

Hireling: The Employee Tracking Application

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ABSTRACT

The objective of "Hireling-An Employee Tracking Android Application " is to design a well designed Android Application that eases the manual work of maintaining attendance records and details of each and every employee details.

Many of the systems in use today don't allow for employee self-service, which means that staff members must go through HR departments or managers in order to access and manage their personal information. The Android Application has been developed using Android Development Kit(ADT) using JAVA as Front End and DB Browser for SQLite at BackEnd. The software is very user friendly. User feedback will be taken into consideration for future development or enhancement.

Keywords-Attendance, Leave, Admin, Employee, Database

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I. INTRODUCTION

Managing and maintaining employee information in the current environment of many organizations is a very difficult task for anyone. Employees manually recording their attendance in a register book and maintaining a manual calculation to update the employee database for each month is the traditional method. Such a system takes so much time to generate records and many times it creates an error also as it follows a manual traditional system. In addition to these mistake difficulties, there are occasionally many other issues that arise, such as the loss of the attendance register book or the manually inserting of false data through unidentified sources that are actually not allowed for that task. In order to lessen all of these issues and worries caused by this issue, a smart mobile-based application is created to boost both efficiency and security by transferring all employee data to the approved web-based admin panel server as it is connected in the suggested mobile applications. Our System is based on two major aspects that is one for admin and other one will be for Employees. The Employees will have the access to their attendance and leaves and The Admin will have access to all its employees and will be responsible for granting leaves to them. The administrator will maintain oversight of the employees in the effective database. Therefore, it is essential to increase the use of mobile-based tracking applications to register systems in order to enhance the current method of

conveniently recording and reporting employee information.

II. LITERATURE SURVEY

K.Akhila, (2013) worked on An employee tracking system based on Android that was developed in a novel approach to android-based student attendance tracking using an Android application. System monitors all activities of employees. Increased productivity, cost savings, and quick access to employee attendance records were all possible thanks to the developed system[9].

Onwuachu Uzochukwu C, Enefiok Etuk A. (2016) worked on a system for keeping track of all employee activities, including time off requests and scheduling information, that runs on Android. As a result, managers will be able to learn more about the employee[13].

Ramteke Priyanta,(2016) worked on the Employee Tracking and Monitoring System using Android on design and implementation of the admin and employee applications by separating corporate and personal data. On the same smartphone the system provides different securities. This system utilizes a dynamic database utility in this system to retrieve data or information from a centralized database[4].

V. Sanghavi, (2018) created a mobile application for the Android operating system to store Master Control Facility (MCF) employee data as part of their work on a Master Control Facility Android

App for Employee Information Security. It monitors the employees of MCF through cell phones. The fundamental security measure used in this application is encryption. Java is used to implement the application, and a SQLite database is used to store the outcome[10].

Mr.Pratik (2019) worked on Employee Management System in which it is stated that the creation of a work center's scheduling system is the aim of the "Employee Management System". A simple and even online method of informing employees of events and notifications that is scheduling is used. It records data pertaining to the confidential information of their employees. The project contains modules like Employee and Admin[3].

III. FRAMEWORK

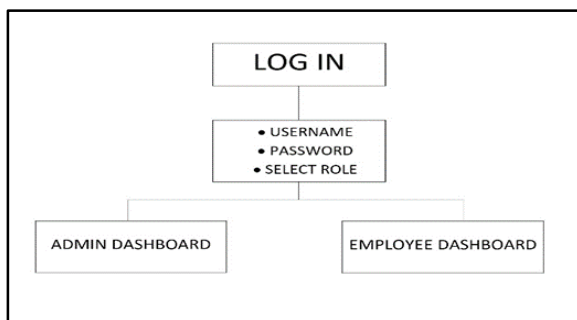


Fig. 1. Login Flowchart

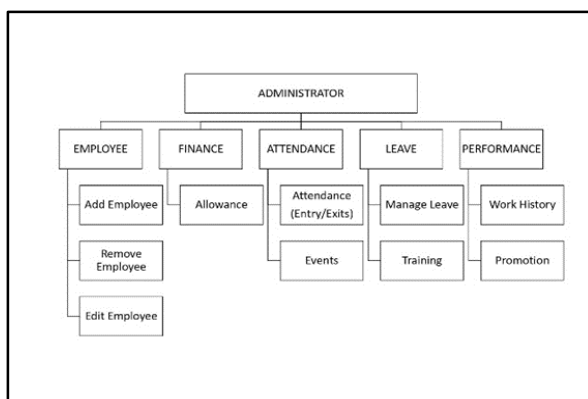


Fig. 2. Admin Flowchart

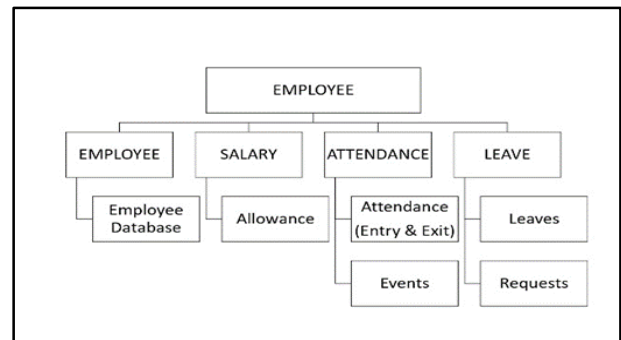


Fig. 3 Employee Flowchart

IV. METHODOLOGY

After careful consideration, it was decided that the system would include the modules and roles listed below.

The concerned modules are as follows:-

- Users
- Admin

The super users of this application are the administrators and staff. The admin section is only accessible to admin. The administrator has all the data on all the registered personnel as well as on all the items.

There are several sub-modules inside this module.

1. Admin
2. Employee

A. ADMIN

- 1) *Add New Users*: As new employees or users join the company, the administrator will register them.
- 2) *Approve Employee Attendance*: Admin can approve or deny the leave request from the employee.
- 3) *Attendance Tracking*: Admin can track attendance of employees.

B. EMPLOYEE

- 1) *Daily Attendance*: The employee will fill the daily attendance (in-time and out-time).
- 2) *Leave Application*: Employees can fill the leave application filling the details including the reason for the leave.
- 3) *Profile View*: Employees can view its profile in this tab.
- 4) *Check Attendance status*: Employees can check the status of applied leave whether it's approved or not.

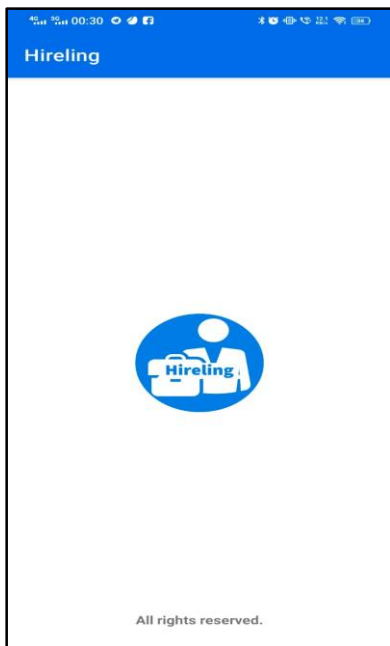


Fig. 4. Splash Screen

Welcome Screen of the Hireling Employee Tracking Application

A. ADMIN MODULE

This module manages the employee registration procedure. The following describes the admin module's sub-modules:

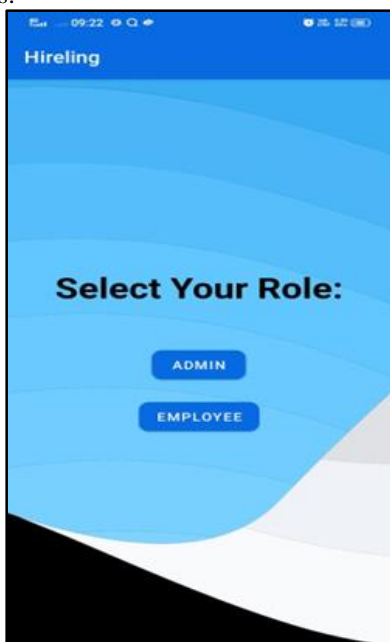


Fig. 5. Select Your Role

When the user launches the Android app, the interface shown in the Figure appears. The following

figure displays the two sections: the admin section and the login section. The admin logs in to the admin section to access the rights that app grants to the admin. The employee logs in to use the app's services on the login section.

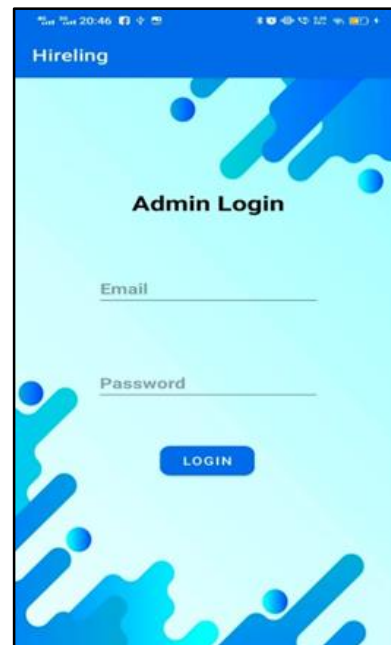


Fig. 6. Admin Login

This Figure shows the login screen for the admin, where admin can log in to access the admin portal.

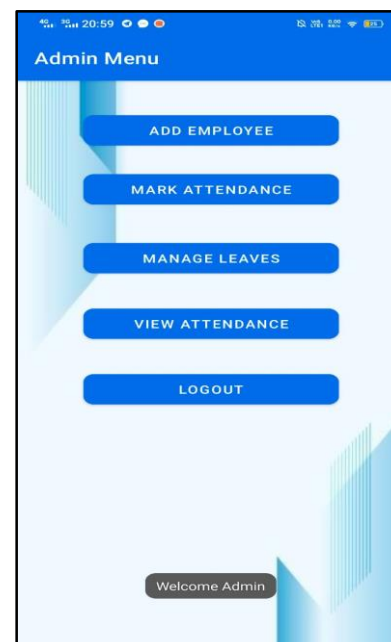


Fig. 7. Admin Menu

This Figure shows the first screen after admin login, which the admin uses to access the app to register

new employees, manage the leaves of employees and also for viewing the attendance of the employees of the company.



Fig. 8. Adding New Employee

This Figure shows the employee registration page where the admin can add an employee by filling in the necessary details like name, email, department, qualification and also the date of joining.

Eid	Fname	Lname	Email	Dept	Qualification	DOJ	Password	FullLeave	UnFullLeave
1	Vishakha	Mangtani	vish@gmail.com	HR	MBA	2-1-2023	abc12	9	15
2	Khushi	Mangtani	khushi@gmail.com	Teaching	MCom	3-3-2023	Employee	10	15
3	Ketan	Paryani	ketan@gmail.com	Finance	BSc in Stats	3-3-2023	Employee	10	15
4	Ayan	Mukherjee	ayan@gmail.com	Non-Teaching	BCom	1-2-2023	Employee	10	15
5	abeer	mangtani	abeer@gmail.com	Non-Teaching	Mtech	20-3-2023	Employee	10	15
6	Ayan	Jain	ayan@gmail.com	Non-Teaching	BCom	4-1-2023	Employee	10	10

Fig. 9. Database of Employee. Registration

This Figure shows the Database of Employee Registration where admin adds an employee the details of the employees are stored here.



Fig. 10. Mark Attendance

This Figure shows the mark attendance screen where admin can mark the attendance of the employees.

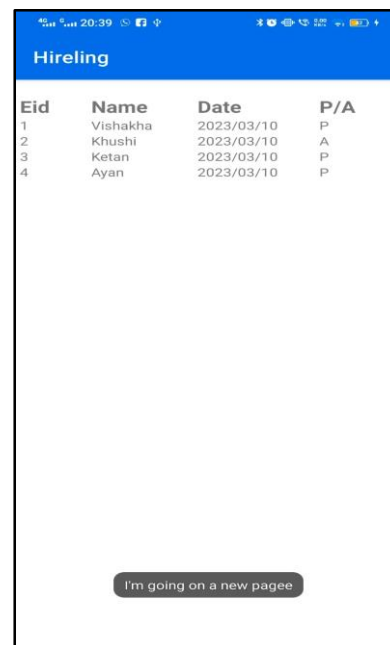


Fig. 11. View Attendance of All Employees

This Figure shows the view attendance tab where admin can spectate the attendance of the employees in their company.

Aid	Ed	DateAttendance	PA
1	1	2023/03/10	P
2	2	2023/03/10	A
3	3	2023/03/10	P
4	4	2023/03/10	P

Fig. 12. Database of Attendance

This Figure shows the Database of attendance of the employees where the attendance of the employees is stored.

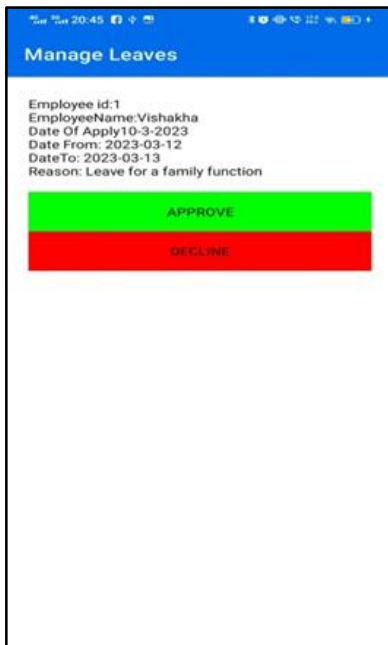


Fig. 13. Managing Leaves

This Figure shows the managing of the leave tab which is done by admin. Admin can approve or deny the leave request sent by the employee.

Lid	DateApply	DateFrom	DateTo	Reason	Status	Ed	Name	LeaveType
1	10-3-2023	2023-03-12	2023-03-13	Leave for a family f.	Approve	0	Vishakha	Paid Leaves
2	11-3-2023	2023-03-15	2023-03-20	abc	Pending	0	Aryan	UnPaid Leaves

Fig. 14. Database of Leaves

This Figure shows the Database of Leaves of the employees where the leaves taken by the employee and the leaves remaining of the employees are stored.

B. EMPLOYEE MODULE

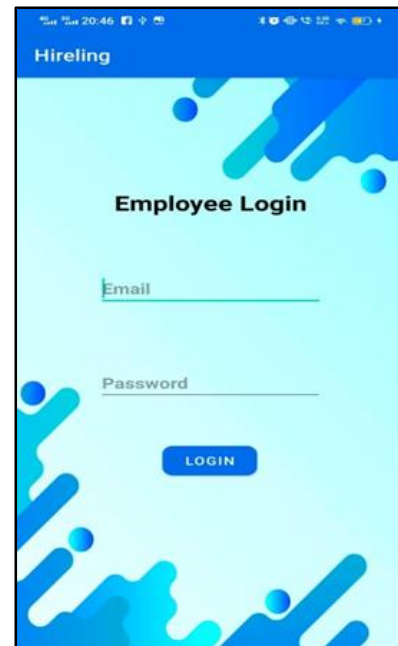


Fig. 15. Employee Login

This Figure shows the login screen for the employee which the employee uses to access the employee portal.

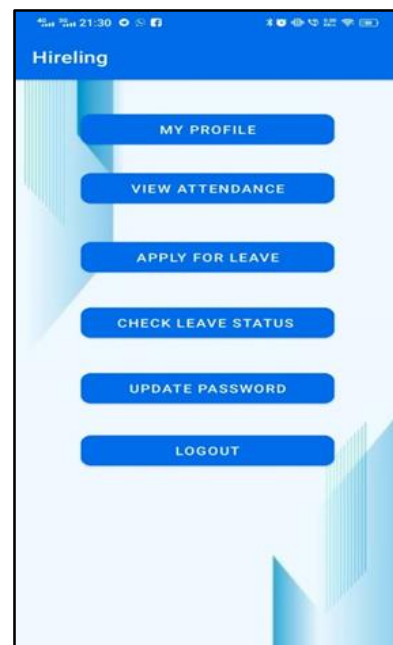


Fig. 16. Employee Menu

Figure shows the login screen for the employee which the employee uses to access the app to apply leave, view attendance, check the leave status.



Fig. 17. Employee Menu

This Figure shows my profile page of the employee menu which shows the information of the current logged in employee.



Fig. 19. Apply For a Leave

This Figure shows the apply for leave tab which is used to apply for leave according to the type of leave taken by the employee and by filling the necessary details for applying the leave.



Fig. 18. Viewing Attendance of the Employee

This Figure shows the view attendance tab of the employee menu where employees can see their attendance which is already stored in the database.

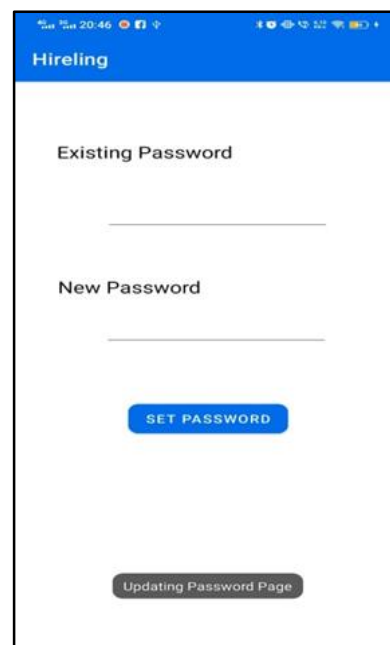


Fig. 20. Updating Password

The Figure shows the update password tab where employees can update the existing password.

V. CONCLUSION.

The application allows the administrator to update all of the employee's absences and attendance data. The employee's daily attendance does not require manual entry. This will reduce the working of maintaining records for every employee manually and thereby also preventing any discrepancies in the process. This application increases the value of the company by enhancing workforce productivity overall, lowering hardware and maintenance costs, and raising customer satisfaction. It does this by utilizing the most recent mobile development technology.

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