TIME TRACKING

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ABSTRACT

The primitive system of taking attendance through pen-paper or registers by the associations and institutions aren’t important effective these days. The delegates of the absentees by their groups or musketeers are important common due to which this important factor of covering the class becomes ineffective. The pen-paper attendance system non-essentially consumes important time in class while smart ways gives further time to speaker. It can be simply be manipulated. So, for that numerous associations and institutions have replaced it through biometric detectors which mark attendance through fingerprints of scholars or staff. But due to covid-19, where touching anything is parlous. As we know in the current situation during covid-19 epidemic, Government of different nations have a strict guidelines for social distancing needed to be followed far and wide keeping the aspect of safety measures in mind. For that, an attendance monitoring system has been cooked through face recognition. Asistencia App is a mobile application developed in Android Studio. The process of this work is to simplify the whole process of managing staff attendance of college to an automated way where the admin can manage the work leaves and attendance of the staff. The users can send feedback. The user can mark his/her attendance through a biometric reader installed in the college.

Keywords: Android, DFD, IAS Software, Biometric reader, Microsoft SQL Server Management Studio

1. INTRODUCTION

The main idea behind the project is to develop an android application which will help staff and authorities to manage attendance at one instant. The time for attendance and work leave management will get reduced, if they use this application. The attendance is marked using a biometric reader installed in the college. Hence this idea is very useful. The project is about how the users will get best use of the application according to his/her point of easiness. Nowadays people use mobile phones and other mobile devices. The main idea of this project was to design a system that is highly compatible with the latest smart devices and will be helpful for users to manage their attendance in a fast and easy way by reducing time and effort spent. The intention through this humble work is to cut short the complexities that may arise due to manual work.
This application consists of four modules:

- Registration Module: The user is prompted to enter his/her basic details and create login credentials.
- Admin Module: The administrator can manage the leave applications, staff attendance, and view and analyze feedback.
- Login Module: The user can enter the system with the respective login credentials.
- User Module: The user can view or edit his/her profile, apply for leave and provide feedback.

2. METHODOLOGY

With manual systems, the level of service is dependent on individuals. It would be easy for all to switch details and end up with inconsistency in data entry or in handwritten orders which have drawbacks with existing systems:

- Biometric reader reads only fingerprint.

To avoid all these limitations and make the working more accurate we introduce a new application “ASISTENCIA APP”. This will help to overcome the limitations of the existing system. It is very simple to design and easy to implement.

- Ensure great efficiency
- Improve the security features by adding face recognition feature
- Reduce time consumption
- User friendly and interactive
- Consistency in data

The purpose of this system is to provide an easier facility to the users to manage their attendance and work leaves.

3. SYSTEM FEATURES

The working of each module can be classified as follows:

1. Registration Module
   The user is prompted to enter his/her basic details and create login credentials in both app side and device side.

2. Admin Module
   Administrator has the overall control over the application. Admin login to the admin side by using the login credentials. Administrator can view the list of staff, their attendance, work leaves, feedback and also can approve the leaves.
3. Login Module
The user can enter the system with the respective login credentials.

4. User module
The staff can login with the respective login credentials. The staff can view their attendance, view leaves and send feedback.

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**Fig 1. Data Flow Diagram**

### 3.1 User Side

**Designing Part**

**Login and Registration page:**
- Login: The registered user can login to the system using the login credentials. If not registered, user can go to registration page by clicking register button.
- Registration Page: The user can register by entering basic details and can create login credentials.
  - Profile: User can view their basic details and edit them.
  - Leave form: User can apply for leave by entering data.
  - Feedback: User can send feedback to the admin.
  - Notification: User can view notifications from the admin.

Other major things in the menu of home page are:
- View Leave Status: User can view their status of applied work leave as approved, not approved or denied.
- Logout
User side Results

Fig 2. Login and Registration Page

Fig 3. Leave form and Profile page
3.2 Admin Side

Admin manages the attendance using the IAS software associated with the biometric reader and manages the database using a webpage created using HTML and CSS with PHP embedded using Visual Studio Code. The webpage will show the list of users, leave applications, and “add notification” section. The “Add Notification” section is for the admin to add notifications to the users. Microsoft SQL Server Management Studio is used to maintain the database for the biometric reader.

Admin side Results
4. CONCLUSION

This app helps to manage attendance and work leave of staff. The application provide high security as face recognition feature is added. Users can mark their attendance through a biometric reader installed in the college. The device reads their face and fingerprint to add attendance. Users can make use of this application for viewing attendance, getting notifications, applying work leave and sending feedback to the admin. Feedback can be anything about the application, work leave management, attendance management etc. The admin can view and analyse the user feedback and take timely actions.
REFERENCES


