COSC 341 Human Computer Interaction Assignment 2

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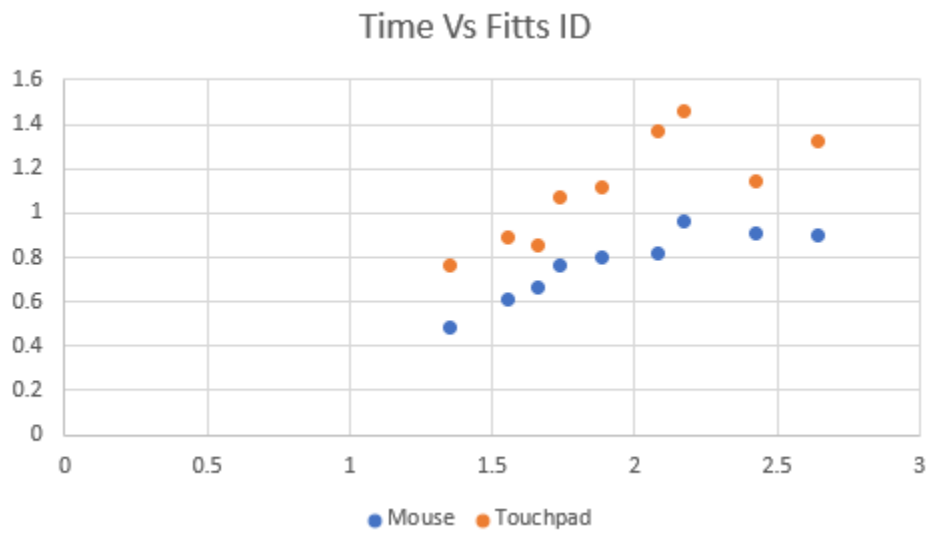
The Idea of this assignment is to test the amount of time taken for each individual to click on a targets forming a circle. The targets distance and sizes are going to be the independent variable as there is 3 versions of each distance and size. We have determined 3 sizes: 0.8f, 1.3f and 1.8f where as the distances will be 2.8f, 3.5f, 4.2f. The reason why we did these distances and sizes is due to when we created the initial file that is a size that looks pretty good to the eye, so then we decided to stick with it and change it by increments of 0.5 for the size and 0.7 for the distance.

We tested 3 People: Carter, Kenneth, and Kenneth's friend. And the results are as shown below.



There is a direct correlation between the Fitts ID (which is on the X-axis) and Time (which is on the Y-Axis). When we look at what it means in terms of the distances and the size, The larger the Distance and the smaller the size causes the users to take more time when it comes to clicking on the targets. This makes complete sense as the smaller targets and the larger distances will naturally cause both of the inputs to be slower as there is a larger margin of error and naturally more time to move the cursor to the targets.

Also unsurprisingly, the Mouse beats the Touchpad in time by a few milliseconds. This could be due to the participants being more used to the mouse than the touchpad or it could also be due to the mouse being the more quick and accurate tool.

How we collaborated:

We divided the tasks in not super equal ways. This is due to Carter doing a lot of the work in the first assignment, so I (Kenneth) decided to take on more work in this assignment to make it more equal. I decided to do most of the coding and whatever's left over, Carter would take over and finish and polish things up.

We both mutually decided to do the readings together but Carter is the one that's going to record himself playing the game and uploading it onto the internet. I also decided to work on the PDF as I had more time to read up on the Fitts law and thus meaning that I would be able to write a little bit more.

Challenges we Faced:

Working with unity and learning it from scratch makes it a pretty fun and difficult challenge. There are some quirks about collaborating through unity like some features not being able to show up after we upload and pull the files from our separate computers. In the end we just had to chat each other and communicated actively what is happening and what problems we are facing.

In the end we compromised and if there were features that didn't show up then the other person would do the recording for example.