

Smart Attendance System

Problem Statement:- Attendance management has been a great challenge over the years in the Indian Academic Institutions. The process of marking attendance and maintaining the records is a tedious and slow process as in most of the cases the attendance records are maintained using registers. This process also has a lot of loopholes which results in proxies and the record getting lost or damaged as the register can be lost. Another aspect is the time, marking attendance takes time and it can consume a lot of class time.

Proposed Solution:- The face is one of the easiest ways to distinguish the individual identity of each other. Face recognition is a personal identification system that uses personal characteristics of a person to identify the person's identity. So we use facial recognition to mark the attendance. A database of photos of students who are enrolled in the course is stored. The teacher uploads the photo of students present on that day and uploads it on the website. The face recognition program matches the students in the photo with the database and records their attendance. This is a great solution which eliminates proxies, makes record maintenance easy and reliable and makes the process of marking attendance fast and efficient.

Description:- In this project, the teacher uploads the photo of students sitting in the classroom and uploads it on the website. The facial recognition program identifies the students present and marks their attendance. The students and teachers can use the website to get the attendance reports and check how many classes a particular student has attended.

Tech Stack:

- Next.js
- Firebase
- Flask
- Python