



# Department Automation System

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## Abstract:

In department all the works are done manually using Microsoft Office packages, this leads to lots of burden to all staffs in the department and their valuable time is wasted. Sometimes it leads to manual errors such as inconsistency in data, reduces its integrity and inappropriate information during analysis of department details. To overcome all these issues, we are implementing Department Automation System which will manage the working of department activity using single platform. This system has easy interface and powerful data management. This system contains 3 modules. They are: Anna University Result Analysis, Placement Details Tracking, Attendance System. The Users are: Student, Admin, Staffs. Anna University sends students result in pdf format. Our idea is to read the data in pdf and update the data into database and the result analysis will be given. Result analysis module helps to monitor the test report of students and also find the student with consistence performance. Placement details of the students in the department will be updated in database including number of companies attended, number of rounds attended in each company and using that information a special training is given to the student. Attendance system used to monitor the regularity of students in class. The main objective of this system is to reduce the paperwork and manual processing.

**Keywords:** Automation, single platform

## I. INTRODUCTION

Department management is becoming a very essential in this modern education system. With the help of Department Automation System we can gather all the useful information needed to the management in few clicks. Department Automation System consists of different modules such as Anna university result details, placement details, attendance details etc., of all the student. 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 such as storing that in a database. In Department automation system the basic information of student is collected automatically. This software manages the information about various users including faculties, information about subjects 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. The objective of our system is to reduce the paper work and to eliminate manual processes and to save significant staff time.

## II. EXISTING SYSTEM

In an existing system, the anna university result pdf is converted into excel sheet and the result is analysed and report is generated. It is not store in the database. The faculty can take the attendance and mark the details using checkbox provided along with every student name. The sheet is stored and sent to the administrator. In an existing placement automation system, a criteria based search is done which will automatically finds the students who satisfy the criteria according to the company requirement.

## DISADVANTAGES OF EXISTING SYSTEM:

- No exact tracking of attendance of students, so it leads to lack of monitoring the student activities.
- Time consuming

- Manual errors
- Monitoring the placement details is difficult and consuming lot of manual works

## III. PROPOSED SYSTEM

In proposed automation system, with login credentials, the faculty can update the number of students absent in a particular class and the reasons for their absence which can be viewed by the department head. In placement automation module, it tracks the entire placement details of student such as number of companies attended, number of rounds attended in a particular company and number of student got selected in that particular company. In result analysis automation module, the cycle test, internal assessment marks are updated and pass percentage of each subject, each class, each year and entire department is calculated.

## IV. WORKING PRINCIPLE

Our System manages the three most important module of any department management system which is Student, Staff and Admin. The system is given a role based access. Every user is having username and password which is used for accessing the system

### (1)STUDENT:

Students are admitted by admin only to the system. When he got admitted the username and passwords are generated by admin and can be managed by student afterwards. Student can view their personal profile, current attendance record, Class Tests records.

### (2) STAFF:

Staff has access rights to manage daily attendance of all students of respective classes. Staff members can upload the anna university results and that are stored in database. They can also analysis and generate the report for each subject and

classes results. Staff member can also maintain the placement details of all the student.

**(3)ADMIN:**

Admin can manage the accounts of the all the students and staff. All the logs of student information can be view and manage by Admin itself. Any changes made by the student on their profile is verified and approved by admin.

**V. TECHNOLOGY**

**Software Requirement:**

- Operating System: Windows 7 and above.
- Java Version : JDK 1.8.
- Web Server :Tomcat 8.

**Hardware Requirement:**

- RAM : 4GB and above.
- Hard disk : 500 GB and above.
- Processor : i3 and above.

**Technologies used:**

- Programming Language : JAVA.
- Core Framework : Collections.
- J2EE : JSP, Servlet.
- Script : JavaScript.
- Web Designing : HTML5, CSS3.
- Front-end Framework : Bootstrap3.

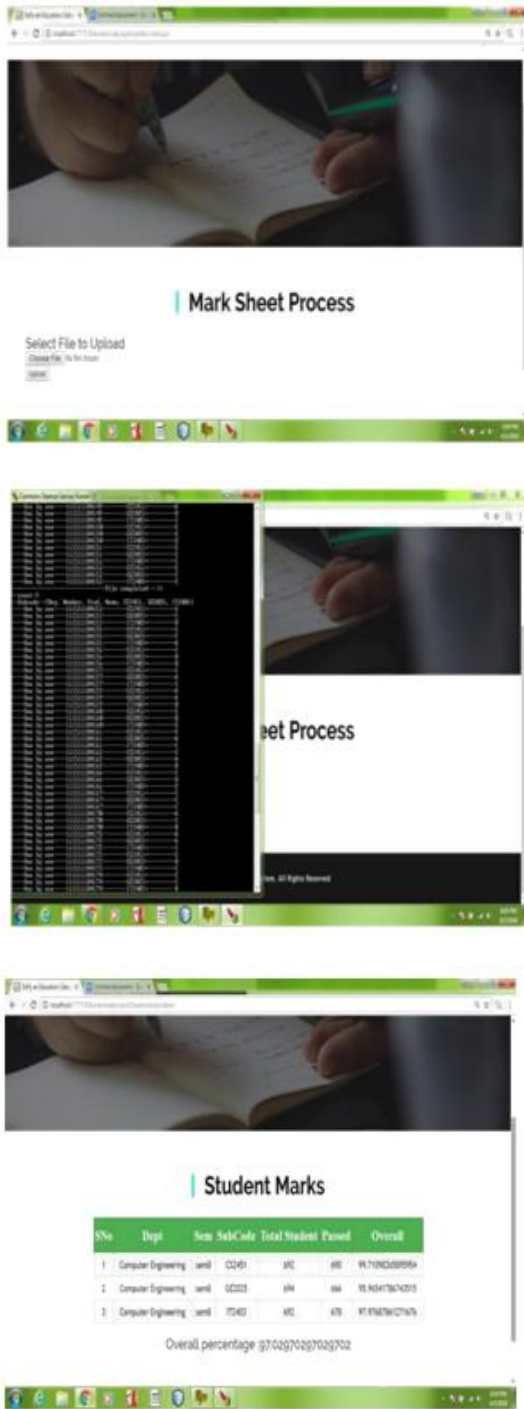
**VI.SCREENSHOTS**



Student ID	Department	Year	Date	Status
1 111110401	Computer Engineering	Final Year	15.02.2018	Present
2 111110402	Computer Engineering	Final Year	15.02.2018	Absent
3 111110403	Computer Engineering	Final Year	15.02.2018	Absent
4 111110404	Computer Engineering	Final Year	15.02.2018	Absent
5 111110405	Computer Engineering	Final Year	15.02.2018	Absent
6 111110406	Computer Engineering	Final Year	03.03.2018	Present
7 111110407	Computer Engineering	Final Year	03.03.2018	Absent
8 111110408	Computer Engineering	Final Year	03.03.2018	Absent
9 111110409	Computer Engineering	Final Year	03.03.2018	Absent



Name	Age	Height	Weight	Salary
John	25	1.8	75	10000
Jane	22	1.6	60	8000
Mike	30	1.9	90	12000
Sarah	28	1.7	70	9500
David	35	1.8	85	11000
Emily	24	1.7	65	8500
Chris	32	1.9	80	10500
Alex	27	1.8	75	9000
Olivia	26	1.7	68	8800
Noah	31	1.8	82	10200



## VII. FUTURE SCOPE

It is more efficient and convenient for the department staffs to do their work .It reduces the man power and also reduce the paper works needs. If all the works are done by computer there will be no chance of errors. Moreover storing and retrieving of the information is easy, so work can be done speedily and in time. All the data in the database are more secure. Some more features of this software are they are user friendly, required very less paper works, more Interactive with the user and finally it is very responsive then the existing system.

## VIII. ACKNOWLEDGEMENT

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## IX. CONCLUSION

In 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. There is no security to their personal information. 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 and also assists in automating the existing manual system. This is a paperless work. It reduces the man power required. It provides accurate information always because if all the works are done by computer there will be no chance of errors. All years Student information are gathered together in the database and can be accessed at any time. The data which is stored in the database helps the department in taking intelligent decisions by the providing the accurate results. Here the data stored in the database are more secure.

## X. REFERENCES

- [1]. DUCAUSE Center for Applied Research (ECAR). 15. Kim, Y. Lee-Z. Gosain. S. (2005) "Impediments to successful ERP implementation process", Business Process Management Journal, 11(2), 158-170. 16. King, P., Kvavik, R. B., & Voloudakis, J. (2002). Enterprise resource planning systems in higher education (ERB0222). Boulder, CO:EDUCAUSE Center for Applied Research (ECAR).
- [2]. "A Research Paper on College Management System", Lalit Mohan Joshi, International Journal of Computer Applications (0975 – 8887) Volume 122 – No.11, July 2015.
- [3]. "Erp system for college automation using rfid tags", Multidisciplinary Journal of Research in Engineering and Technology, Volume 2, Issue 2, Pg.437-446 .
- [4]. Ravindrakumar Rajput, "Mobile Based College ERP System (M-ERP)" International Journal of Engineering Research & Technology (IJERT) ISSN: 2278- 0181 IJERTV4IS030550 www.ijert.org (This work is licensed under a Creative Commons Attribution 4.0 International License.) Vol. 4 Issue 03, March- 2015 .
- [5]. "COLLEGE ERP SYSTEM", International Journal for Research in Engineering Application & Management (IJREAM) Vol-01, Issue 02, May 2015.
- [6]. Nielsen, J. (2002). Critical success factors for implementing an ERP system in a university environment: A case study from the Australian International Journal of Human and Social Sciences 5:6 2010 398, HES. Faculty of Engineering and Information Technology.
- [7]. Nilay Narlawar, "College Management Module's Constructed by Advance Java in the ERP System", Current Trends in Technology and Science ISSN: 2279- 0535. Volume: 3, Issue: 3 (Apr-May. 2014).
- [8]. <http://www.scientechsoft.com/CollegeERP.php>
- [9]. <http://www.sonetmicrosystems.com/eScop.php>.
- [10]. [http://www.profmmax.com/pbs/solutions/erp/education/education\\_management\\_system/education%20management%20system.aspx](http://www.profmmax.com/pbs/solutions/erp/education/education_management_system/education%20management%20system.aspx)