

Engineering Notebook

18/01/2022

- We talked with Professor Akbas who is the product owner and he wanted us to do more numbers of landmarks. He suggested that we might need to do a soft reboot of the project.
- He wants us to work on a ML algorithm that will automatically detect the landmarks.
- He also suggests that we should use the images that the previous group created.
- We might need to zoom with the previous group to ask some questions regarding this project.
- Using synthetic faces might be a good idea (which can be created by softwares) to grow the database.
- Professor said that we do not need to point out all of the 70 points anymore, just the most important points.
- We need to look for a facial recognition ML which will ID the landmark on the face and will differentiate faces.

24/01/2022

- Talked about what we changed in the project.
- Fixed the backlog.
- Fixed the product vision.
- Focusing on making a ML algorithm that can successfully and accurately make the points on the faces in the dataset.
- Need to search ML algorithm:
 - This image is real.com
 - 3D github resources

27/01/2022

- Create clusters of face using proportions, ratios using the KNN algorithms and make sure to show it to Professor Akbas
- Check if we can upload the synthetic faces on Digitised Rhinoplasty website.
- Must include the synthetic faces in the KNN algorithm.
- Look for tools to manipulate synthetic faces to grow the database.
- Check what GANs is.
- Check 3D face Scan????
- We need to grow the dataset a lot more.
- We need to be more accurate about the landmarks.
- Please talk to the product owner more.

01/02/2022

- Make face clusters
 - Professor wanted grouping of faces based on different sizes and points (such as heights, weight, etc.)
- There is a software that can modify the same face using the same 3D images (from another university)
- Use GAN maybe?

3/02/2022

- Check out what Roboflow is.
- We need to fix the backlog because it is too short.
- Look for facial recognition for landmarks.
- Check out what DeepC is.

- Ask the professor about the synthetic face dataset.

07/02/2022

- Work on the presentation for sprint 1

08/02/2022

- Day of the Sprint 1 presentation.