**CIS 634 Object Oriented Software Engineering**

**Group-14**

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**Project Proposal**

**Title of the Project: FACE RECOGNITION ATTENDANCE SYSTEM**

Language: Python

Tools: open CV, TKinter, NumPy

**INTRODUCTION:**

The traditional attendance system involves teachers marking registers, which introduces human error and requires a lot of upkeep. In this system, time usage is a major area of concern. We have considered employing modern digital tools, such as face recognition, to overhaul it. Our project will guarantee greater accuracy and minimal manual labor. The endeavor is revolutionized to address the issues with the established system. Our process entails face recognition before attendance is recorded. about the project. When a student's face is displayed from the folder containing the database of all the pupils in the class, attendance is registered if the face matches one of the faces in the saved image; otherwise, the face is disregarded and attendance is not marked. The model has an accuracy of 99.38% on the Labelled Faces in the Wild benchmark. Any organization, including businesses and educational institutions, places a high value on attendance. Therefore, keeping a record of attendance is crucial. The issue arises when one must manually take attendance, which takes a lot of time and is also exhausting.

**TOOL AND TECHNOLOGY:**

-**Open cv python:** it is used for Face Recognition and detection

-**Thinker**: it provides a fast and easy way to create GUI applications

- **Numpy:** It also has functions for working in domain of linear algebra, Fourier transform, and matrices.

**Objective:**

* Reduce manual processing
* Produce monthly report
* Flexibility and liability
* Send an Email to the student if required