



Android College Campus

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Abstract-- The Android Based Mobile Campus is developed to provide students with information regarding library due dates, any placement activities, general notices, attendance and marks details. This information should be provided to students in a cost effective way. So to achieve the same, we have developed this application, wherein students can access this information using their Android enabled mobiles. The mode of communication is Android. Students need not queue up near notice board / log on to college website for any of the above mentioned details. Just come into the proximity limit of one of the many available Android points and explore the service.

Keywords- Android, Information system.

I. INTRODUCTION

With the advance in time and technology there is a need for faster dissemination of information. Connected, personalized, intelligent information appliances are becoming increasingly important in our business and private lives. These appliances include devices such as cell phones, two-way pagers, personal organizers, screen phones, and POS terminals.

In a real world scenario, such as college campus, information in the form of notices, hand-written manuals, oral communication, is spread among the students. Today it is imperative to not only use the traditional forms of communication, but also newer forms such as mobile technology, for quicker and easier communication among the students. This concept provides,

▪ Student-Alumni Interaction

Students can query the server for alumni information by specifying either the company name or the name and year of passing out through his mobile. Based on the search criteria, the list of alumni names is displayed. The student can get further information about the alumni on request.

▪ Student Information

Students can query the server for student information by specifying the student name, department, semester through his mobile. List of student names is displayed. Further information about the student can be obtained on request.

▪ General notices

These consist of general campus recruitment notices such as information regarding the recruiting company, campus interview date and other placement activities. The placement officer sends the notice to the students through the server.

▪ Project/Seminar Information

The students can query the server for the project seminar information by specifying the topic or platform or field.

A student can query for project/seminar information based on topic, field or platform using his mobile. Based on the search criteria, the names of available project/seminars are displayed. On further request, information about the authors/participants is displayed.

II. PROBLEM STATEMENT

With the advance in time and technology there is a need for faster dissemination of information. Connected, personalized, intelligent information appliances are becoming increasingly important in our business and private lives. These appliances include devices such as cell phones, two-way pagers, personal organizers, screen phones, and POS terminals.

In a real world scenario, such as college campus, information in the form of notices, hand-written manuals, oral communication, is spread among the students. Today it is imperative to not only use the traditional forms of communication, but also newer forms such as mobile technology, for quicker and easier communication among the students. The focus of our project is on helping to students. Instead of manual notice board college can use the electronic flow of data at the time of manual notice may occur the errors but in the electronic flow system low errors occur. Now a day's everybody using high quality and Android supported mobiles. So in this project we used Android to communication between college and students.

III. THE BASIC CONCEPT

The basic idea behind iterative enhancement^[1] is to develop a software system incrementally, allowing the developer to take advantage of what was being learned during the development of earlier, incremental, deliverable versions of the system. Learning comes from both the development and use of the system, where possible key steps in the process are to start with a simple implementation of a subset of the software requirements and iteratively enhance the evolving sequence of versions until the full system is implemented^[2]. At each iteration, design modifications are made and new functional capabilities are added. The procedure itself consists of the initialization step, the iteration step, and the Project Control List. The initialization step creates a base version of the system. The goal for this initial implementation is to create a product to which the user can react. It should offer a sampling of the key aspects of the problem and provide a solution that is simple enough to understand and implement easily. To guide



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the iteration process, a project control list is created that contains a record of all tasks that need to be performed. It includes such items as new features to be implemented and areas of redesign of the existing solution. The control list is constantly being revised as a result of the analysis phase.

The iteration involves the redesign and implementation of a task from the project control list, and the analysis of the current version of the system. The goal for the design and implementation of any iteration is to be simple, straightforward, and modular, supporting redesign at that stage or as a task added to the project control list. The level of design detail is not dictated by the interactive approach. In a light-weight iterative project the code may represent the major source of documentation of the system; however, in a mission-critical iterative project a for Software Design Document^[3] may be used. The analysis of iteration is based upon user feedback, and the program analysis facilities available. It involves analysis of the structure, modularity, usability, reliability, efficiency, & achievement of goals. The project control list is modified in light of the analysis results.

IV. EXISTING SYSTEM

The Existing system for in majority of the college campus for maintaining the records and other information is a manual process. Taking existing system in to consideration, we can find that the Student has to interact with the Office in person, brief on the requirements they expect and so on. All these require more time and labor. The data collected may be inconsistent, redundant and getting in touch with a remote Student will become impossible.

More over there would be lack of co-ordination and follow-ups. As the system is manual, there are many chances for it to procure more errors. There may be chances to happen selection process to occur at more than one place at a time, with regard to the existing system it would be hilarious to maintain records on venue, batches etc. Also there was no proper complaints registration system. Students used to write their complaints on a cheat and were supposed to add to the complaints box. That may be reviewed or may not.

V. LIMITATIONS OF THE EXISTING SYSTEM

The existing system has the following problems:

- Requires many departments to handle variety of tasks and involves lot of paper work.
- No proper assignment of responsibilities would be there.
- No automation and centralization of records.
- Low and dragging access to records and details on employees.
- Loss of records is probable to occur, as it is paper works.
- Accumulation of records as organization extends.
- Becomes more complex as task becomes more functional.

- Difficulty in establishing and developing organizational capabilities of coordination, commitment and competence.
- Inability in understanding the benefits of increased organizational and managerial effectiveness.

VI. PROPOSED SYSTEM AND DESIGN

The proposed system for ACC is fully an automated one using Wireless Android^[4]. In the proposed system, the Student online can Register the details and requirements put forward by them. Online registration is also possible with this the proposed system. The proposed system is a centralized one, by which the data redundancy can be avoided; moreover the coordination of different departments becomes much easier.

Above all the system provides high security for all its data. The proposed system is mainly required for the listed as:

- Easy updating of information
- Provides online registration facility
- Status of processing can be verified and identified at any stage of process
- Efficient allocation of resources
- Ensures timeline management

The proposed system bridges this gap between the end-users and the contrivance planning managers by providing a centralized control over the entire system. The different departments utilize the system for sequencing the different processes that are isolated apart.

The proposed system design is as follows



Fig1: Schematics to show the concept of ACC

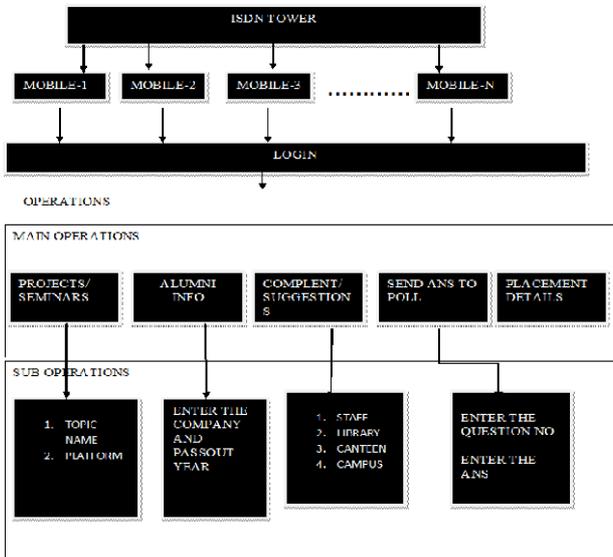
In the proposed system Employee Self Service will be available which allows employees to manage their own personal and benefit information. The payroll system included is used to compute, certify and create employee pay and disburse money.

The working of the system can be explained in detail by the detailed structure of the system as follows



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VII. IMPLEMENTATION DETAILS

Iterative development of model:

Iterative development slices the deliverable business value (system functionality) into iterations. In each iteration, slice of functionality is delivered through cross-discipline work, starting from the model/requirements through to the testing/deployment. The unified process groups iterations into phases: inception, elaboration, construction, and transition. Inception identifies project scope, risks, and requirements (functional and non-functional) at a high level but in enough detail that work can be estimated.

Elaboration delivers a working architecture that mitigates the top risks and fulfills the non-functional requirements. Construction incrementally fills-in the architecture with production-ready code produced from analysis, design, implementation, and testing of the functional requirements. Transition delivers the system into the production operating environment.

Each of the phases may be divided into 1 or more iterations, which are usually time-boxed rather than feature-boxed. Architects and analysts work one iteration ahead of developers and testers to keep their work-product backlog full.

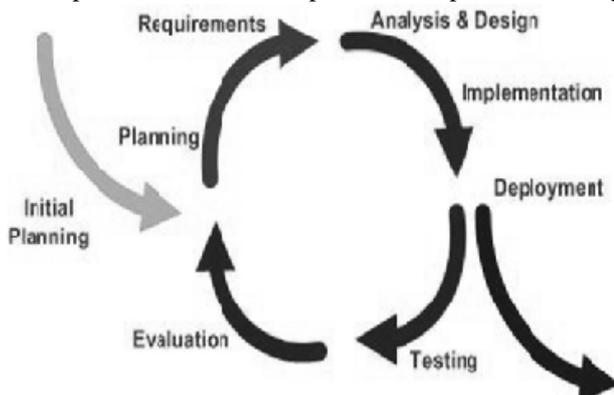


Fig: Spiral development model for iterative development

The proposed system as it designed by using this technique is easy to modify and rebuilt and it also provide the flexibility in the further development without disturbing the existing code and interrupting the current system functioning.

VIII. TOOLS AND TECHNIQUE USED

The minimum system requirements for supporting this system are as follows.

1. The operating system must be of windows series
2. The database used should be minimum a Microsoft access database with “.mdb” format.

SOFTWARE CONFIGURATION

OPERATING SYSTEM	Windows 95 and above
PACKAGES	Tomcat server Java IDE(eclipse) Jdk 6 and above Microsoft Access 2006 Android emulator
MS-DOS	Version 5.0/ above

Table1: The requirement specification for operating with this system.

To operate with this system the prerequisites are as follows

HARDWARE REQUIREMENTS
1. Internet connection
2. Android enabled cell phone for file transfer
3. PC with Android USB adapter connected

Table2: The hardware requirement for operating with this system.

Here is a list of tools that I have used to develop this system. Any developer with the basic knowledge of these tools can develop this system as per their requirement.

1. XML and HTML 5.0
2. JSP
3. JAVA
4. MS ACCESS
5. An router for connecting different system together
6. Android emulator toolkit for simulation based output
7. If you are using Android enabled cell phone for application based output then knowledge of JSON
8. Server like Tomcat 5 and other higher version
9. An IDE like eclipse Galileo and other higher version

There are other development tools also that are available apart from this for serving the same purpose.

IX. BENEFITS OF PROPOSED SYSTEM

- Improve business practices and streamline operations.
- Reduce the need for departmental system.
- Automate audits and edits, and centralize rules administration.
- Improve information access at the employee, user and administrative levels.
- Automatic review of plans, policies and eligibility requirements.



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- Automatic identification of taxable wages.
- The time keeping function included in the proposed system will support the capture of information based on an employee's work schedule.
- The Leave Management module maintains balances for leave benefits and balances.
- Non-technical users will be able to create and retrieve contrivance planning management reports.

X. CONCLUSION

While studying at BKIT, I gained good knowledge as well as experience about the organization, its structure, working environment, function, vision and their goals. The study has helped me to understand how an Organization functions on a day-to-day basis and how each department functions together. Administrator has whole control of the project. Load and update the information to database then students access the data by using their mobile. The proposed system which I have developed too will soon replace the all manual work of the office and other related stuff to an electronically monitored system and I hope it will be lot more useful to other institutions too.

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