Interactive Services of College Databases

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Abstract— Information Retrieval is the science of locating from a large documentation collection, those documents that satisfy a specified information need. As the number of users using internet on mobile is increasing at a phenomenal rate. Thus providing required data using GPRS on the latest and most common platform i.e. Android is what this paper is about. The application allows students to retrieve the common required information easily.

Keywords— Android, GPRS, College, Database, Information Retrieval.

I. INTRODUCTION

Now a day when there is mobility in every aspect of life, people do not wish to visit different places in order to gather information. Due to the increase in use of mobile phones, everything is simply available at finger tips. The convenience of Internet allows any one remotely to retrieve information by sending queries. In educational institutes we have seen lack of technology for accessing information such as displaying notices, results, attendance timetables grades internship opportunities and other extra and co curricular activities. This causes inconvenience not only for students but also for staff. We intend to solve this problem by creating an android application where the student can access the above information by using GPRS as a medium. With the help of this application, not only students can access the information from a remote place but also can avoid the inconvenience of travelling all the way to the institute. This system will benefit the students and help them utilize time effectively.

II. LITERATURE SURVEY

A. Existing system

There are information retrieval systems available for banks and railways etc at present. The basic information retrieval systems used were via SMS. The mobile banking was widely accepted due to its SMS feature.

For railways currently IRCTC has launched its SMS services where in we can get our PNR status by sending the PNR number to the specified number. Also other different facilities include checking the trains running between two different stations etc. also different banks have adopted the latest Android mobile app for its information services. The services provided include: Enquiry services, funds transfer, IMPS-interbank mobile payment service, DEMAT account services, bill payments, m-commerce, etc. But as such there is no such facility available for colleges.

B. Drawbacks of existing system

In spite of various technological advances, the educational field is still away from these adaptations. Even today students have to come in person to the colleges to check the various notices, or to see their results, timetables, etc. At some colleges certain data is passed onto the students using SMS facility. But this transfer is only on the side of college. It doesn’t take into consideration which information is needed by which student and at what time. Also the delivery of the SMS to the students is based on the student’s mobile network. The college website which partially displays the information is heavy and requires flash, java, shockwave player and more time for loading content.

III. PROPOSED SYSTEM

The proposed system will have the internet connectivity at ends, the server side as well as the user (student) side. Both are connected to each other at a common web space where in the actual information transfer takes place. Students can enter their seat nos. if they want to check their result. The system will check the details of the received Seat No. and the same will be sent back to the student. Similarly the proposed system can also be used to get other information like attendance record of a student, the net salary for the month for teachers, the fees payment details, library information etc.
A. System architecture

Fig 1: System Architecture

The figure above shows the system architecture of our project. The system architecture comprises of five different modules. Each of which is important for the successful implementation of the project. The architecture comprises of User (student with a mobile phone), Web server, GUI application, Server, Database. Functionality of each module is described below.

1) User

The User comprises of the students of the institute. The students will have to first register themselves on the institute’s services through website or by manually filling a form. By which, a user id and password will be generated for that particular student. This user id and password will be used by the student for filling the login form on mobile application. This will provide authenticity for the system as well. Any student who wishes to use these services must have a mobile phone with android operating system. This application is prepared on Eclipse SDK with built-in android SDK. The student will have to download the application and install it before using the institute’s services.

2) Web Server

Since the IP address of any computer is private, a direct communication with the institute’s server is not possible. For this, we use a web server called ‘livegprs.net’. With the help of livegprs.net, we can send a file or receive it from the institute’s server. It acts as an intermediary for communication between the user and the server.

3) GUI Application

The GUI Application is installed on the institute’s server. THE GUI application is created in VB.Net. The GUI application facilitates by generation of user id and password for the user. Also, creating, updating, deleting data from the database can be done with the help of this application. Moreover, any disruption or breakdown in database and services can be rectified from here.

4) Server

The institute’s server has to be powerful enough to handle a huge amount of queries coming from the user. The institute’s server must remain active and working all the time. All queries search is carried out by Microsoft SQL Server 2008. It accepts the queries received from the student, processes it and searches the record/desired information in the database. If the record/desired information is found, it will convert the information into appropriate format and send it to the user.

5) Database

Again, here, Microsoft SQL server is used for creating and updating database records. The Database comprises of the students information. Students Information includes, name, id no, result, attendance record, term work marks, marks obtained in various subjects and its practical’s, timetable, internship opportunities, notice board.

IV. CONCLUSION

Only the imagination can limit the applications of the above proposed system. Though following are some examples. It can be installed in colleges. It can also be used by Banks. It can be used in HR department of companies etc... A customized version of this system can be used by management and higher people for communication with employees of different departments in an organization. Furthermore, the above application can be made available on Windows Phone Platform. As the time progresses newer technologies will keep coming. It’s all about making more out of present resources.
We are actually trying to develop a system, which will have a great impact on the present information retrieval methods. With the method we employed it will be very easy to create system with right approach and maximum user satisfaction. With the kind of technology used it is easy to note that system works fine on most basic software and hardware support.

REFERENCES


