

## **January 18, 2022**

Today we met as a team to talk about our future plans in regard to the project for the semester. Dr. Akbas wants us to focus on the ML algorithm again, but this time

- Main requirements:
  - We need to use the landmarks (those numbers) to compare the faces – (Might work if we have time)
  - Train neural network to find the landmarks on the 3d face for us
    - Set of generic marks on the faces in dataset
    - Neural network should have a training dataset, test, and validation dataset
    - Face recognition software?
    - Research on facial recognition software and how they work?!
  - Synthetic images from Digitized Rhinoplasty?

## **January 25, 2022**

Today we as a team we logged on and worked on the product vision and backlog. We had a bit of a learning curve when it came to ZenHub.

- We need to start seriously looking at MLs
  - 3D github resources
  - Thisimageisnotreal.com, GANs, GANFit?
  - Starting with ML algorithm and then building off it?
  - Akbas said do we want to compare faces using landmark ratios or do we want to go 3D landmarking ourselves
  - Look for academic journals

## **January 28, 2022**

- Create cluster of the faces that is like each other using KNN
  - Show it to Akbas, as he wants to see it
- Check synthetic face, if we can mark the landmark on it or not on the digitized website
- If we can mark the landmark, include the synthetic faces
- Is there a tool to manipulate faces to create more database?
- XYZ points for 3D?
- Focus on landmarks for 3D faces!
- GANZ – Akbas talked about github
- Bigger database??
  - Better accuracy

## **February 1, 2022**

- I was absent I believe?

**February 3, 2022**

Today we banded together to work on SRS and SDS.

**February 8, 2022**

Presented to the class our first sprint

**February 10, 2022**

As a group, we discussed sprint 2 and how we would proceed with creating faces.

**February 15, 2022**

I started creating faces through FaceGen and uploading them to our Google Drive

**February 17, 2022**

I created more faces for our database and as a team we discussed the clustering side as well as the digitized rhinoplasty facial points

**February 22, 2022**

Finalized ideas that we were having in regard to who does what

**February 24, 2022**

As a team, we worked on the Test Plan together.

**March 1, 2022**

We started on the SDS and SRS

**March 3, 2022**

We finished working on the SRS and SDS and started talking about what we would do regarding our presentation the next week.

**March 8, 2022**

The team worked on creating our presentation for the sprint.

**March 10, 2022**

We presented our sprint 2 presentation and talked about what we would do in sprint 3.

**March 14-18<sup>th</sup>, 2022**

Spring Break so I did not work on the project.

**March 22, 2022**

I worked on logging my entries in my engineering notebook as I had forgotten for a few weeks.

**March 24, 2022**

We started to talk about what we wanted to accomplish in our last sprint and what we could accomplish in time.

**March 29, 2022**

The Backlog was due, so as a group we went through and merged certain tasks into one and created others that was not in our original plan for sprint 3. We started as a team to really put together what we wanted to do. We settled that our main goal of this sprint was the GitHub.

**March 31, 2022**

I created a few more faces for the database using FaceGen so we have more for the clustering algorithms that Jared is working on. I also checked in with Marvin regarding faces.

**April 5, 2022**

We started putting in time with the SRS and SDS documentation and seeing where everyone was at in the project.

**April 7, 2022**

As a team, we banded together to get the documentation (SRS and SDS) ready for submission.

**April 12, 2022**

We started to clean up our documentation for the test plan and think about what everyone needs to do to finalize the project such as where we need to put all of our database and how we can go about doing that on the GitHub.

**April 14, 2022**

As a team, we worked on the Test Plan together for the final submission.

**April 19, 2022**

Started looking into the different ways we could format our GitHub for the next set of students after we graduate to look at.

**April 21, 2022**

I checked in with Alex and Priscilla regarding their work on the Digitized Rhinoplasty as Jared needs their data so he can do his part. They said they did not need help, so I continued to research how to format the GitHub.