



I-Campus Innovative College Management Solution

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Abstract

Since ages, marking attendance has been one of the most important way to record and track the presence of students in schools, colleges. Attendance marking in different forms has been in use in various organization to record the presence of their human resource. This helps the organization in generating their month-end payroll, and other activities. Such systems may be manual or automated. Biometric-based system, card-based system are some of the examples of automated attendance system.

In this project, an attempt has been made to record attendance through mobile devices. The aim of the project is to create an Android mobile application for attendance system that can be used by all teachers for their respective courses. This application fetches the details of the courses allotted to the respective faculty and the students enrolled in the courses from the server using the internet connection and stores it in the mobile database. This application stores the attendance in the mobile internal database and the faculty can view and update the attendance whenever required. At the end of the month, when the faculty is needed to upload the attendance, they can directly upload it from their mobile in the server provided the internet connection is available. We can also use the same technique for feedback process, sessional marking, & timetable.

This application uses Android application development toolkit. Android is a Linux-based operating system developed for smart phones or tablet computers. It is a stack of software that includes operating system, middleware and libraries and APIs written in C. The Android application is developed in Java-like language using the Android software development kit (SDK). The integrated development environment (IDE) which is officially supported for Android apps development and used in this project is Eclipse, which uses the Android Development Tools (ADT) plugin.

Introduction

In this project, an attempt has been made to record attendance, sessional marks, feedback, creating time table through android application. The aim of the project is to create an Android

mobile application for maintaining student record that can be used by all teachers for their respective courses. This application fetches the details of the courses allotted to the respective faculty and the students enrolled in the courses from the server



using the wi-fi/internet and stores it in data base.

This application stores the student record in server and the faculty can view the attendance whenever required only hod's are update the records ore admin can update the records whenever required. Daily upload the attendance using android application , they can directly upload it from their mobile in the server using wi-fi/internet connection.

Principle ofcollage have to full excess permission to view the record of all department and update the record when necessary. We need to purchase the domain and space for publishing our project website which store student information and admin information.

The android application is connected to website which we have developed using php(personal home pages) language. Android application data base we have use a sqllite. At the time of submission of attendance report the faculty directly uploads the attendance in the server.

This project presents the Student Information include student attendance record, their sessional marks, their feedback abut teacher and automatic timetable generating through mobile devices, which is developed using Android application. The application is installed in every faculty's mobile phones and can be used to take attendance.

This application fetches the details of the courses allotted to the respective faculty and the students enrolled in the courses from the server using the

internet/wifi connection and store it in the database. This application stores the attendance in the database and the faculty can view the attendance and student record whenever required.. Daily bases student attendance can be save our uploaded. And sessional marks they can directly upload it from their mobile in the server using internet/wi-fi.

EXISTING SYSTEM

The existing system is manual entry for student. Here attendance will be carried out in hand written registers. It is tedious job to maintain the records. It required more human efforts.

Similarly, for feedback there is wastage of paper & need of presenty of whole class. In same way for Timetable & Sessional mark there is need of updation manually. It is very difficult & time consuming task.

- Normally college attendance, sessional record feedback system time table that all work is on paper that is hard to maintain.
- Teacher staff maximum busy on paper work rather than teaching work.
- If in case of feedback system all students are given feedback but also include student that

PROPOSED WORK

Android is a Linux-based operating system developed for smart phones or tablet computers. It is a stack of software



that includes operating system, middleware and libraries and APIs written in C. It was developed by Google and Open Handset Alliance in July, 2005. Android is an open source and Google releases the source code under Apache license. This open source and free license allow the manufacturers and the enthusiastic developers to freely develop and modify their applications in Java-like language that utilizes Google-developed Java libraries.

The Android applications are developed using the Android software development kit (SDK). The SDK includes a comprehensive set of development tools which includes a debugger, software libraries, a handset based emulator which is based on QEMU (Quick EMUlator) and tutorials. The integrated development environment (IDE) which is officially supported for Android apps development is Eclipse which uses the Android Development Tools (ADT) plugin.

The following are the several features which help in the development of Android applications.

Features of Android

Application framework

Android application framework is supported by number of open source libraries like Open SSL, SQLite,. The application framework is also supported by the Android core libraries. The framework is based on UNIX file system permissions which ensures security as the applications can have

only those abilities that mobile phone owner give at the time of installation. The application framework enables the reuse and replacement of components.

Dalvik Virtual Machine (DVM)

Dalvik is a process virtual machine used in Google's Android operating system. It is a low memory based virtual machine which is especially designed for Android to run on the embedded systems and work efficiently in low power. The programs are commonly written in Java and are compiled into byte code. This byte code is then converted from JVM .class files to .dex file (Dalvik executable) before installation on a device.

Linux Kernal

Android uses Linux version 2.6 for the core system services like memory management, process management, security and network stack. The Linux kernel also acts as an abstraction layer between the hardware and the software stack.

Motivation

The student Information system is one of the most important system used in every organization to keep the track of attendance. The previous conventions followed for taking attendance was very tedious task and requires a lot of paper work. It was not automated and so handling and maintaining the system was a tough job. The previous



attendance system used in colleges needed the faculty to give the attendance details to be uploaded in the server. So there was a need to automate the attendance system and to reduce the manual effort needed in storing the records and maintaining it. The attendance system through mobile devices is fully automated. It is easy to use.

Technique used for front-end:

Data Table

Admin Table:

S.No.	Field name	Data Type	Description
1.	User name	Text	Store user name for checking correct Username
2.	Password	Text	Store password corresponding to username
3.	User Type	Text	User Type Administrator or User

Teacher Table:

S.No.	Field name	Data Type	Description
1.	Teacher Id	Number	Unique key for Every Teacher
2.	Teacher Name	Text	Name of Teacher

Attendance Table:

S.No.	Field name	Data Type	Description
1.	Student Name	Text	Name of Student

Microsoft Visual Studio 2010:

In any application, initially web designing is essential task. We need to make it more attractive for the end user. As all the tasks are performed on frontend so it must be flexible & attractive for the end users.

We design web pages using Microsoft Visual studio 2010, in which we are using ASP.NET & C#.



2.	Status	Number	Total number classes attended by particular Student
3.	Semester	Text	In which Semester Student is Studying
4.	Subject	Text	The Subject Wise Attendance Is maintained
5.	Month	Text	The Month Wise Attendance is maintained where total working days in month=20

Sessional Table:

S.No.	Field Name	Data Type	Description
1.	Student Roll No	Number	Roll No of Student
2.	Student Name	Text	Name of Student
3.	Semester	Text	Semester Name
4.	Sessional	Number	Sessional Number
5.	Subject	Text	Subject Name
6.	Marks	Number	Marks Obtain

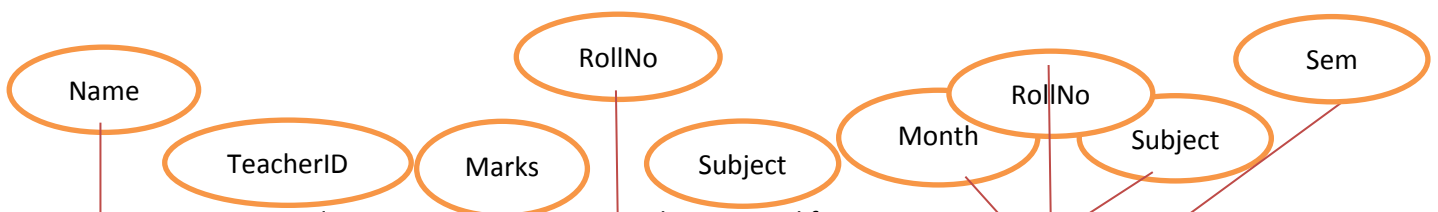
Feedback Table:

S.No.	Field Name	Data Type	Description
1.	User Name	Varchar	Login Name of Student

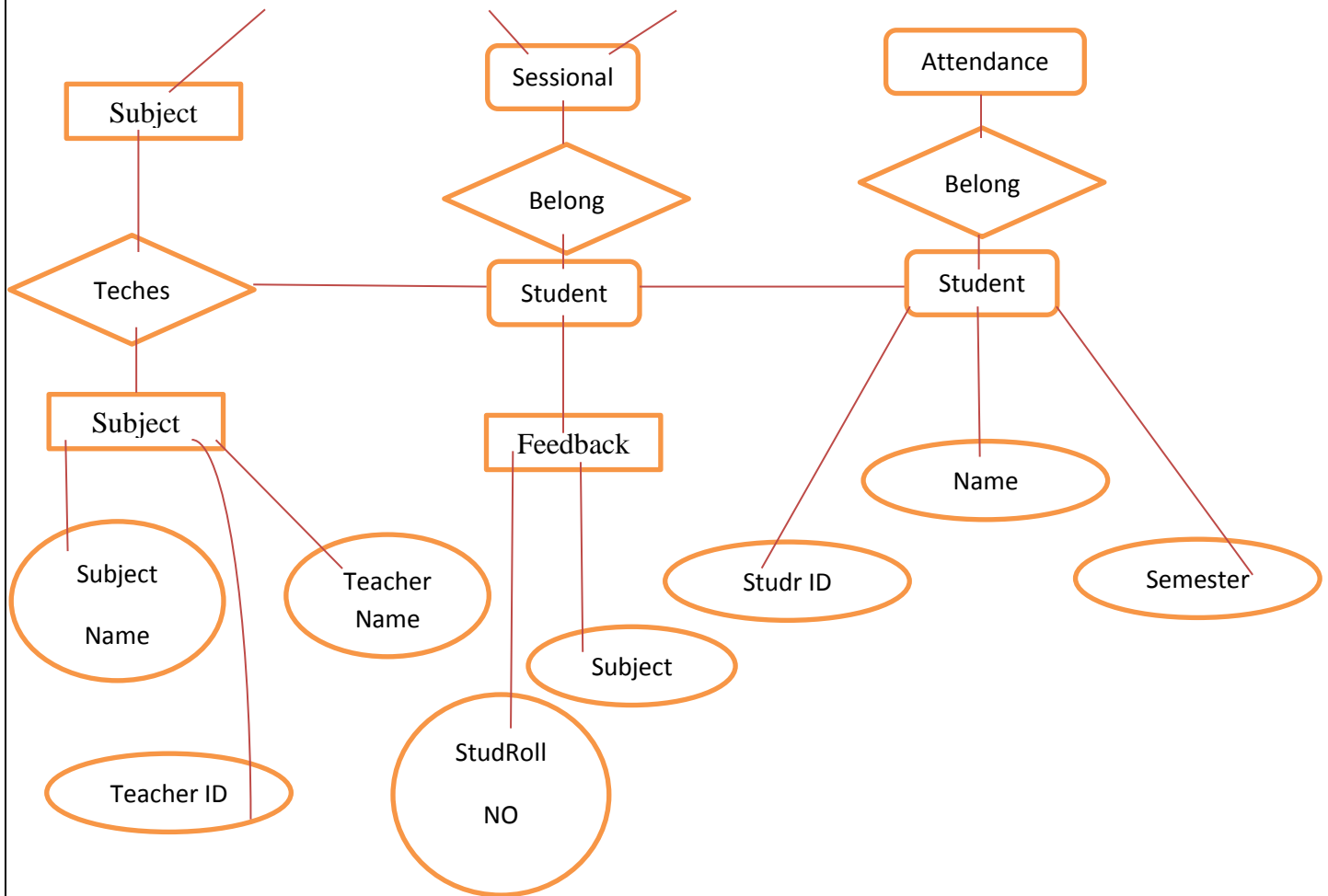


2.	Password	Varchar	Password of student
3.	Subject	Text	Subject Name
4.	Feedback	Varchar	Give a feedback out of 10

ER-Diagrams



Papers presented in ICRRTET Conference can be accessed from
<http://edupediapublications.org/journals/index.php/IJR/issue/archive>



Related Work

Our ICAMPUZ System simplifies the taking and maintenance of attendance, sessional marks, Feedback, Time table through mobile devices. The system is deployed on every faculty's mobile and the faculty can take the attendance for their respective classes and store it in the database using internet/wi-fi. The software focus on the easy way of storing and uploading the student record detail in the server with the use of mobile phones.

Android application framework is supported by number of open source libraries like Open SSL, SQLite, and Libc.

The application framework is also supported by the Android core libraries. The framework is based on UNIX file system permissions which ensures security as the applications can have only those abilities that mobile phone owner give at the time of installation. The application framework enables the reuse and replacement of components.

We have connect the simply Sql data base and store a simple data in database and we have develop android application.

Module of Project :



- Attendance System
- Sessional Marks
- Feedback System
- Time Table Generator
- OTP(Onetime password generator)
- Application Front End & backend

Attendance System

In Attendance module teacher username our password are unique for all teacher staff in the teacher section list of subject which they are teach and semester name class teacher have permission to add student name our remove student name . A subject teacher are simply take a student attendance and send into local server.

Sessional Marks

In the sessional module the class incharge have to update a sessional marks. Which class have they. All class incharge have their own id password that sessional module include subject names and their respective teacher name in that include marks out of and obtain block

Online Feedback system

In that module the student give a online feedback related to subject, teacher skill, their teacher technique etc. That one condition we include only 75% attendance are mandatory to give a feedback . Otherwise in the feedback sessional show

the message 'you don't appear to give a feedback Because of low attendance '.

Time Table

In time table module under the hod of respective department they have to fill a lecture of teacher and their teaching hour daily and subjects name which they are teach. the timetable is automatic generate and showable to student blocks.

OTP (one time password generator)

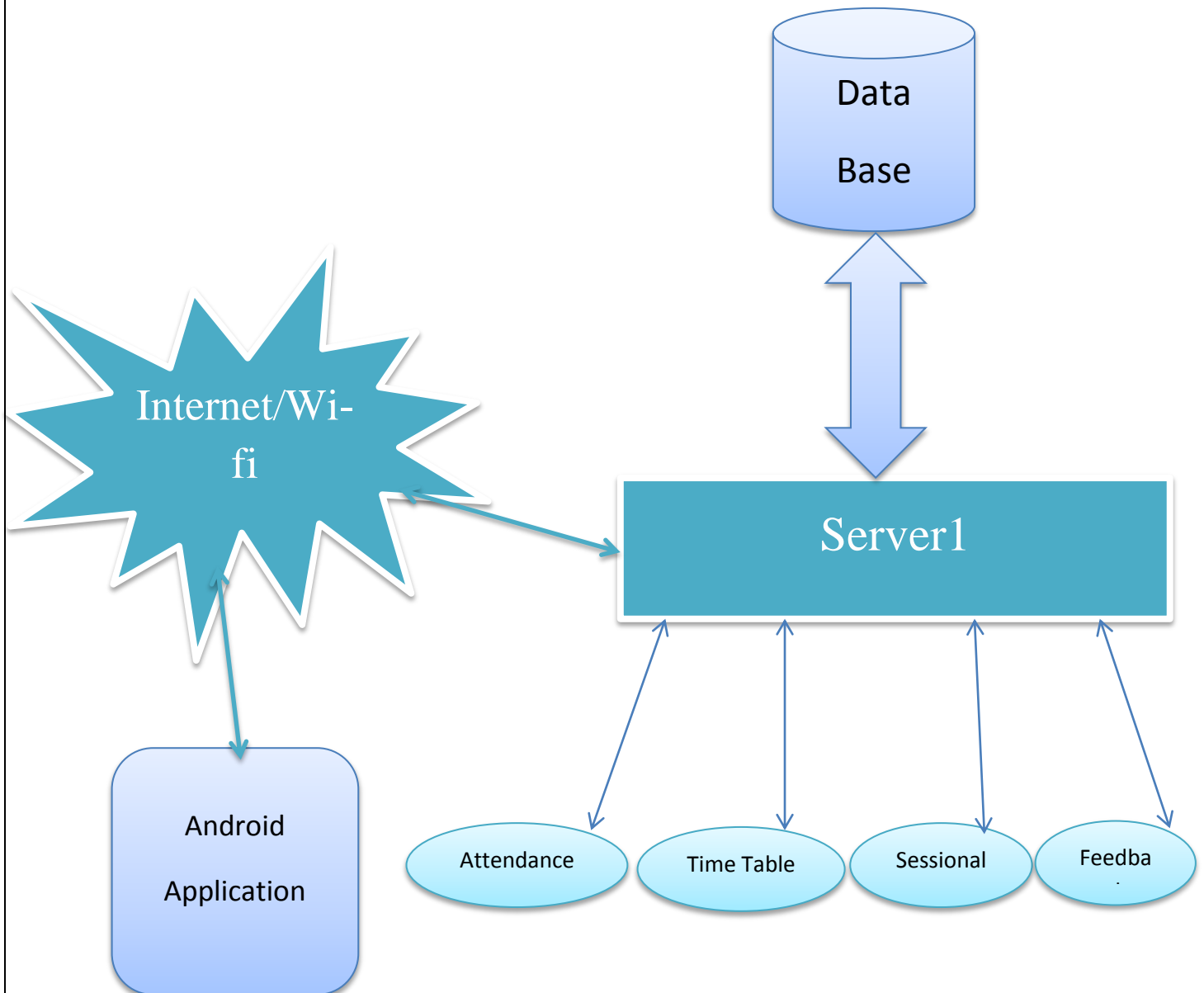
The method one time message generator is use as a password for the user/parents for the student information security purpose we include that module. The OTP can be set one time either user login 2nd time the OTP can be change OTP send a register no which store in the database if in case the user register mobile no is block our they want to change the number that time they give a some security question related to student than enter their current mobile number for example what is you are DOB. Old mobile no, student id, Mother Name etc. can be set a security question related to student.

Application Front end Backend

In this module we design one android application which is data storing our retiring purpose. One website that information storing to the back end and managing all information that web site we host and we have to purchase a space.



BLOCK DIAGRAM



Application

I-CAMPUZ is a collage base application that application is reduce the

paper work and save the paper. Easy to maintain the student record no need to do any paper work. Smart and easy to



maintaining a student record Collage base application.

CONCLUSION

The attendance system through mobile devices is a very effective tool which can be used to a great extent. The system is portable and can be easily installed and used on any mobile phones supporting Android OS. The use of this system can result in a reduction of number of hours spent in feeding the attendance details, timetable details, sessional details, feedback details in the server database. It also provides an interface which is easy to understand by the users and greatly helps in adapting to the use of this system. By using this application, the activities like feeding

daily attendance, updating timetable & sessional marks, & filling feedback form can be more easier & flexible.

REFERENCES

Book References

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