Comment: you should highlight what you need to hit enter on.

Question 4

The next question was asking if the user found the game enjoyable. This was a mixed response between yes and no, but a trend could be drawn from the feedback. While the game starts off enjoyable, it gets repetitive fast.

This is due to two primary reasons. Firstly, there is complexity. Following the computational principle of computation, there are realistic limitations of the game that come from such features like limited memory, resources and expertise, why on paper the solution could be developed for years into a massively complex system, this could never be the case.

The second reason is design. This game is currently in a shared space in the school for distribution purposes. To have permission to use some of this shared space of the schools, I cannot take advantage of the kindness and use up a massive amount of this space, meaning that I have to use a little memory as possible for the game. There is also the target audience of the game. Not only have I designed the game to be simple so that anyone can play it to completion (hence the lack of a limited life system, those that are really bad at the game will be able to complete it), but it has to be completed in a limited time, namely break and lunch times, but could also be a godsend to those waiting behind school inn parent evenings. Because of this, the game has been spilt into twenty levels, each one taking around one minute to finish, giving the play time around 25 minutes, anymore would be too long for a student to play on any occasion other than after school.

4) Do you feel like the game is enjoyable?

Yes ☑

No ☐

Comment: if you enjoy science, then you will enjoy this game.

Question 5

This question is interesting, as it has many varied responses, most of which can be applied to two trends. Firstly, it seems the older the student, the less likely they feel like they are the correct target audience. This is fine, as the game is for pre-GCSE students first and foremost, therefore if year 10 students feel like the game is too simple for them, it's because it is.

The next trend is that some of those you checked no gave the reason that they don't like science. This response is somewhat disappointing, as the game is supposed to be promotional. Of course, these replies were from some of the post-GCSE testers (because it is valuable to see how the views change) and it seems that once you get a negative opinion of science, it seems to cause unjustified discrimination of anything that relates to science.

5) Do you feel like you are the correct audience for the game?

Yes ☐

No ☑

Comment: I do not enjoy science

This reminds me of my analysis section, one of the reasons my solution took the form it did and my target audience is pre-GCSE students is because of the difficulty of trying to appeal to an audience that already hates your agenda. On the other hand, the younger audience seems to be more accepting of the game.

Question 6

This question features the most variation of all the questions. Looking back, this could be because the idea of quality is very different for everyone. If we take my gaming history, I would play about 200 flash games every year, meaning that I would be increasing critical of this game as I have a myriad of examples to compare this game to – as well as a defined 1 to 10 number of game quality.

In terms of the feedback given, it follows a standard bell curve, shifted away from one, with around 4 being the lowest source. The opinions seem to be that it isn't a terrible game or a waste of their time, but isn't fantastic either. Due to the limitations of the game itself (and my art) I predicted an average around 4-6 and would have been ecstatic with an average score of 7.

Questions 7 and 8

The replies to question 7 (what themes in the game stood out) seemed to be based on preference, with a number of replies checking a majority of the boxes. The only part I would really point out from this would be that the properties of materials seems to be lacking compared to others. I can understand why, as even the real life experiments for this subject is lacklustre and will remain boring all the way until a material scientist major.

Question 8 has more to analysis. Firstly, it seems that biology is the least popular of the three, this could be because it was the first stage and therefore less memorable, or because the objects were more abstract and therefore harder to understand. Some people also voiced concern that DNA and genetics is too complicated for pre-GCSE students; as they are already on a computer, if they decide that they don't understand any topic and look it up, not only has this game gone above and beyond, it'll also help them in the long run.

The next point to look at would be the chemistry and physics levels that people did enjoy. This was mostly due to the objects in that level being more complex or that they found it easier to relate to those topics.

Question 9

Three main issues were found with the game, two of which I was aware of.

Firstly, there is the bug that causes the game to crash if you jump during the level transitions. Seeing that not every feedback form included this bug, I would argue that the exit block is helping. Seeing that I have already discovered and attempted a fix on this bug, I won't explain it again.

The next issue was the final level wall. Once again, I was aware of this issue but I have no idea why it only happens on the last level. The bug itself lets you jump through the final wall, reaching a level transition that doesn't exist – causing the game to crash. This is surprising as this only seems to occur on the final level, this is also interesting as I am yet to find a situation where they mechanically fail for vertical movement. Honestly, I'm not too sure what causes this issue, but as the user would have finished the game at this point, it isn't the most immediate issue with the program.

Finally, there are some reports of the game crashing if the enter button is pressed repeatedly. I have attempted this myself and have failed to mimic the outcome. I believe that the cause of this could be the invisible object at the start, of the game (the one linked to press enter to start). Other than that, I have actively looked for the bug and just cannot find myself.

9) If you found any bugs or issues with the game, please record exactly what happened here: