

Abstract:

The idea is to allow enterprises such as schools, colleges, banks and other offices to manage vital day-to-day processes such as employee management, customer management, meeting and schedule management, analytics and reporting. The application consists of two main components. One is the web application and the other being the mobile application. The web application is responsible for authentication, user role management and database management whereas the mobile application is responsible for users' attendance or presence via scan-to-confirm strategy. It provides customizable options for creating users with role management and secure authentication. The schedule of activities are recorded by the administrator at the beginning of the session. The mobile app is responsible for recording the actual events occurred when the session is held. It records the time, date and location of the incident by a QR Code and sends the data securely to the web application which in turn stores and processes the information. Reports can be generated based on processed information and made available to different users based on their roles. Whenever there is a change in schedule, it will be notified to the employees through the app.

Impact:

The project is built keeping scalability in mind. The selection of tools and technologies for the project helps us in serving millions of users, including real-time data without any delays. The application is containerized into microservices where a load balancer is attached that handles a heavy amount of traffic. Also, continuous integration and continuous delivery techniques of deploying and testing the project has been implemented for better developer operations.

Project Expansion:

The project is currently under the development phase where it is being tested for accuracy and reliability. It will help every enterprise in making their day to day processes easier and accountable. Further plan is to deploy the product in any enterprise organization which strive for quality.