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Integrated University Management System (IUMS)  
Software Engineering II (CSE 2100)

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## **ABSTRACT:**

A university management system is a software solution that has developed focused on the challenges universities face with the capability to restructure an institute for good. Comes with several modules dedicated to help students to tackle the problems and challenges that they are facing the system can deliver their institute many benefits.

The Project titled “Integrated University Management System” is a university management software for monitoring and controlling the whole student life cycle up to degree completion. This Project will be developed in NetBeans 8.2 and database management will be handled by MySQL. It is created for the university and its affiliated institutions to conduct, monitor, and analyze complicated activities such as student admission, examinations, and much more. This software mainly focuses on basic operations in a university management as well as some special features like facility of user login and facility of administrative login. New users can open a user account quite easily after filling up a registration form provided with username and password. A user will have the opportunity to update his/her account details, visit his/her profile.

The purpose of this software is to Improve the quality of education, ease one’s daily operations, digitalize data collection and management, optimize resources and improving communication. IUMS helps make important tasks like admission, results processing, registration, and fee management more efficient, so they can be done faster. All users, including students and university personnel, paper valuers, setters, and moderators, are given a role-based login/password to complete their tasks. Each student has access to the university’s examination management system to complete the following Student Lifecycle tasks.

## **Software Platform:**

-  The project will be developed using JavaSwing
-  NetBeans 8.2
-  MySQL server

## **FEATURES OF A UNIVERSITY MANAGEMENT SYSTEM:**

### ***1. User Login:***

This feature gives user to login to the system. A user can log in to the system by providing username and password. After proper verification of the username and password, valid user will be allowed to enter into the system. A username and password mismatch will not allow someone to enter into the home page and the user will be asked to re-enter his/her username and password. The student login will allow a student to access the university management system. The user can also view his profile and edit his profile information.

### ***2. Administrative Login:***

This feature allows an admin to login to the system by providing username and password. After proper verification of the username and password, admins will be allowed to visit the administrative home page. Username and password mismatch will not allow an admin to enter into the system. Through administrative login an admin can have access to some special features such as: result management, class routine, exam schedule, payment information, readmission, carry, clearance or improvement application, teachers' evaluation and also the certification. He can also view his profile and edit information.

### ***3. New User Registration:***

This feature allows any member from the institution to create an account for himself. This option will be available at the start of the program. A new member has to fill up a registration form by providing his name, Id, department, contact no, username and password. After providing valid information a new user can create an account for himself and later, he will be allowed to enter into the system.

### ***4. University Information Management:***

This module will help the university admin in handling the records and services offered by the university. It will secure and generate reports for transaction purposes.

### ***5. Department and Faculties:***

This feature contains the information of all the departments of a university and also the faculties. It helps us to know the rank list of the faculties and the summary of their researches.

### ***6. Courses and Subject Management:***

As the main goal of every university is to provide a quality education, this module would ease the activity of handling courses and subjects. The system will help the admin assign the subjects per course and then bracket its schedules.

### ***7. Student Information Management:***

The student information management costs a lot of time and effort to do. While this module will do the management, the admin would just feed the information to the system.

### ***8. Faculty and Student Attendance Monitoring:***

This module might require a device to monitor the attendance of each of their students and faculty. This will help them handle the performance of their student as well as their faculty members.

### ***9. Grading System Management:***

The work of this module is to help the admin convey learning progress and performance of their students in a clear, accurate, consistent, and fair manner.

### ***10. Payment and Financial Monitoring:***

This module will give them hold of all the payment transaction of their students or their parents. It will also help the admin with securing their financial statements for the university needs and purposes.

### ***11. Examination management:***

This feature is developed to manage the entire exam process. It covers all the activities that are related to examination management, right from receiving enrollment and examination forms, to the processing of exams, printing, distribution, and statistical reports.

### ***12. Admission Management:***

The feature helps educational institutions to manage the student enrollment process effortlessly. It lets admission teams capture student inquiries, check their eligibility, follow-up, collect documents, and complete the application process digitally. The admission management system also allows students to apply online, check their application status, submit documents and pay fees online.

### ***13. Library management:***

The purpose of this feature is to operate library with efficiency and at reduced costs. The activities of book purchasing, cataloging, indexing, circulation recording and stock checking are done by it. The system saves time for both the user and the librarian. With just a click the user can search for the books available in the library. The library management system software makes the library a smart one by organizing the books systematically by author, title and subject. It also has facilities where student after logging in their account can see the list of available books, list of books issued, it's issue date and return date and also the user can request the librarian to add new books by filling up the book request form.

### ***14. Hostel management:***

The motive of this management is designed to manage all hostel activities like hostel admissions, fees, room, mess allotment, hostel stores & generates related reports for smooth transactions. It is also used to manage monthly mess bill calculation, hostel staff payroll, student certificates, etc.

### ***15. Certification:***

This feature provides certificate of the students. It is uniquely designed to provide secure comprehensive issuance, revocation, and management of certificates in an IT environment.

## ***16. Notices:***

The main objective of this feature is to allow the university authorities to post important notices to online notice board which can be seen by students and staff members on their home screen after login. The university authorities can also post exam schedules, important notices and so on.

## ***17. FAQ:***

If the students have any queries about anything, they can ask freely using this feature. All the questions will be cordially welcomed by it.

## **IDENTIFIER AND PRIORITY FOR SOFTWARE REQUIREMENTS**

<b>Features</b>	<b>Name</b>	<b>Priority</b>
01	User Login	High
02	Administrative Login	High
03	New User Registration	High
04	University Information Management	High
05	Department and Faculties	
06	Courses and Subject Management	High
07	Student Information Management	High
08	Faculty and Student Attendance Monitoring	High
09	Grading System Management	High
10	Payment and Financial Monitoring	High
11	Examination Management	High
12	Admission Management	High
13	Library Management	High
14	Hostel Management	Medium
15	Certification	Medium
16	Notices	Medium
17	FAQ	Low