

Meeting #3

Project working on: Attendance tracking using Facial Recognition for Schools and Universities.

Milestones to Achieve:

- Make GUI of overall application
- Creation functional dynamic pages.
- Create a database to store data for User registration.
- Merge the GUI page and Database.
- Collect facial data from Users.
- Allocate Facial Data with Database Information.
- Fill out the other necessary information of the developers of the software.
- Track Attendance.

Progress so Far:

- Changed the GUI like the location, size and font of the buttons and text as per the feedback provided by the mentors.
- GUI for storing the student details, capture the face,
- Worked on training the faces using the LBHP algorithm and save the trained faces in a form of .xml file.
- Also creating a GUI for face detection where the face is detected based on the boundary box where the red box indicates that the face is unknown and green box with the details like the student_id, name, department and roll number indicates that the face is detected.
- Then the faces that matches with the faces in the trained database gets saved in the form of text along with the date of attendance and the timestamp are recorded in a form of a csv file.

Left to achieve:

- Creating the GUI for the rest of the buttons like the attendance where the student attendance can be tracked, giving the details of the developers, then also providing the information which will be helpful for the users in the help button.

- Tracking the attendance for a particular day and calculating the number of students present in the class and also provide the details of the students that are absent on the day for the teacher/professor.

Feedback from the Mentors:

- To finish the complete website within the next few days so that any further advancements and features can be added and deployed.
- To develop a SaaS (Software as a Service) Model so that the user can just use the app and the backend support and management should be done by us.
- To try different models for training as of now it is taking some time to give the face detection, try another model for faster use and accuracy.
- Go in depth with the ml model used and also get the metrics like the Accuracy, Precision, Recall, MAP (Mean Average Precision), MAE.