

Team 13 – Allergy Prediction AI

Agenda

- Introductions
- Review project design from last semester/491 and any possible design changes
- Discuss what we learned last semester
- Discuss what our next steps are, what our objectives/requirements are for the upcoming semester
- Discuss semester schedule and project milestones
- Review our team's process and any changes or improvements
- Q&A

Meeting Took Place: Wednesday, January 24th, 2024

Meeting Notes

- Client Gaffar went over this semesters plan, which is building on what we achieved last semester
- This semester we will deliver the project
- Three main objectives for this semester: Train a model to our dataset, provide an application, benchmarking (AWS)
- Looking for obvious correlations in the dataset like age and deciding how viable these correlations are for making predictions
- We will meet every two weeks with client

Meeting Summary

- Project title and team info, attendance

Project Title: Allergy Predicting AI (Team 13)

Team Info:

Eric Christensen – Initial Component Design

Zoe Davis – Team Organizer

Josh Dutchik – Documentation and Frontend Support

Blake Friemel – Backend Development and Testing

Jack Gray – Front and Backend Testing

Michael Koopmann – Client Interaction

Attendance: Zoe Davis, Jack Gray, Michael Koopmann, Blake Friemel, Josh Dutchik, Eric Christensen

- Summary of main points

Goals:

- Excellent accuracy with the data and model 90 – 95 percent

Objectives:

1. Train a model with the data available

- Validate data: Check results/accuracy to confirm that data is sufficient for our model usage, manage AI model at calculated percentage

- ensure the data is reliable and contributes accurate and useful information towards the training and development of our model

- Determine correlations, trends, and importance relating to all data points

2. Application

- Front/Back end
- Interacts with the model – using user input
- UI/UX experience
- Must run on the cloud

3. Benchmarking – AWS and GCP (This is the true goal/objective)

a. Compare training cost (measure time/resources)

b. Compare running cost -> account creation and application usage

- Decisions made
 - What datapoints are valuable and crucial to the training and development of the data
 - Finalize the selection of the AI model types that best fits for the analysis of the data
 - Decide the course of action testing will need to be taken
 - Figure out how we will verify the AI calculations and results

- Actions to be taken
 - Continue work on frontend/backend application
 - Validate and correct the datapoints inside the data we have been given
 - Continue testing and training with the model itself
 - Work on connections between the application, the cloud, and the AI model itself

- Next steps for project
 - find 1 or 2 models that work well with the data
 - Focus on validating the data from the hospitals and patients we have received and ensuring that the datapoints we are selected would benefit in the training and the final calculation of the model's output. We need to make sure the data will produce accurate results and that our model is able to draw correct conclusions, trends, and relationships from the datapoints that we are giving it
 - Continue creating an application with both a frontend and backend that can give and receive data to the model for calculations and analysis that can be given back to the application