PROJECT-I Report on

Android Application for Attendance Management

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INFORMATION

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by

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CERTIFICATE

This is to certify that the project entitled **"IoT enabled performance evaluation of a**

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Mini Project Report Approval for T.E

Mini Project report entitled IoT enabled performance evaluation of a sports person using react.js by

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Declaration

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Acknowledgment

It is our pleasure to present the project on Attendance management system using Android studio.

We would like to thank Prof. Gopal Pardesi, the principal of Thadomal Shahani Engineering College, Bandra.We express deep gratitude and sincere thanks to our project guide. Prof. Gopal Pardesi for giving us the idea on how to approach and start the project, also the honest feedback and constructive criticism provided helped a lotto improve and eliminate flaws. We hope our work will have a significant impact and make people's lives easier.

Thank You

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Abstract

This document is meant for describing all the features and procedures that were followed while developing the system. This document specially mentions the details of the project and how it was developed, the primary requirement, as well as various features

And functionalities of the project and the procedures followed in achieving these objectives.

Over the years the manual attendance management has been carried across most of educational institutions.

To overcome the problems of manual attendance, we have developed " attendance Management System For Android devices".

Attendance Management System is based on web server, which can be implemented on any computer or Android Phone. In This application,

The application is to be developed using Android Studio, Java and XML. The entire application should be very easy to use and intuitive so as to attract users with a very simple user interface.

The system communicates with database residing on a remote server. It calculates automatically, the attendance percentage of students

Without any manual paper-based work.

The system facilitates the end users with interactive design and automated processing of attendance management.

With the effective use, any Institute can apply the "Attendance Management System" for conducting quick attendance and getting better results in less time.

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Chap ter 1

Chapter1

Introduction

Attendance Management System is software developed for daily evaluation of students in their continuous assessment record, and performance in accordance with the principle of the institution. It is facilitated to access the performance and information of attendance of a particular Student in a particular semester of study. The information **is** sorted by the teachers, instructors and advisors, as provided by the student for a particular day throughout a complete semester. This system will also enable the evaluation of student regular presence in various lectures which will determine the eligibility of the student to sit for a semester examination. Attendance Management System basically has three main modules for proper functioning

- First module is admin which hold the key for editing and updating information. The admin has absolute right to all the users which are the Teachers and Student.

- Second module is handled by the user which can be a Teacher or Instructor. This user has a right of making daily attendance, updating, editing and generating reports to the students.

- Third is handled by a user which is the Student, he has less privilege to the access of the system; the student can only view his own record by providing his username and password. He will be able to see the percentage of his attendance as well as his results. If any comment or change of class schedule the student can see in his own profile only.

Aim & Objective

- Create a Window application to be used in place of old paper based user Employee Salary manage process.
- Use the technologies and Server technology used in here to create strong and secured database connectivity.
- Incorporate the server software within the code.
- Runtime package and deployment instructions are given.

- ❿ Eliminate duplicate data entry and errors in time and attendance entries
- ❿ Eliminate paperwork and save time.
- ❿ Automatic calculation of attendance
- ❿ To Increase security.

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Scope

The application is to be developed using Android Studio, Java and XML. The entire application should be very easy to use and intuitive so as to attract users with a very simple user interface. A menu bar, which can be
accessed by sliding from the left side of the screen, will be used to access the various different features of the application. The user can maintain multiple profiles on the application to keep track and record various different attendances ranging from college to tuitions etc.

Chapter 2

PROJECT OVERVIEW

Apparently in our today world things cannot be done organized, accurately and efficiently using file based system so making things globally in a digitized way is a tremendous advantage in especially this type of Attendance management system program. Just think what if your institution does not have an online presence, the chances are you could be losing valuable and efficient data and by so doing you will eventually lose business and customers to your competitors who do have effective and active online presences.

- ❿ **Purpose:-**

The purpose of developing this attendance management system is to computerized the tradition way of taking attendance. Another purpose for developing this software is to generate the report automatically at the end of the semester.

Chapter 3

System Analysis

CHALLENGE & WEAKNESSES OF CURRENT SYSTEM.

Current System

In the present system all work is done on paper. The whole session attendance is stored in register and at the end of the semester the reports are generated and it takes more time in calculation. By the way we are not interested in generating report in the end of the semester but during the semester for the student to take note of his situation, and the department to know what action to take on students with poor attendance even before Exam.

So, we are not able to get student regularity report and take necessary action on students whenever we want because of having very time consuming process.

Weaknesses in Current System

- **Not User Friendly:**
  The existing system is not user friendly because the retrieval of data is very slow and data is not maintained efficiently.

- **Difficulty in report generating:**

  We require more calculations to generate the report so it is generated at the end of the semester. And the student doesn't get a single chance to improve their Attendance.

- **Manual control**:

  All calculations to generate report are done manually so there is greater chance of errors.

- **Lots of paperwork**:

  Existing system requires lot of paper work. Loss of even a single register/record led to difficult situation because all the papers are needed to generate the reports.

- **Time consuming**:

  Every work is done manually so we cannot generate report in the end of the semester or as per the requirement because it is very time consuming.

Requirements of New System:

User Requirements

The User requirements for the new system are to make the system fast, flexible, less prone to errors and reduce expenses and save time.
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- A system that can automate the checking of answers which are pre-stored so that results can be generated as soon as the Student gives the reason.

- A facility that can generate result charts as per required.

- The New system should be more secure in managing Student records and reliable enough to be used in any condition.

- Finally, it should prove cost effective as compared to the current system

Feasibility Study

A key part of the preliminary investigation that reviews anticipated costs and benefits and recommends a course of action based on operational, technical, economic, and time factors. The purpose of the study is to determine if the systems request should proceed further.

- **Technical Feasibility:**

   The system being developed is economic with respect to student attendance. It is cost effective in the sense that it has eliminated the attendance work completely. The system is also time effective because the calculations are automated which are made at the end of the month or as per the student requirement. The result obtained contains fewer errors and are highly accurate as the data is required.

- **Economic feasibility:**

The technical requirement for the system is economic and it does not use any other additional Hardware and software.

- **Behavioral Feasibility:**

The system working is quite easy to use and learn due to its simple but attractive interface. User requires no special training for operating the system.

Features of the New System

Features of the New System

The new system has been designed as per the user requirements so as to fulfill almost all them.

- **User Friendly**: -

  The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover the interface provided in the proposed system, provides user to deal with the system very easily.

- **Reports are easily generated**:-

  Reports can be easily generated in the proposed system so user can generate the report as per the requirement (weekly, monthly) or in the middle of the semester. User can give the notice to the employees to be regular.

- **Very less paper work:**

The proposed system requires very less paper work. All the data is feted into the computer immediately and reports can be generated through computers. Moreover work becomes very easy because there is no need to keep data on papers.

CHAPTER 4

The entire application will be designed using Android Studio. The language to be used for coding is Java. The structure and framework of the application was designed using XML. All the data in the application is stored on an internal SQL server which has been implemented using SQLite. SQLite is a relational database management system (RDBMS) contained in a C library. In contrast to many other database management systems, SQLite is not a client– server database engine. Rather, it is embedded into the end program.

SQLite is ACID-compliant and implements most of the SQL standard, generally following PostgreSQL syntax. The database has been made in accordance to the subjects and years so as to make the options easier to pick for teachers or head of departments (users).

The various features in the application will be implemented using various Activities in Android studio for performing multiple tasks like taking input from user and storing in database.

The admin will control the majority of the

application and the admin name and password

is fixed in the database.

Android Studio is the official integrated development environment (IDE) for Google's Android

operating
system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development and thus ideal

Conclusion

Being the Final year students of IT, we were able to implement what we learnt in our class. We were able to attain our set objectives, and this helped us gain confidence in writing our own code and our own applications.

We worked as a team, and gained some experience on how professional programmers work in the industry.

There is always room for improvement, and this application we created can also be improved. This is especially because we had to create it within a limited time due to other projects, quizzes and Exams. With more time, the software can be vast and improved to include security and different types of users. Thanks a lot.

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