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By

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DEPARTMENT OF INFORMATION TECHNOLOGY

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INSTITUTE OF SCIENCE AND TECHNOLOGY
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DEPARTMENT OF INFORMATION TECHNOLOGY

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **GNANAMANI CT (Reg.No: 38120026)** who carried out the project entitled "**Mobile Application for Student Attendance and Mark Management System**" under my supervision from June 2021 to November 2021.

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Submitted for Viva voce Examination held on _____

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DECLARATION

I, **GNANAMANI CT** hereby declare that the project report entitled **Mobile Application for Student Attendance and Mark Management System** done by me under the guidance of **Dr.V.NIRMALRANI M.E.,Ph.D.**, is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering Degree in Computer Science and Engineering.

DATE:

PLACE:

SIGNATURE OF THE CANDIDATE

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ABSTRACT

In this world of growing technologies everything has been computerized. With large number of work opportunities the Human workforce has increased. Thus there is a need of a system which can handle the data of such a large number of Employees in an organization. This project simplifies the task of maintain records because of its user friendly nature. The “**Mobile Application for Student Attendance and Mark Management System**” has been developed to override the problems prevailing in the practicing manual system.

This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner. The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user-friendly.

Marking attendance in the class meeting session and recording the marks of the students are the prime tasks of the subject handlers, since marking the attendance can regulate the students to attend the classes. Moreover, it verifies number of students present in the conducted classes. The purpose of recording the marks is to analyse the performance of the students in terms of curricular activities. Earlier, the tasks of marking attendance and recording the marks are handled manually by pen and paper method. This method consumes more time and adds more workload to the subject handlers and sometimes the data may prone to error. To avoid these problems, this paper presents a mobile application for student attendance and mark management system. This application is mainly designed for the faculties and other staff members of the organization who maintain attendance and marks regularly.

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CHAPTER – 1 INTRODUCTION

In current scenario, marking attendance in the class session and entering the marks of the students are the essential tasks of the subject handlers, since marking the attendance can regulate the students to attend the sessions and verify the number of students in the class. Record of marks is inevitable to analyse the performance of the students in their exams. The management and maintenance of student information is a key task for any institution. The task of marking attendance and making entry of the exam makes are traditionally carried out manually with a log book. Later, this task is carried out by the desktop applications. The desktop application is a standalone application installed in the particular desktop or laptop and the tasks can be performed only with that particular desktop system.

The main drawback of this system is that the computer systems are not portable hence it cannot be kept anywhere to perform the task such as mark and attendance entry. The entered marks can be viewed only on the particular system if the desktop is not connected with network. Another method for mark and attendance entry is web-based application. In this method, the attendance and the marks details are uploaded in a server through internet and the users such as students, parents, and teachers can view the marks and attendance through browsers with internet using any one of the devices such as desktop, laptop, and hand held mobile devices.

This system is active only when the internet is on since the data are not been updated with the local database. These limitations of the traditional systems are overcome by the mobile applications. The mobile application allows the users to install this application in their mobile devices. The user can update the student attendance and mark details in the local mobile database by connecting their mobile devices with the server which keep the attendance and mark details through internet. Hence, the updated marks and attendance details can be viewed even offline.

In order to reduce the manual work and to achieve more efficiency in managing the student information, this paper presents a java-based mobile application to manage the student attendance and makes more easily and effectively. The proposed application can store student information to the server database and it can be retrieved by the mobile phone and save that information in their local mobile database. Through this system, teachers can easily record the student attendance and can generate the reports. The rest of this paper is organized as follows: Section 2 reviews the literature. Section 3 explores the implementation of the application. Section 4 discusses the outputs and Section 5 concludes this paper.

CHAPTER – 2 AIM AND SCOPE OF THE PROJECT

This section explains the mobile application environment and the mobile application of student attendance and mark management system. Figure 1 shows the architecture of mobile application environment. The mobile application for the student attendance and mark management system is developed and deployed in the cloud server. This application is also installed in the mobile devices of the users such as student, staff and parents, faculty members for accessing the student marks and attendance details. The users are divided into two groups namely student and staff. The student user can be either students or parents. The staff user can be the staff members, faculty member, principal, dean, etc. of the educational institution. The student users can view the attendance and marks that are uploaded in the database or cloud server. The staff users can enter, edit, modify and update the marks and attendance of the student through any mobile device.

CHAPTER – 3 EXISTING SYSTEM AND PROPOSED SYSTEM

Existing System :

In current scenario, marking attendance in the class session and entering the marks of the students are the essential tasks of the subject handlers, since marking the attendance can regulate the students to attend the sessions and verify the number of students in the class. Record of marks is inevitable to analyse the performance of the students in their exams. The management and maintenance of student information is a key task for any institution. The task of marking attendance and making entry of the exam makes are traditionally carried out manually with a log book. Later, this task is carried out by the desktop applications. The desktop application is a standalone application installed in the particular desktop or laptop and the tasks can be performed only with that particular desktop system.

Drawbacks :

- The main drawback of this system is that the computer systems are not portable hence it cannot be kept anywhere to perform the task such as mark and attendance entry.
- The entered marks can be viewed only on the particular system if the desktop is not connected with network. Another method for mark and attendance entry is web-based application.
- In this method, the attendance and the marks details are uploaded in a server through internet and the users such as students, parents, and teachers can view the marks and attendance through browsers with internet using any one of the devices such as desktop, laptop, and hand held mobile devices. This system is active only when the internet is on since the data are not been updated with the local database.

Proposed System :

The mobile application for the student attendance and mark management system is developed and deployed in the cloud server.

This application is also installed in the mobile devices of the users such as student, staff and parents, faculty members for accessing the student marks and attendance details.

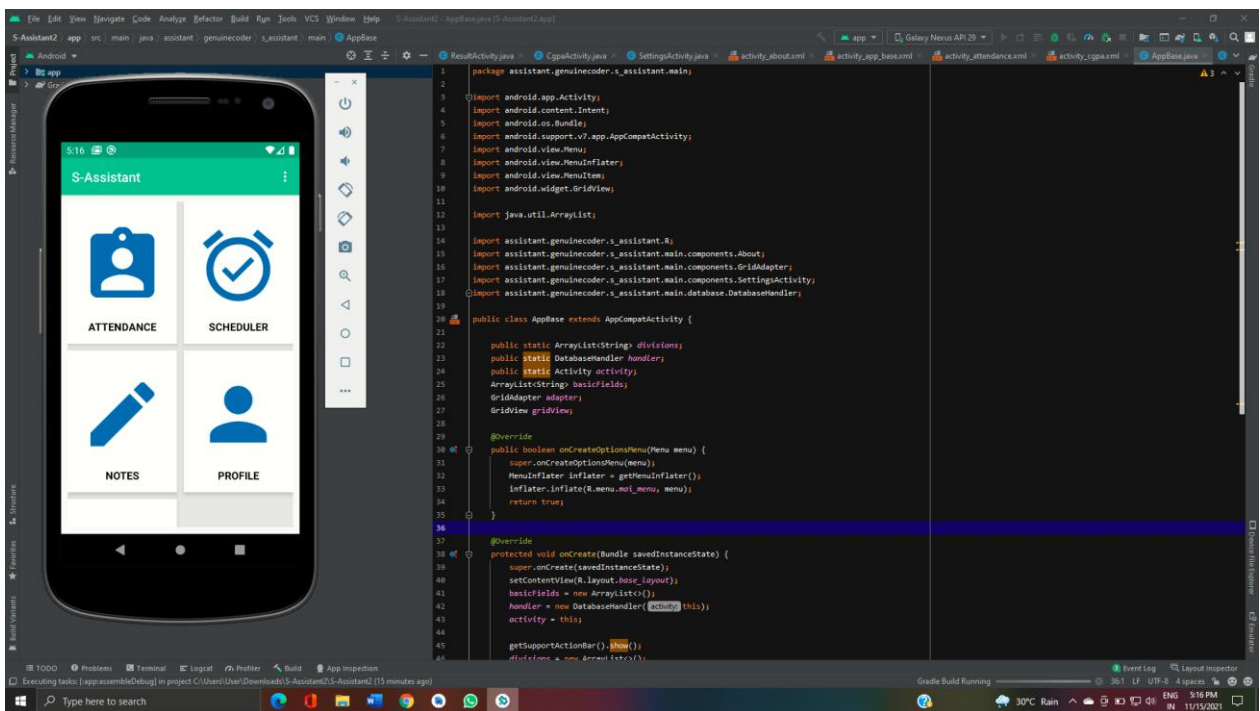
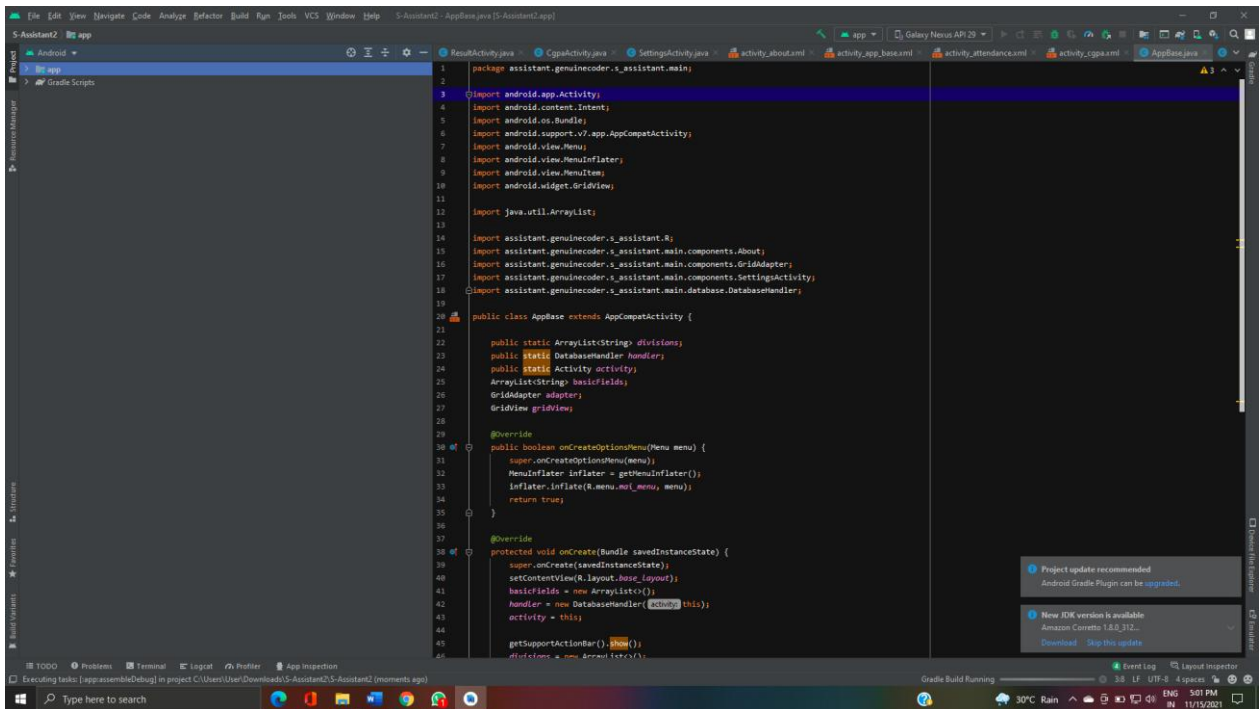
The users are divided into two groups namely student and staff. The student user can be either students or parents. The staff user can be the staff members, faculty member, principal, dean, etc. of the educational institution.

Advantages :

- The student users can view the attendance and marks that are uploaded in the database or cloud server.
- The staff users can enter, edit, modify and update the marks and attendance of the student through any mobile device.
- The student login enables the student users such as students and parents to view the class attendance details and marks that obtained by the students in the internal and external assessments.

CHAPTER – 4 RESULTS AND DISCUSSION

This section presents the sample code and output of the developed application. Figure 3 shows the sample code of mobile application for student attendance and mark management system. Figure 4 (a) shows the mark and attendance entry form. Figure 4 (b) shows the mark and attendance submission acknowledgement form



CHAPTER – 5 SUMMARY AND CONCLUSIONS

This paper presented a mobile application for the student attendance and mark management system. This system is enabled with two login modes namely student and staff. The student login allows the students or parents to view the student mark and attendance. The staff login allows the staff and faculty member to edit, modify, and update. This application is implemented using Sun Java wireless toolkit with J2ME.

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