Agenda

- Introductions
- Review of your design from CPRE/EE/SE 491 (What did you accomplish? What did you learn? What next steps are you planning?)

  We learned how different cloud providers operate and what kinds of technologies they use. We were also able to begin running Keras models and learn how our data could work with them. We explored the different cloud hosts and learned how to setup a simple cloud environment using AWS. We were able to connect a simple frontend client to communicate to one of our AWS endpoints.

- Discussion of any changes or improvements to the design

  Between the initial and current designs, we found which services we need and how we can connect each of them together. We also moved the frontend into the overarching cloud design to consolidate everything.

- Discussion of the objectives and requirements for CPRE/EE/SE 492

  Implement design from 491, design report and poster, and present completed project.

- Discussion of the schedule and milestones for the project

  The first step is to create each component, then upload them to AWS and connect. Simultaneously, the components are thoroughly tested. While each can be made independently, it makes sense to begin with the model and then make the frontend and backend.

- Review your team process and discuss any changes or improvements
- Q&A session

Meeting Notes

3 milestone objectives for semester

- Objective 1: Train model with the data we have
    - Goal is to first validate the data (is the data we have good enough for the model, or do we need more/new data from patients)
    - After validation, we can begin to train and improve the model
    - Success with AI varies by domain
        - Example: skin cancer detection achieved 55-60% accuracy
        - Others can be lower or higher, but we will need to determine what is feasible
    - The most expensive part of AI project is the data collection

- Must be careful about what data correlates with the outputs (reasonable correlation)
        - The main parts of objective 1 are input, model, and output
    - Objective 2: Provide application
        - Application has frontend interactive UI and backend with model
        - Should be straightforward, building on what we have done in previous classes
        - Runs on the cloud provider
    - Objective 3: Benchmarking (Compare between GCP and AWS)
        - Compare training costs
        - Compare running costs, usually much more than training costs

Our next step is to find and run models to train on our data.

Summary

Team 48 - Allergy Prediction Using Artificial Intelligence

Attendance: Joseph Trembley, Noah Ross, Xerxes Tarman

Unable to attend: Ella Godfrey (work) and Alex Ong (work)

The main discussion was about what we will be completing this semester. We briefly talked about what we have already done. The three major points are training a model, providing an application to access the model, and benchmarking between Google Cloud Platform and Amazon Web Services

Primary actions are to begin training a model, provide an application to interact with the model, and compare costs between Google Cloud Platform and Amazon Web Services

The next step in the project is to find and run models to train on our data.