Week 2

Completed November 5

Today was our second time we met up. We discussed our ideas the first meeting. Second meeting was with Professor Martin, we all pitched our ideas and she gave feedback on how we can expand our ideas. Shane's idea was to create a way for a user to take pictures and see the elements. Yao's idea was to create an alternate source of energy and use arduinos to operate. My idea was to create a drag and drop app that allows you to code with ease. The idea is sorta like the game designing application Alice. Today we narrowed it down to one project, and created deadlines for the future and some meeting dates.

Completed on November 7

Nobody in our group had experience with MATLAB. We needed a good foundation in order to start programming. We looked through numerous courses to help build up the foundation. After looking through a couple of courses on Udemy, we found one that attracted us. Just from looking at the course description and the content, it looked like it was very useful for our project. Unfortunately, only the first section came to use, the rest of the sections were primarily used for editing pictures. We were hoping that this course would show us how to plot data, create things such as a 3D graph, and help us for our idea on using our phone or any kind of camera to do certain things. We made sure that we finished the entire course before moving on. Trying to collect as much information. We ended up having to request a refund because even after we finished the entire course it did not come to use at all. We are currently looking for more courses out there on Udemy because we believe that Udemy offers lessons that are much more in-depth than you would find on YouTube.

Completed on November 7

Our code is currently being updated. We met with professor Martin, and she wanted us to make the line graph neater and have it so that the colors are in the same spot. So if white was on the bottom the first frame, we WANT it to be on the bottom the next frame too. It doesn't matter if it is not the most dominant color. We have to make it, so the line is neater. Also, we would like to include some more colors. We are currently working on adding more colors to the project. We originally kept it to six colors (Red, Green, Blue, Grey, White, and Black), but we got feedback from professor Martin saying that we should include more colors into the figures. What we have in plan is to include 20+ new colors. Also making sure that we cover all the colors of the rainbow. ROY G BIV ( Red, Orange, Yellow, Green, Blue, Indigo, and Violet). Then we will add some extra colors. These extra colors will, for the most part, be different shades of different colors. This is just used to add more varieties of color so the figures can be more pleasing to look at and show more detail than just six colors. Also, we are going to create a new MATLAB folder just for the video version. Everything that we made for the image will be used for the video. Same figures, except the data, will alter, and new line graphs will constantly be added. The line graphs will connect with one another instead of showing a gap in between them. I have attached a list of colors we hope to incorporate into our project. This was created by Yao https://freedcampfilestorage.s3.amazonaws.com/A\_Project\_IzH/Color%20Variations%20MATLABs-39201.pdf?AWSAccessKeyId=AKIAI56FRGV4ETJQCNMQ&Expires=1512358577&Signature=slzu4JWqpz32DFaR8syV4%2B5SQTk%3D

Completed on November 8

We continued to watch Matlab videos on Udemy that were for free. However, we wanted a course that was longer than just an hour and a half. Therefore, we used YouTube. We thought we wouldn't find anything useful because there isn't a way to build up a foundation. We would constantly have to watch videos that only have to do with things that we want. In other words, no video is going to completely give us the results we want. We have to gain some knowledge first and apply that knowledge to alter some code that we watch from YouTube to have it output what we imagine it. Matlab is not as popular as other programming languages, but it's good enough to have some videos out there to use. Matlab is easy to adapt to and the features it has to make it such a wonderful programming language to learn. We can create bar graphs, manipulate images, create 3D plots, do some interesting things such as have it detect your fingers, or face. It can be used to help create a more secure system as it can be used as an alternative way to lock a device.