



National Conference on Advances in Engineering and Applied Science (NCAEAS)

29th January 2018

Organized by : Anjuman College of Engineering and Technology (ACET) Nagpur,
Maharashtra, India, In association with

International Journal of Scientific Research in Science and Technology



Smart Department System International Journal of Scientific and Research Publications

Er. Alisha Fazlani , Er. Aaliya Khan , Prof. Imteyaz Shahzad

Research student, Department of Computer Science & Engineering, Anjuman College Of Engineering &
Technology, Nagpur, Maharashtra, India

ABSTRACT

Smart Department System is an application which includes different modules for parent login, faculty login and student login and manages all activities of department at one place. Department management is becoming a very essential component in education in this modern day age. With the help of Smart Department System we can gather all the useful information needed to the management in few clicks. Smart Department System consists of different modules such as student, faculty, admin etc. Our main purpose is to create a software which will manage the working of these different modules. The interconnectivity among modules reduces the time to perform different operational task. Smart Department System is the software which gathers the basic information of student automatically. This software manages the information about various users including faculties, information about subjects offered in various semesters; marks obtained by Students in different semesters and then generate a final report of each and every student. We have used bootstrap which increases the responsiveness of the system. If in future we want to implement this system as the web based application because of bootstrap it will be easy and automatically screen will resolve according to that. The objective of our system is to reduce the paper work and to eliminate manual processes and to save significant staff time

I. INTRODUCTION

- Smart Department System is an application which includes different modules for parent login, faculty login and student login and manages all activities of department at one place.
- Department management is becoming a very essential component in education in this modern day age. With the help of Smart Department System we can gather all the useful information needed to the management in few clicks.
- Smart Department System consists of different modules such as student, faculty, admin etc. Our main purpose is to create a software which will manage the working of these different modules. The interconnectivity among modules reduces the time to perform different operational task.
- Smart Department System is the software which gathers the basic information of student automatically. This software manages the information about various users including faculties, information about subjects offered in various semesters; marks obtained by Students in different semesters and then

generate a final report of each and every student.

- We have used bootstrap which increases the responsiveness of the system. If in future we want to implement this system as the web based application because of bootstrap it will be easy and automatically screen will resolve according to that. The objective of our system is to reduce the paper work and to eliminate manual processes and to save significant staff time.
- Smart Department System is the intranet based software which will help the students to view notices, view attendance and also staff to upload question bank, assignments etc.

This application includes 3 login portal.

- Faculty Login
- Student Login
- Parent Login

1. Sign up Form:

Sign up means "to register; to create an account". This module provides user a signup form in which user fills all the essential information which are used for login purpose.

2. Login Credential:

In terms of security, login is the process by which an individual gains access to a system by identifying and authenticating themselves.

- ✓ Student
- ✓ Parent
- ✓ Faculty

3. Student Portal:

Student module consist of two submodules, first is data card in which all the important information related to student are required.

- Ex: Personal details, Academic details & Extra activities.

4. Parent Portal:

In parent module, all the information (like marks, attendance & performance) related to the students are visible to their parents.

5. Faculty Portal:

This module is related to faculty. Faculty can add, delete or update the information of the students in this module.

II. RESEARCH ELABORATIONS

Existing System

- By surveying the different college websites, we found out that neither of the colleges had a feedback form nor a parents information portal.
- It is a must for the respected parents or the guardians to know how well their ward is performing at the institution or where he or she is at currently.
- Yes we are including a student tracker to know their current location, this will ensure that the students are REGULARLY attending the college.
- By looking at the above existing systems we observe that we have to do double work i.e. first the teachers have to take the attendance manually and then upload to the college database.
- An increase of manpower takes place since the use of paperwork is increased at a considerable rate.
- In existing systems the parents cannot get the location of their ward.
- It is a must for the respected parents or the guardians to know how well their ward is performing at the institution or where he or she is at currently. Yes we are including a student tracker to know their current

location, this will ensure that the students are regularly attending the college.

- This application will even display the marks and attendance of the students for all the subjects. Even the faculty members can be contacted on a short notice. The feedback form will be filled only by the student in the entries of good, average, and excellent. An extra field will be provided for suggestions if there is any problem with the teaching style then you can comment on them. Your suggestions will be posted anonymously so your identity will be hidden.

Proposed System

- This is the generic type of software which is suitable to all the colleges. The software mainly consists of three portals i.e. student portal, faculty portal and parent portal.
- This application can be easily implemented in various situations. We can add new feature as and when we require. It is open for future enhancements.
- Reusability is possible as and when we require. There is flexibility in all the modules.
- The software is extensible in a way that its developer may not expect. Reusability is possible. Reusable software reduces design, coding and testing cost by amortizing effort over several designs.
- The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently.
- The existing system which we use in our college is traditional process which is a complete manual process (for e.g. feeding student information in excel sheet manually).
- The software Smart Department System facilitates the Faculties and Head of the

departments to know the present status of a student.

- The software gives the information such as student personal data, student's present Location, student activities and results etc.
- The parents will be given timely updates regarding any student activities that are held in the college and also about Parents Teachers Meetings.
- The main objective of the project is to manage the details of college, course, students and faculty.
- The project is built at administrative end therefore only the administrator or the authorized person (for e.g. HOD) is guaranteed the access.
- The application can be used in any other colleges.
- The application keeps the track of student's current location.
- This application can further be used in future as office automation system where employee data can be stored at one place.

III. RESULTS

- By using Existing System accessing information from files is a difficult task and there is no quick and easy way to keep the records of students and staff.
- Lack of automation is also there in the Existing System. The aim of Our System is to reduce the workload and to save significant staff time.
- This System provide the automate admissions no manual processing is required. This paper assists in automating the existing manual system. This is a paperless work.

- It can be monitored and controlled remotely. It reduces the man power required. It provides accurate information always.
- All years together gathered information can be saved and can be accessed at any time.
- The data which is stored in the repository helps in taking intelligent decisions by the management providing the accurate results.
- The storage facility will ease the job of the operator. Thus the system developed will be helpful to the administrator by easing his/her task providing the accurate results. The storage facility will ease the job of the operation.

IV. CONCLUSION

- This is the generic type of software which is suitable to all the colleges. The software mainly consists of three portals i.e. student portal, faculty portal and parent portal.
- This application can be easily implemented in various situations. We can add new feature as and when we require. It is open for future enhancements.
- Reusability is possible as and when we require. There is flexibility in all the modules.
- The software is extensible in a way that its developer may not expect. Reusability is possible. Reusable software reduces design, coding and testing cost by amortizing effort over several designs.
- The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently.
- The existing system which we use in our college is traditional process which is a

complete manual process (for e.g. feeding student information in excel sheet manually).

- The software Smart Department System facilitates the Faculties and Head of the departments to know the present status of a student.
- The software gives the information such as student personal data, student's present Location, student activities and results etc.
- The parents will be given timely updates regarding any student activities that are held in the college and also about Parents Teachers Meetings.

V. JOURNALS

1. IJIRST –International Journal for Innovative Research in Science & Technology: College Automation System.
2. International Journal of Advanced Research in Computer Engineering & Technology (IJARCET): Android College Management System.
3. Multidisciplinary Journal of Research in Engineering and Technology: ERP System for College Automation Using Rfid Tags.
4. International Journal on Recent and Innovation Trends in Computing and Communication: Information Management System for Faculty and Students.
5. International Journal of Innovative Research in Computer and Communication Engineering: Web Based Application for College Automation System.
6. International Journal of Advance Research, Ideas and Innovations in Technology: Institute Administration Automation and Student Database Management System.

VI. REFERENCES

- [1]. "Professional Android 4 Application Development" by Reto Meier.
- [2]. "Programming Android Java Programming for the New Generation of Mobile Devices" by Zigurd Mennieks , Laird Dornin , G. Blake Meike ,& Mausmi Nakamura.
- [3]. "Android Cookbook" by Ian F Darwin.
- [4]. "Learning Android Building Applications for the Android Market" by Marko Gargenta.\
- [5]. "Android Programming: The Big Nerd Ranch Guide" by Bill Phillips and Chris Stewart.
- [6]. "Head First Android Development: A Brain-Friendly Guide" by Dawn Griffiths and David Griffiths.
- [7]. "Android Programming: Mastering Course for Beginners Quick Start to Develop Your Own App" by Mitchell Schuler.
- [8]. "Android Programming In a Day!: The Power Guide for Beginners In Android App Programming" by Sam Key.
- [9]. Abelson F. and Sen R. Unlocking Android, 2009. Manning Publication Co. ISBN 9781-1-9339988-67-2.