

# Attendance Management System Using Face Recognition(Prototype)

This project involves building an attendance system which utilizes facial recognition to mark the presence, time-in, and time-out of employees. It covers areas such as facial detection, alignment, and recognition, along with the development of a web application to cater to various use cases of the system such as registration of new employees, addition of photos to the training dataset, viewing attendance reports, etc. This project intends to serve as an efficient substitute for traditional manual attendance systems. It can be used in corporate offices, schools, and organizations where security is essential.

This project aims to automate the traditional attendance system where the attendance is marked manually. It also enables an organization to maintain its records like in-time, out time, break time and attendance digitally. Digitalization of the system would also help in better visualization of the data using graphs to display the no. of employees present today, total work hours of each employee and their break time. Its added features serve as an efficient upgrade and replacement over the traditional attendance system.

## **Scope of the project**

Facial recognition is becoming more prominent in our society. It has made major progress in the field of security. It is a very effective tool that can help law enforcers to recognize criminals and software companies are leveraging the technology to help users access the technology. This technology can be further developed to be used in other avenues such as ATMs, accessing confidential files, or other sensitive materials. This project serves as a foundation for future projects based on facial detection and recognition. This project also covers web development and database management with a user-friendly UI. Using this system any corporate offices, school and organization can replace their traditional way of maintaining attendance of the employees and can also generate their availability(presence) report throughout the month.

## **Flow of the Project**



Fig 1: Shows the Basic UI of the Project

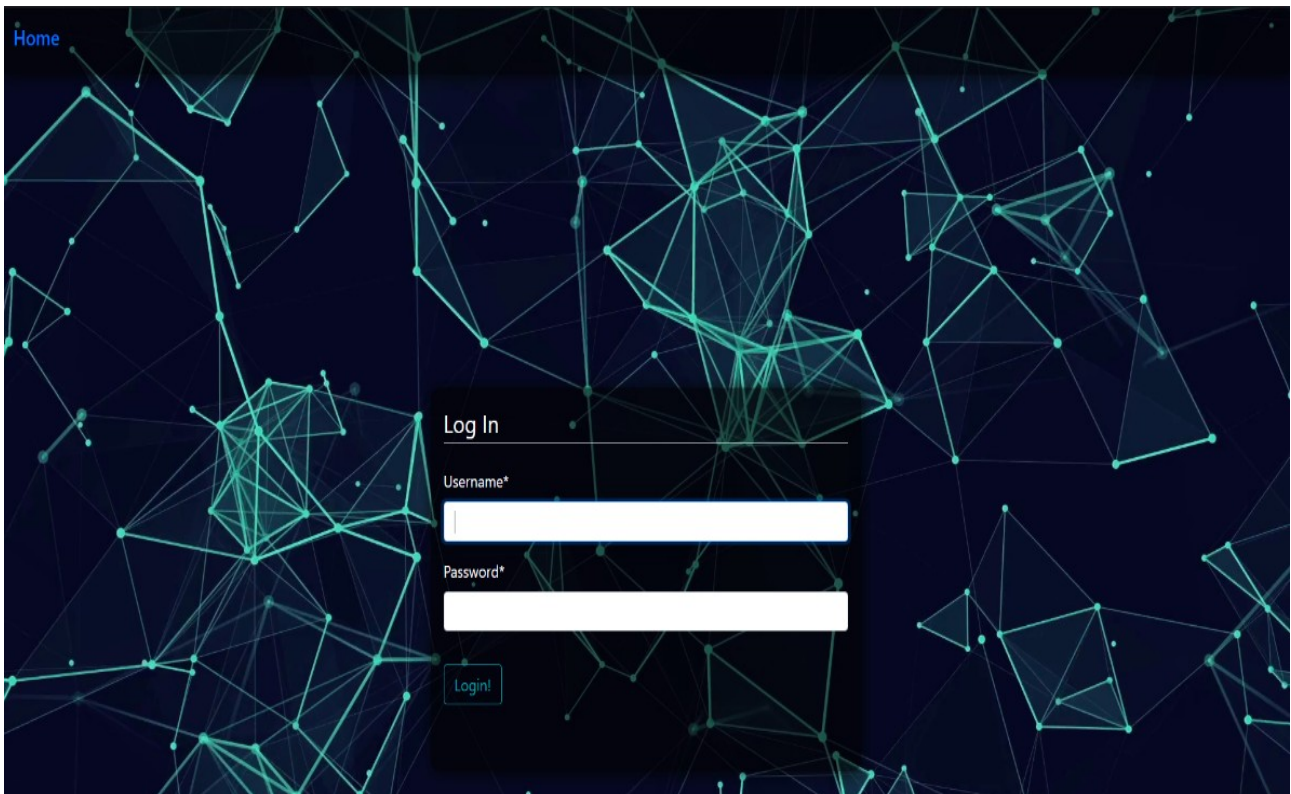


Fig 2: Shows the Login Page

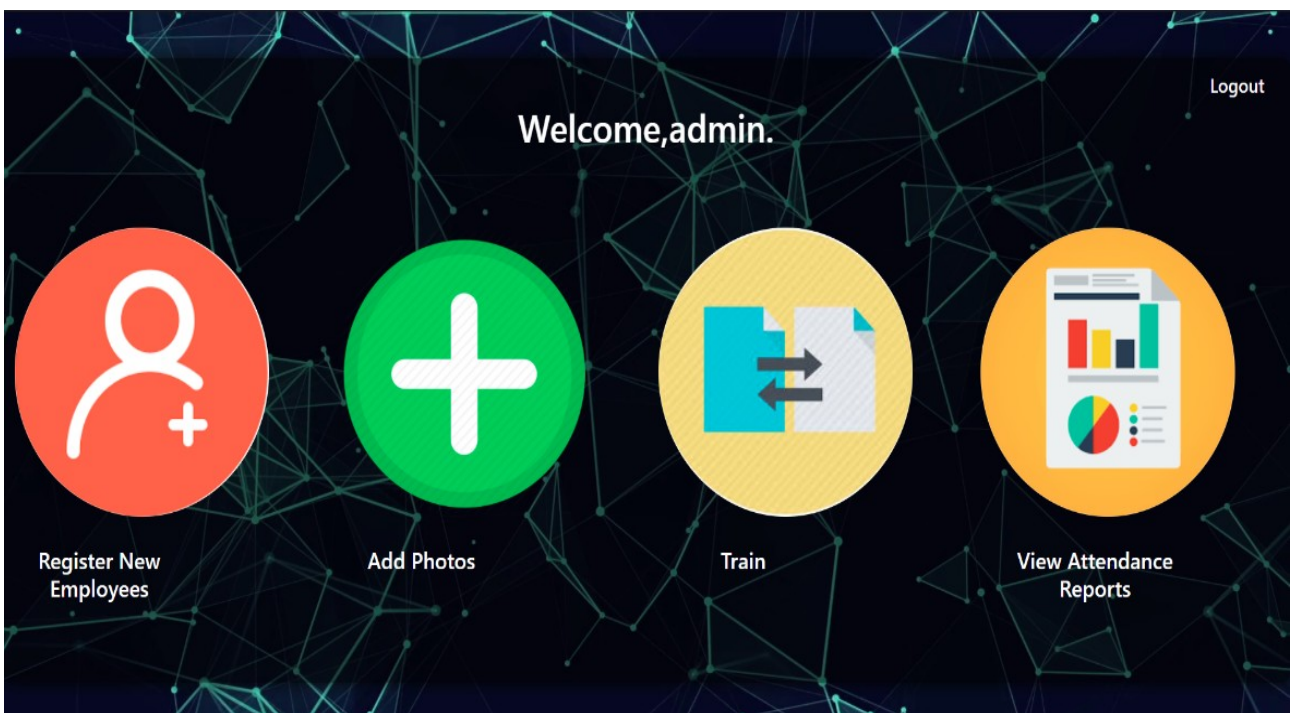
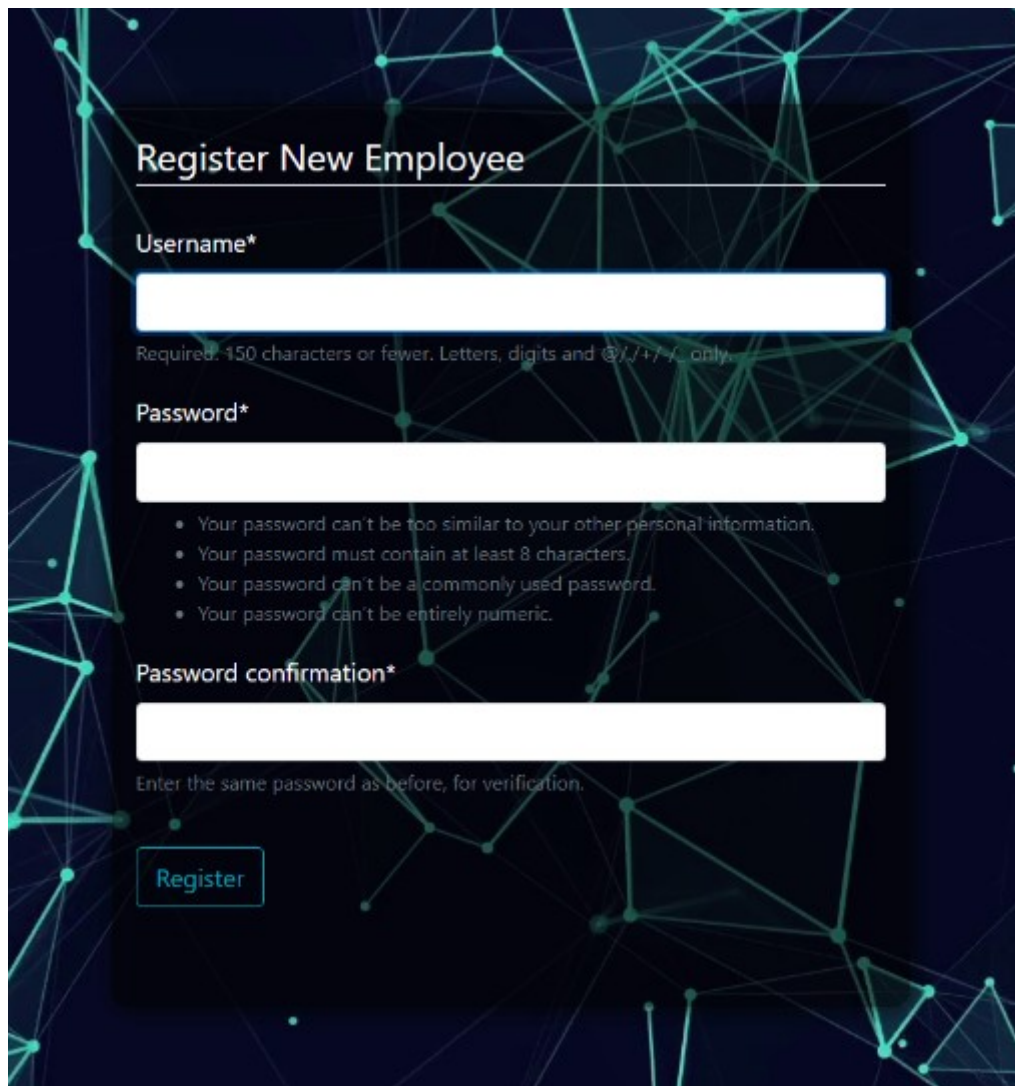


Fig 3: Shows the Admin Page

The image shows a registration form titled "Register New Employee" on a dark blue background with a network of glowing green lines and dots. The form includes three input fields: "Username\*", "Password\*", and "Password confirmation\*", each with a white rectangular input box. Below the "Username\*" field, there is a small text requirement: "Required: 150 characters or fewer. Letters, digits and @/./+/-/\_ only." Below the "Password\*" field, there is a bulleted list of password requirements: "Your password can't be too similar to your other personal information.", "Your password must contain at least 8 characters.", "Your password can't be a commonly used password.", and "Your password can't be entirely numeric." Below the "Password confirmation\*" field, there is a text instruction: "Enter the same password as before, for verification." At the bottom left of the form, there is a blue button labeled "Register".

## Register New Employee

Username\*

Required: 150 characters or fewer. Letters, digits and @/./+/-/\_ only.

Password\*

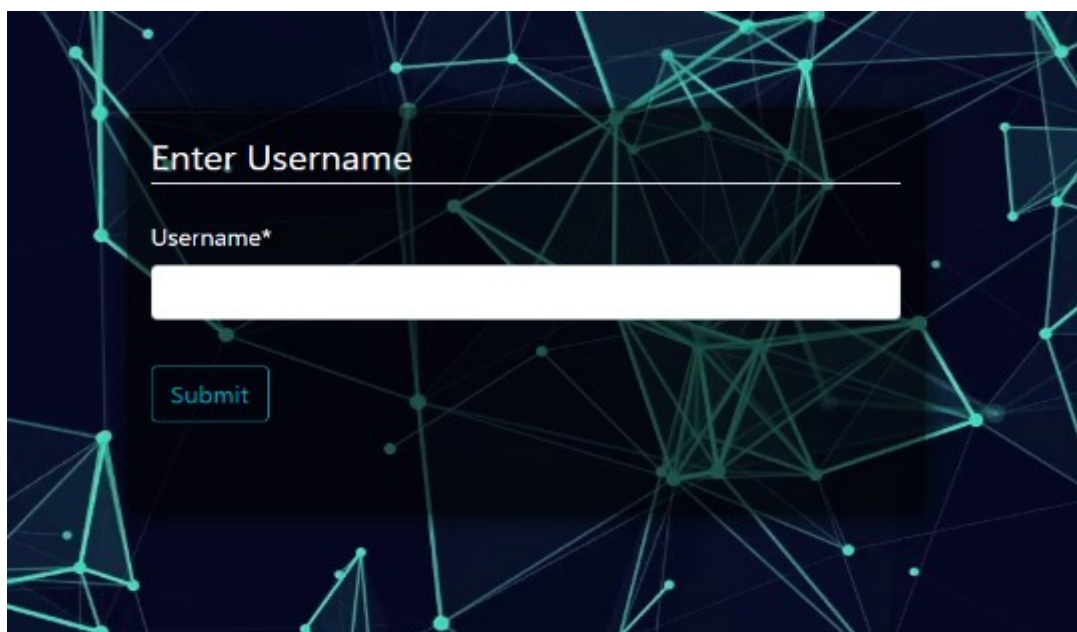
- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation\*

Enter the same password as before, for verification.

Register

Fig 4: Shows the Register New Employee

The image shows a form titled "Enter Username" on the same dark blue background with a network of glowing green lines and dots. It includes a single input field labeled "Username\*" with a white rectangular input box. Below the input field, there is a blue button labeled "Submit".

## Enter Username

Username\*

Submit

Fig 5: Enter Username



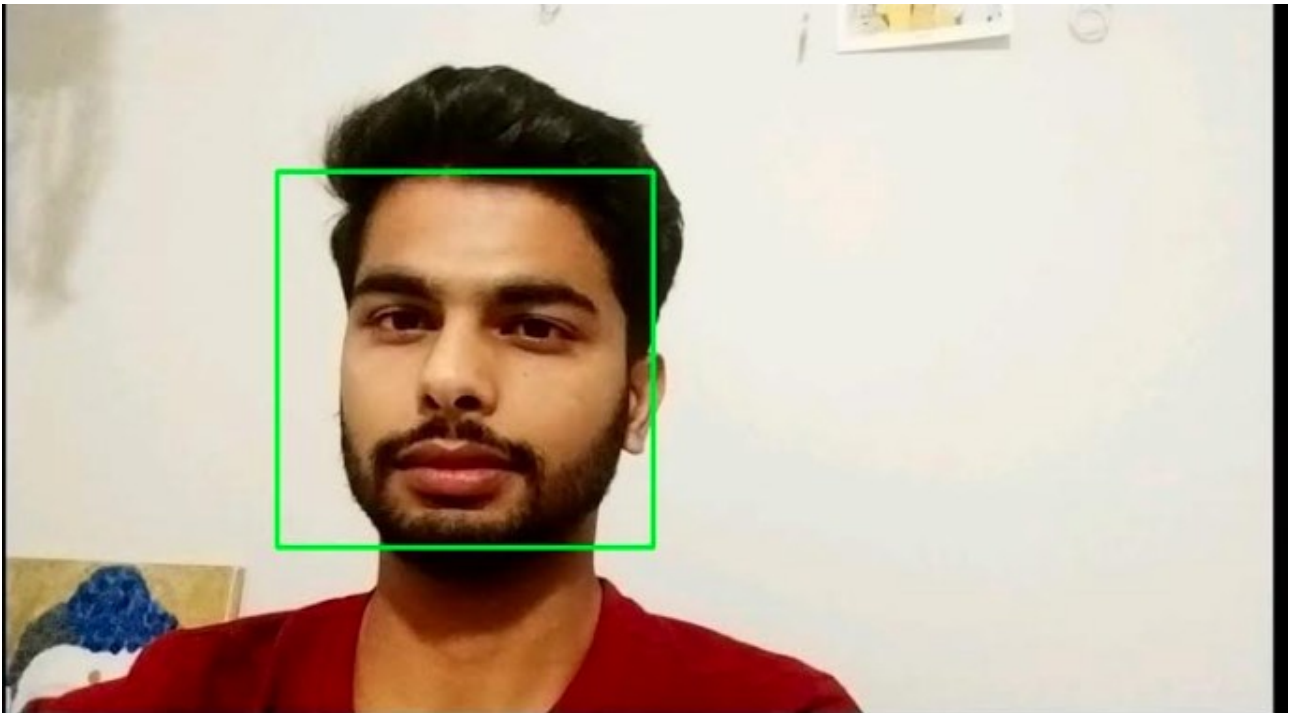
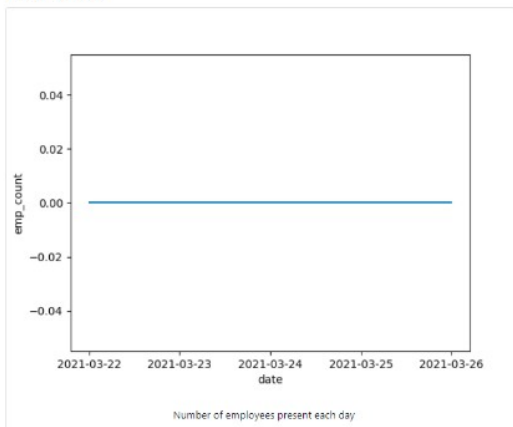


Fig 6: Taking image of the Employee

#### Today's Statistics



#### Last Week



#### This Week

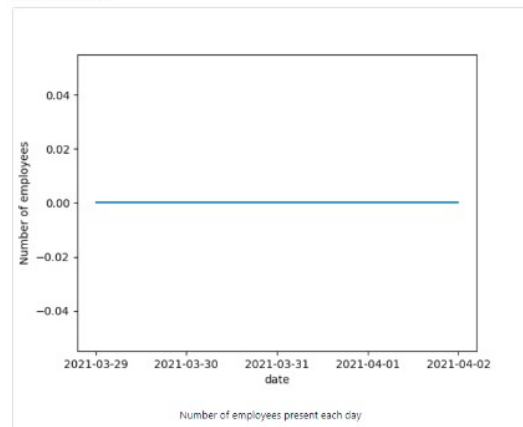


Fig 7: Shows the statistics of the day

## Conclusion

This is a prototype version of our Project.