Android Application for Employee Management

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Abstract – Employees are the backbone of any company therefore their management plays a serious role choose the success of a corporation. The overwhelming emergence of computers paved the way for easier access to information that leads to increased production, efficiency, and reliability. The firms that embrace this generation and new automation will see an increase in efficiency, revenue, and the bottom line. Instead, many firms wanting an edge are automating their office management with new technology that shows clients a unique brand experience. These new systems are necessary to satisfy a generation of new clients who demand to use the latest technology. This generation demands to use mobile devices, interact through online portals, and enjoy their experience when dealing with their clients.

Key Words: generation | experience | clients | technology | firms | efficiency | management | portals |

1. INTRODUCTION

“Android Application for Employee Management” is an Android-based application that’s made for maintaining the tiny print of an employee working in any organization. the worker’s Registration Management Android Application will make it easy for the employer to remain track of all records of employees. This android application would be developed using the powerful coding tools of Android Studio 4.0 at the frontend with a Microsoft SQL Server Management Studio 2012 at the backend. it might be simple to understand and perhaps employed by anyone who isn’t even familiar with the legacy employees’ system. The goal of this project is to style and develop an employee registration management system to fill existing gaps within the electronic management of employees

1.1 OBJECTIVES

There are several objectives of this android application are following given below:

- This android app provides all the information about the employee to the management for better and efficient management of employees.
- It provides the facility of sending all the details to the newly registered employees through multiple sharing options.
- It provides facility to the employee to fill the daily work report if he is working from home.

1.2 Purpose

In the previous year times, all the work was done manually. There was no computer facility and android that later got into knowledge.

After GUI concept the projects work start to reduce human effort. And after starting of project work reduces the manual work data are highly secured and safe than manual work. But that time no one knows how to store data in database and how to retrieve it from database, and difficulty occurs in query.

- Consume less time and converting the existing system from being monotonous to more flexible.
- To provide data to management about the employee so that management can keep track on employee.
- Enabling the employee to fill the daily work report if he is working from home.
- It would help the admin to send the details to the newly registered employees through various modes.
- Maintenance of the records of employee’s work would be easier and user friendly.

2. SYSTEM ANALYSIS

The system after a careful analysis has been identified to be presented with the following modules and roles. The modules involved are:

- Admin
- Users

The employees and admin are the super users of this application. Only admin has access to the admin section. The admin has all the information about all the registered employees and about all products.

This module is divided into different sub-modules.

1. Admin
2. Employees
2.1 ADMIN MODULE

Figure 1: Admin Module

- **Add New Users:** The Admin will Register the New Employees or Users when they join the new organization.
- **Send SMS:** Admin will Send the SMS to the newly registered users through multiple options.

2.1 EMPLOYEE MODULE

Figure 2: Employee Module

- **Daily Attendance**
  The employee will fill the daily attendance (in-time and out-time).
- **Leave Application**
  Employee will fill the leave application filling all the necessary details.
- **Daily Report**
  Employee will fill his daily working report including tasks completed and ongoing tasks if he is working from home.

3. IMPLEMENTATION

3.1 ADMIN MODULE

This module handles the registration process of the employee. In this module admin can also send the SMS to the Employee after the employee gets successfully registered.

Sub-Modules of the admin module are described below:

3.1.1 Welcome Screen

Figure 3: The Welcome Screen is displayed after splash Activity

The figure 3 displays the screen after the user opens up the android app. The figure then shows the two sections one is the admin section and the other is the login section. In the admin section the admin logs into the admin section and avail the privileges offered by the app to the admin. In the login section the employee logs in to avail the services offered by the app.
3.1.2 Admin Login

The figure 4 illustrates the login page of the admin in which the admin logs into the app for registering the new employees and sending them the credentials they are allotted by the admin through multiple modes like e-mail, message etc...

![Admin Login Page](image)

**Figure -4:** Admin Login Page: The page shows the Login page of admin.

3.1.3 Employee Registration

The figure 5 demonstrates the format of the registration form which consists of various fields like name, date of birth, e-mail id etc... i.e., the figure 5 demonstrates the credentials that employees need to provide while registering themselves in the company or an organization.

![Employee Registration](image)

**Figure -5:** Registration: It shows the registration page where the new employee gets Registered and SMS Sending Facility.

3.1.4 SMS Facility

The figure 6 demonstrates the one of the ways the Admin uses to send the details to the employee i.e. message (SMS)

![SMS Facility](image)

**Figure -6:** SMS Facility: The image shows the SMS Facility Demonstration
3.2 EMPLOYEE MODULE

This module handles all the services offered by app. This module shows that an employee can successfully punch his attendance through app, submit the leave application and submit the daily work report through app.

The various Sub-Modules of the Employee Module are described below:

3.2.1 EMPLOYEE LOGIN

The figure 7 illustrates the login page of the employee which shows that employee has to enter the credentials which was provided to him by the admin in order to avail the services of the app.

3.2.2 VARIOUS SERVICES OFFERED

The figure 8 shows the various type of services that employee avails after he successfully logins by providing correct credentials.

3.2.3 DAILY ATTENDANCE

The figure 9 illustrates the attendance form which consists of in-date, in-time, out-date and punch-out-time. This form helps in saving the time of an employee by saving time which was earlier getting wasted because of the manual methods of punching the attendance.

The figure 9.1 shows the record inserted successfully as soon as the employee punches in the valid attendance details through the android application.
The figure 10 displays the leave application which consists of various columns like name, type of leave, from date, to date, user-id and leave description. This form helps an individual employee to fill the leave application from app itself and save the time.

3.3 TESTING AND RESULTS

<table>
<thead>
<tr>
<th>Test_ID</th>
<th>Test Case Name</th>
<th>Result</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Admin Login Form</td>
<td>Display Message invalid username or password</td>
<td>Pass</td>
</tr>
<tr>
<td>2.</td>
<td>Signup Form</td>
<td>Although the message of register success is highlighted The Database will return empty values</td>
<td>Pass</td>
</tr>
<tr>
<td>3.</td>
<td>User Login</td>
<td>Display Message invalid username or password</td>
<td>Pass</td>
</tr>
<tr>
<td>4.</td>
<td>Daily Attendance</td>
<td>Successfully entered the in-time and out-time</td>
<td>Pass</td>
</tr>
<tr>
<td>5.</td>
<td>Leave Application</td>
<td>Successfully Submitted the Leave Application</td>
<td>Pass</td>
</tr>
</tbody>
</table>
4. CONCLUSION

The project Android Application for Employee Management was completed successfully. The purpose of this project was to develop an android application for increasing employees’ overall efficiency. This project has given us great satisfaction in having designed an application that can be implemented in any organization. Also, the project helped us understanding about the development phases of a project and software development life cycle. There is a scope for further development in our project to a great extent. Another feature we wished to implement was not to allow employees to mark their attendance on public holidays and so on. A number of features can be added to this system in the future like providing biometric attendance.

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BIOGRAPHIES

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