

Agenda:

- Introductions: Evan Nim, Bariture Ibaakee, Breann Grant, Alex Lafontaine, Megan Eberle, and Abigail Thompson
- What did we accomplish in 491? We were able to start testing an AI model. We also made a small demonstration for our presentation.
- What did you learn? We learned a lot about AI this past semester. Navigating Keras.io and picking a model, and then testing it. We also learned about the cloud as well.
- What are the next steps we are planning? We have been discussing the accuracy that the model should have and are planning on doing more research about skin cancer to refine details in our AI model later on.
- Changes or improvements to the design? We have changed the goal of the accuracy from 75% to 95%. After our presentation we realized that in order for our model to be useful it needs to have a higher accuracy.
- Discuss objectives and requirements for 492 with advisor
- Schedules and Milestones for the project? We first want to familiarize ourselves with skin cancer and how it is diagnosed, this will help us when training our AI model. Then we want to do more testing with the AI model and train it as well. In parallel with this step we want the model to be hosted on the cloud. Testing and training the model will be the majority of our semester. We also need to have a website/app in order for this model to be used as well.
- Review the team process and discuss any changes or improvements? We have a meeting every week that we all attend. We will also have github issues that will be assigned to certain team members in order to keep ourselves on track. We also have a group chat that makes it easy for us to all communicate.
- Q&A

Meeting Notes:

- Bi-weekly meeting with our advisor.
- Advisor can provide more information and knowledge about the domain, we need to work with a domain expert.
- Learning about the medical side can be difficult and time consuming and outside our scope.
- All we need to know is that there is an image and there is a diagnosis which is very correlated.
- Objective is to compare the benchmark of the clouds, not the benchmark of the frameworks
- Focusing on reaching 90% accuracy or better
- Naked eye/lense/light has accuracy of ~55-60%
- Our goal is just to do better than humans, we will not do better than 90% accuracy on skin

- The percentage is confidence level, not success.
- Should never be 100% confident
- Confidence level varies by image
- 90% success in training is our goal, not 90% in diagnosis

going forward:

- Try different models to get better training results
- Compare cost for different clouds
- Interface to upload image and display results - doesn't need to be complicated
- Review feedback from first semester with Professor Gaffar
- Rehearse presentation with Professor Gaffer before end of semester
- Don't need a database
- Look up HIPAA - do not keep a copy of anything!
- FDA readiness
- Cannot send image without encoding it

Meeting Summary:

- Include the Project title and Team information, including attendance. (Include a reason if there is an absence)
 - Skin Cancer Diagnosis using AI on the Cloud
 - Team 45
 - Everybody from the team was in attendance
- Summary of the main points discussed
 - Our job is not to learn about the domain but to work with domain experts.
 - Goal is to diagnose with higher accuracy than the human eye.
 - We will need to be HIPAA compliant and comply with FDA Readiness
- List of any decisions made
 - We do not need to do any medical research.
 - We need to start comparing costs of different cloud tools.
 - Look up HIPAA.
 - There is no need for a database.
 - We need to try multiple different models and compare them in order to get the best training results.
 - We need 90% success in training, but not 90% accuracy in diagnosis.
- List of any actions to be taken
 - Begin comparing models
 - Begin comparing cloud providers
 - Begin work on an interface to upload an image and display results
 - Familiarize ourselves with HIPAA and FDA Readiness
- Next steps for the project
 - Start to familiarize ourselves with HIPAA.
 - Research the prices of different clouds to use.
 - Start training models.