Android Application for Faculty Knowledge Inventory System

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Abstract:
The purpose of Faculty Knowledge Inventory system is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data is stored for longer period with easy accessing. This system can lead to error free, secure, reliable and fast management system. It can assist the faculty to concentrate on their other activities rather than on record keeping. Thus it will help the organization in better utilization of resources. The paper is about to introduce the environment for faculties to handle their work and maintain record easily instead of making a lot of paper work. Effective and efficient way of managing all the stuff can be done easily. Better secure transfer of the all information provided using latest technologies. Updating, Inserting, and all the operations can be done easily and efficiently. This application will be most useful in future so that reducing paper work will affect the time as well as the environment.

Key words: Admin, Faculty.

I. INTRODUCTION

Every organization whether big or small, has challenges to overcome and managing the information of Faculty. This system is designed for the particular need of the institute to carry out the operations in a smooth and effective manner. It contains the details of the faculty members of how many demonstrations are carried out, how many seminars are attended and so on. The faculty can also update the details in their respective mobile phones with in no time. Analysis is the study of the various operations performed by the system like as (add, update, delete, search faculty details) and maintain relationship within through the system. The Faculty Management System can be entered using a username and password. It is accessible by an administrator as well as the faculty members in their mobile phones. The data can be retrieved easily. The data are well protected for personal use and makes the data processing very fast. This system objectives of easily & maintainable information can be used in any organization as well as institution to reduce the word load of the faculty members and easily maintain the records of the faculties.

II. PROBLEM STATEMENT

To design and develop an android application that stores the faculty details by adding, deleting and retrieving the details of the faculty.

III. SCOPE OF THE PROJECT

The proposed system can be used in the institutions where the details of the faculty members are stored.

IV. OVERVIEW OF THE EXISTING SYSTEM

The Existing system of “Faculty Knowledge Inventory system” is to be computerized in order to overcome the problems which affect the existing system. Maintaining information and retrieving information according to our needs are limited. Manually maintaining the data is tedious and sometimes information may be lost or overloaded by human.

Limitations of the existing system:
1. It is difficult to maintain the details for a long period of time.
2. It is time consuming job.
3. Preparation and retrieval of reports is not possible

V. OVERVIEW OF THE PROPOSED SYSTEM

After computerizing the system, the owner of the organization or the user of the system can finish their work in least amount of time and efforts. The computerized systems have many gains and efforts which the existing system can’t give in any type of situations. In any existing system if we take, the main problem arising is to maintain the number of records and finding. The “Faculty Knowledge Inventory system” of the organization is developed to overcome the most of the problems occurring in the existing system by computerizing the existing system.

Advantages of the proposed system:
1. Maintaining the Faculty details such as department, degree, course, work history, publication, awards and workshop details.
2. Getting the information of the faculty when required.
3. Faculties can update the details by using their mobile with the help of app.
4. Removal of Data Redundancy
5. Data Consistency.

VI. METHODOLOGY

- From the above literature survey we can easily concluded that the application is very useful for the faculties. It reduces a lot of paper work and a huge multitasking making use of single application. This application make a very useful development in every field is used effectively.
- The faculty has to register using the sign up option. The registration form consists of faculty details such as user id and password. The faculty has to register first to login in to the application. Once they have registered they are authorized to use the application. This can also be done by installing the application in the faculty’s mobile phone.
Once the faculty has registered the application then he/she can use the application by filling the details of the faculty such as department, degree, course, work history, publication, awards and workshop details. These details of the faculty can be added, deleted or retrieved easily.

VII. LITERATURE SURVEY

[1] “Web Based Faculty Information Management System”
Authors: S.R.Bharamagoudar, Geeta R.B., S.G.Totad
As mentioned in the paper “Web Based Student Information Management System” by S.R.Bharamagoudar, Geeta R.B., S.G.Totad (International Journal of Advanced Research in Computer and Communication Engineering Vol. 2, Issue 6, June 2013) provides the system using the web based technology, but it require the high speed internet connection which is a further disadvantage of it. Instead of using the application provides the stand alone environment so that can be easy to use on the slow internet connection also. To overcome such disadvantage we use the application based platform which can be easily operated using the smart devices as smartphones ipad, tabs etc. Input is given by the faculties directly by using in the mobile application interface. It can be easily modified using the teachers and the students. If any requirement of the students or feedback can also be taken using the application by individual student. It will also be easy for the teachers to take the daily attendance as well as the results of the students. The teaching plan is maintained and can be reported to the HOD of the department.

Authors: Tilwani T.D and Kumar S
Tilwani, T. D. And Kumar, S.(2007). Worked on the topic entitled 'Information use pattern of social scientists from web-based information resources' and discussed the impact of information in the development of the nation The advancement and prosperity of a society largely depends on it. The authors have emphasized the use and usefulness of Network for access of information and knowledge and discussed on printed materials and electronic document The web-based information access enriched the data collections and helpful for users.

[3] “Knowledge Management and Online Communities of Practice in Teacher Education”
Authors: BaharBaran
BaharBaran (2006), ‘Knowledge Management and online communities of practice in Teacher Education’ examines the relationship among three important topics: teachers’ professional development, knowledge management and online communities of practice. All over the world establishing settings for communities of practice has become an important focus within teachers’ professional development projects, and it seems to be an effective solution to provide lifelong learning opportunities for teachers. A community of practice can provide both implicit and explicit knowledge sharing opportunities among teachers. In this vein, teachers can produce useful documentation, tools, and procedures and share these documents with other novel teachers. With developing information technologies, online environments allow user to communicate in an interactive environment, synchronously or asynchronously. Therefore, online environments have been popular knowledge management places with portals including interactivity. The author also suggests that since establishing a community is not as easy as the blink of an eye, it requires patience and a variety of strategies to be used in different times. In sum, communities of practice needs more research and in the following years, one may learn more about it. The author only focused in teacher’s education and there are no points about the student’s and administrative person’s participation in the Knowledge Management. Making the efficient login for faculties and the HOD of the department as well as the responsible person like principle, or the employer if used in the industries. Different login can provide a various privileges to everyone. From the above literature survey we can easily concluded that the application is very useful for the faculties. It reduces a lot of paper work and a huge multitasking making use of single application. This application make a very useful development in every field is used effectively.

VIII. DESIGN

Figure.1. class diagram for admin
The admin logins using id and password and the admin will verify the faculty who logins.

Figure.2. Class diagram for faculty
The class diagram for faculty is shown above which used by the faculty
IX. DESIGN AND DISCUSSION

Figure 1. Homepage
The home page of the application contains ‘admin’ and ‘faculty’.

Figure 2. Admin login
The admin can login using their username and password.

Figure 3. Admin home
The admin can verify all the faculty details and can view the faculty’s profile and can verify the details of the faculty.

Figure 4. Faculty registration
The faculty can register by giving his/her details like faculty’s name, id, password, DOB, email, address, phone, gender and soon.

Figure 5. Faculty login
The faculty can login using their faculty’s id and their password.

Figure 6. Faculty home
When the faculty logsins using their id and password and they can view their profile, he can add/update the details such as department, degree, course, workhistory, publication, awards, workshop. He can also upload any previous data in the form of a pdf file.
X. CONCLUSION

“Faculty Knowledge Inventory System” is developed to store the Faculty information which is easy to handle by updating, deleting record and retrieving the details according to the user. This application also improves the performance over the existing system by providing the data to the faculty in digital form. This also reduces the workload as well as the less paper work for the faculties. It can also be used in faculty’s mobile phone by which the faculty can easily update the details with in no time. This reduces the workload on the faculties of maintaining the records which can be done in digital format.

XI. REFERENCES

