Week 4:

Progress- We talked to our TA and karate health about the problems we were going to face in the development of our app.

Problems- Xcode only works on apple computers that we don't have

Plans- look into development enviorments that support both ios and andriod apps

Week 5:

Progress: Our group met after class on Tuesday to work on the Requirements Document: Draft 1. Ethan focused on the neural network section of the document outlining what we are going to do with neural networks and what we expect our product will be capable off. Chase outlined our end product and how it can be utilized by patents with RA. I focused on App development and how we are going to create an app that will utilize the neural network and be accessible by RA patients.

Problems: Because we aren't experienced in app development it's tough to write about our requirements when we are still deciding how we are going to implement the app itself.

Plans: Finish our Document Draft 1 assignment and continue to look into app development software as well as approaches with our neural network.

Week 6:

Progress: I looked at different options for developing web progressive apps. I have downloaded and started working on a Web Progressive App tutorial provided by Facebook. I'm able to run a local server using Node JS and start program a basic tic tac toe game.

Problems: I need to look into if web progressive apps allow for augmented reality with he camera. While not detrimental to our application it would greatly benefit it. I know web progressive apps can access the camera but I don't know if it allows for a graphical overlay.

Plans: Continue tutorials and really learn how to program web progressive apps and look into camera element of web progressive apps.

Week 7:

Progress - Worked on Tech Review and also web progressive app tutorial developed by facebook. I created a basic tic tac toe game to learn some fundamentals. Looked into different databases to use for our app and also refreshed on nodeJS.

Problems - Lack of time with other classes has eaten into the time I could be working and learning web progressive apps.

Plans - continue work on web progressive app.

Week 8:

Progress: We had another meeting with karate health. They discussed with us some approaches with our neural networks. They suggested instead of using direct images that we have a algorithm that would calculate measurements on the hand and those calculations would then be sent into the neural network.

Problems: Karate Health talked about how the FDA regulates medical data that companies can store and also requires a specific database that a companies have to use to store that data. Unfortunately our original approach with web progressive apps is now not possible if we want to store users data. This is really concerning because I had spent time learning about web progressive apps like React Native and now that time seems to be wasted.

Plans: I honestly don't know, I'm really concerned about our project. It was suppose to be an application users could download on their phone but know I don't know. I think I will read about FDA regulations on medical data.

Week 9:

Progress - I finished some basic web progressive applications using React as a way to familiarize myself with it. While we may not build an actual application I could use React as a UI for our neural network however we may want to use Python TKinter which I already have experience with.

Problems - We still have the problem with the FDA's regulations. I took a look into FDA guidelines on mobile applications. Apparently any application or add on to the iPhone meant to improve health care is classified as a medical mobile application. However the FDA is only regulating applications that "focus only on the apps that present a greater risk to patients if they don’t work as intended and on apps that cause smartphones or other mobile platforms to impact the functionality or performance of traditional medical devices." Considering that our original idea of using an app doesn't effect the quality of care individuals with RA get and is merely a possible approach to predicting a flare in patients with RA not a diagnosis of the disease itself, I don't believe the FDA's regulations would be a hindrance in the application itself. I still need to look into the FDA's regulations in regards to the storage of patient medical data, however from what I have read our application interface shouldn't be ruled out.

Plans - Talk to my group about what I have read in regards to the FDA's regulations on mobile medical applications. Meet with Karate Health again. Continue learning React.