



College of Engineering Pune
(An Autonomous Institute of the Govt. of Maharashtra)

Software Engineering Mini Project II

Third Year Computer Engineering

University Management System

Under the guidance of
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1. Abstract

UNIVERSITY MANAGEMENT SYSTEM deals with the maintenance of University data, records, instructions, and students information within the University. UMS is an automation system, which is used to store the information, students record, and information of courses. Starting from registration of a new student in the college, it maintains all the details regarding marks of the student, etc. System analysis involves creating a formal model of the problem to be solved by understanding requirements. It manages the college information, student information, faculty information from the college. It has various modules in project having options to add student and faculty change the details of the student or the faculty. It also helps to enter the marks of the student and create the result of the students.

2. Introduction

The university management system is developed to override the problems prevailing in the practicing manual system, this software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner. The application is reduced as much as possible to avoid errors while entering the data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user-friendly. University Management System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources.

Every organization/university, whether big or small, has challenges to overcome and managing the information of students, faculties, Registrations, courses at the management level. This is designed to assist in strategic planning and will help you ensure that your organization is equipped with the right level of information and details for your future goals. Also, for those busy executive who are always on the go, our systems come with remote access features, which will allow you to manage your workforce anytime, at all times. These systems will ultimately allow you to better manage resources.

3. Software Requirements Specification

3.1 Synopsis:

- Purpose:

The objective of the project on University is to manage the details of Students, Classes, Instructors, and Courses. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Students, Registrations, and Classes. It tracks all the details about the students, faculties, courses.

- Document Conventions:

1. Font: Times new roman
2. Font size: 12
3. Heading size: 36
4. Subheading size: 25
5. Subheading's subheading size: 20
6. Bold formatting used to highlight text wherever required.

- Intended Audience and Reading Suggestions:

The project is supposed to be for the administrative end people of the college and the university. It helps admin people to reduce the tedious work of entering the details of the students and the faculties.

- Existing System:

Various Limitations of the existing systems are listed below:

1. Lack of security of data
2. Consumes large volume of the pare work.
3. No direct role of the higher officials.
4. Time Consuming.

- Proposed System:

The aim of the proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work.

- 1) Security of data.
- 2) Ensure data accuracy's.
- 3) Proper control of the higher officials.
- 4) Minimize manual data entry.
- 5) Minimum time needed for various processing.
- 6) Greater efficiency.
- 7) Better service.

- HARDWARE AND SOFTWARE REQUIREMENTS:

Operating System Server: Windows 8 or later

Database Server: Microsoft SQL server – 2010

Software Used: Netbeans IDE

Source Codes: Java

3.2 Assumptions:

In this project it is assumed that the person knows the primary use of the computer and he can understand English.

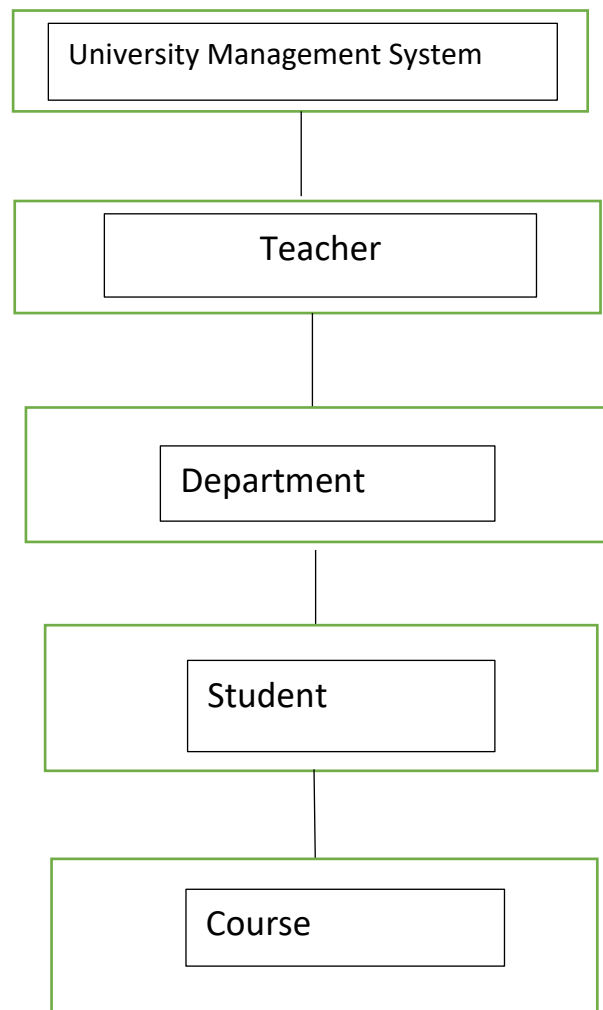
4. Literature Review

Year of the Paper	Title of the paper	Journal Details	Methodology used	Proposed Idea	Advantages	Disadvantages and Limitations
2017	UNIVERSITY MANAGEMENT SYSTEM USING MODEL-VIEW-CONTROLLER (MVC)	An International Scholarly Open Access Journal, Peer-Reviewed, Refereed Journal Impact Factor 7.95	The project deals with the retrieval of information through an INTRANET based campus wide portal	It collects related information from all the departments of an organization and maintains files, which are used to generate reports.	Better service. User friendliness and interactive. Minimum time required.	Lack of security of data. More manpower. Time consuming
2016	COLLEGE MANAGEMENT SYSTEM	IRJET published Journal May 2016	develop an online website which covers all the details of college i	-	-	-
2014	A Survey on “SMART CONNECT” an Android and Web Based Application for College Management System	IJSETR published Journal in November 2014	design a college website which contains up to date information of the college .	<ul style="list-style-type: none"> • Providing the online interface for students, faculty. • Increasing the efficiency of college record management. 	Decrease time required to access and deliver notices	-
2018	A College-Wide Assessment Management System in an Integrated	Journal from College of Medicine and Health Sciences,	s relational database design as well as user	-	-	-

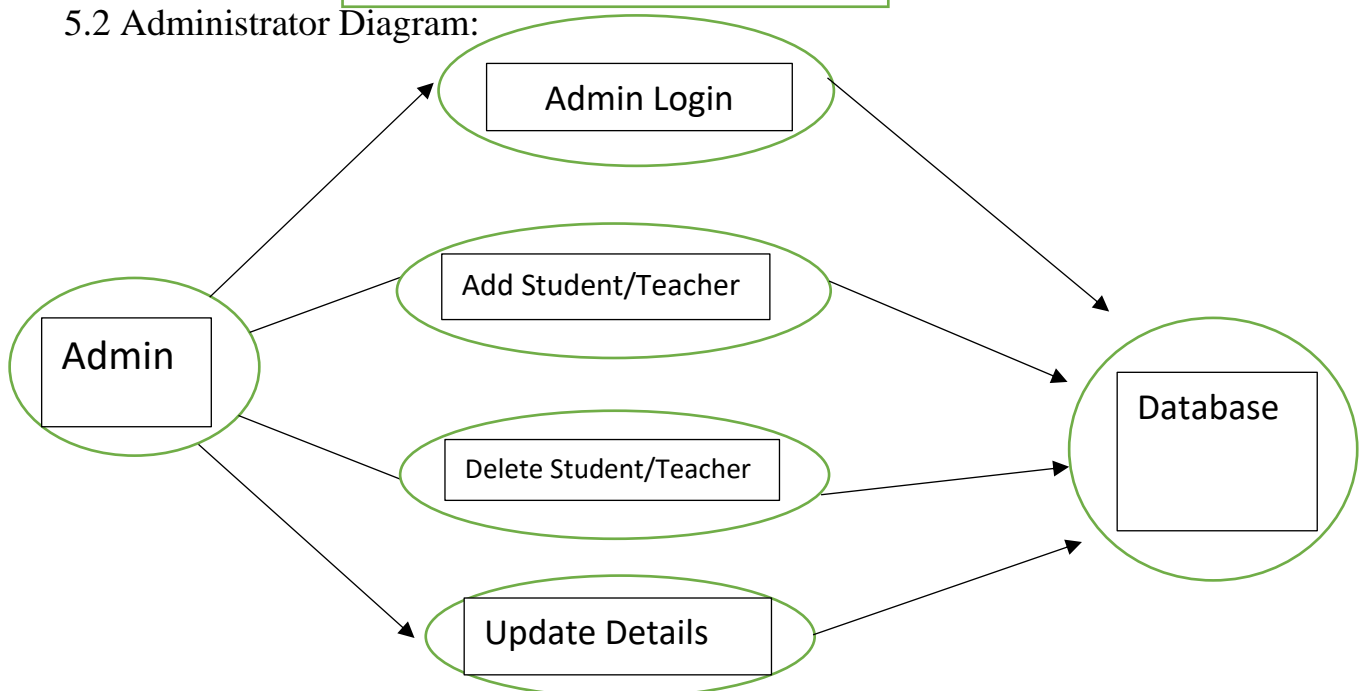
	Medical Curriculum	United Arab Emirates University, Alain, UAE	process flow design.			
2009	Integrated University Management System Based on Open Source Tools	Journal From Fourth International Conference on Internet and Web Applications and Services	open source portal framework developed and customized for university purposes	-	-	-
1995	Innovations in University Management	United Nations Educational, Scientific, and Cultural Organization, Paris (France). International Inst. for Educational Planning.	The Research Programme; The External Environment of Higher Educational Institutions; Improving University Management to Meet Changing Needs	-	-	-

5.Design and DataFlow Diagrams

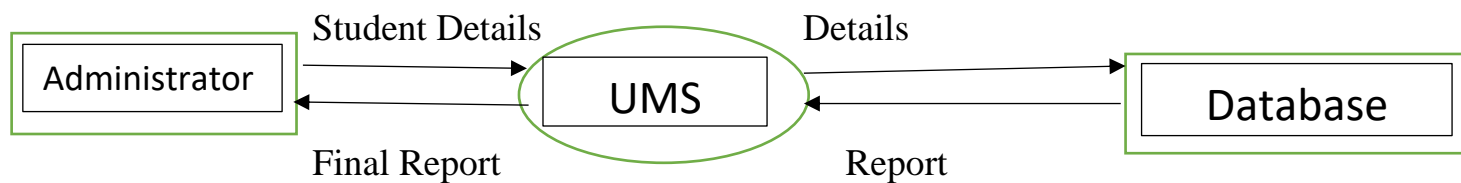
5.1: User Heirarchy:



5.2 Administrator Diagram:



5.3 Dataflow Diagram:



6. Conclusion

This project proved good for us as it provided practical knowledge of not only programming in Java but also using the MySQL database and using Netbeans IDE Platform.

7. References

- [1] Srikant Patnaik, Khushboo kumari Singh, Rashmi Ranjan, Niki Kumari “COLLEGE MANAGEMENT SYSTEM” May 2016
- [2] Sheetal Prusty, Ruchismita Patnaik, Subhashree Tripathy, Tanvi Biswal, Sujata Behera “UNIVERSITY MANAGEMENT SYSTEM USING MODEL-VIEW-CONTROLLER (MVC)” December 2017, Volume 4, Issue 12
- [3] Amita Dhale, Madhav Mistry, Tushar Zore “A Survey on “SMART CONNECT” an Android and Web Based Application for College Management System” International Journal of Science, Engineering and Technology Research (IJSETR), Volume 3, Issue 11, November 2014
- [4] Catalin Maican “Integrated University Management System Based on Open Source Tools” Fourth International Conference on Internet and Web Applications and Services, ICIW 2009, 24-28 May 2009, Venice/Mestre, Italy
- [5] Sami SHABAN, Margaret ELZUBEIR “A College-Wide Assessment Management System in an Integrated Medical Curriculum”

