

492 Kickoff Meeting Summary

Team sdmay24-47

Accurate Cancer Prediction Using Artificial Intelligence

Attendance

- Present
 - Jack (Project Manager)
 - Nicholas (Model Design Lead)
 - Isaiah (Model Design Test)
 - Mason (UI Design Lead)
- Absent
 - Helen (UI Design) (conflicting schedule)
 - Siana (UI Design Test) (conflicting schedule)

Summary

During the meeting with our advisor, we first went over questions anyone had, which led to some clarification on the medical data we have and its usability. Our advisor emphasized the significance of the data, acknowledging that while the number of samples we have is not immense, because medical data is very expensive and resource-intensive to collect, and our project is a discovery project, the amount of data we need to produce some meaningful result can vary from more traditional AI/ML projects. There was some discussion of whether we can/should look for open-source data to use in addition to the data we have, ultimately, the decision was made to allow this, but it would be very difficult to find open-source data with the same criteria as the provided data. We also discussed what exactly we want to have as the output of the model we train. Because the nature of our project is more about discovery, our advisor clarified that we're not exactly trying to predict something but instead see what CAN we predict, which is one reason our data has multiple output fields. We finished the meeting with our next steps being to use our data to start training some form of a model on the cloud before our next meeting in 2 weeks.

List of any decisions made

- One decision we made was the time frame for beginning training the model. As a team, we decided that some form of model creation with our data should begin within the next two weeks before our next scheduled team meeting
- Another decision that was made was regarding outside data sources. The question was raised if we were allowed to use open-source data if it met the criteria. The decision was made to allow this, however, it is understood to be unlikely that we will find relevant data

List of any actions to be taken

- Set up AWS project
 - Even though we are in process of training the model via GCP, one mission of the project is to compare the accuracy of similarly trained models on different cloud platforms. In order to do so, we need to set up our AWS development environment

Next steps for the project

- Set up AWS project
 - Although we have begun development on GCP, we need to compare different cloud platforms. This involves starting an AWS project to train a similar model as on GCP
- Find correlation in data
 - This is the main objective of our project. We aim to find a positive correlation within the data that we can use as input for our AI model. As of right now, it is not even known if there is a plausible correlation between the cell culture and outcome, which is why this project is very investigative
- Train model
 - Once / if a positive correlation is found in the data, find a way to use this as input as an AI model and train on the cloud (both GCP and AWS).
- Refine UI
 - The UI is very basic right now. As we discover new information about the data and train models, we will need to refine the UI to fit with the new constraints