BANNARI AMMAN INSTITUTE OF TECHNOLOGY
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SOFTWARE REQUIREMENT SPECIFICATION

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PROJECT ID : 18

PROJECT TITLE : COURSE REGISTRATION

PROBLEM STATEMENT:

Register their department course and their individual electives and add on courses.

- Department Courses: There are compulsory courses for the students that are specifically required by their department or major. These courses are essential for completing the curriculum and obtaining a degree in that particular field of study.Structures," "Algorithms," and "Operating Systems."

- Individual Electives: Along with the department courses, students often have the flexibility to choose a certain number of elective courses. These elective courses allow students to explore subjects outside their main field of study or specialize in a particular area of interest.

- Add-on Courses: Add-on courses are additional courses that students can opt for to

enhance their knowledge or skills. These courses may not be directly related to their department or major but offer supplementary learning opportunities. Add-on courses could include topics like "Public Speaking," "Entrepreneurship," or "Foreign Languages," depending on the student's interests and goals.

TECHNICAL COMPONENTS:

FRONTEND	• HTML • CSS • JAVASCRIPT
BACKEND	• JAVASCRIPT • EXPRESS.JS
DATABASE	• MongoDB
TASK SCHEDULING	• AGENDA.JS
AUTHORIZATION AND AUTHENTICATION	• PASSPORT.JS • OKTA

SOFTWARE REQUIREMENT SPECIFICATION (SRS) FOR STUDENT SATISFACTION SURVEY:

1. INTRODUCTION:

This system's goal is to enable students to sign up for add-on courses, departmental courses, and individual electives. Students will have an easy-to-use and effective platform to choose their preferred courses and organize their academic calendar thanks to the system.

2. SCOPE:

The system will be made to meet the demands of students enrolled in courses within a particular department or school. It will have tools for choosing courses, seeing which ones are available, verifying prerequisites, and confirming registration.

2.1. BENEFITS:

1. Students' course registration was made simpler.
2. Increased efficiency and accuracy when choosing courses.
3. Decrease in administrative work and manual documentation.
4. Increased clarity on conflicting schedules and course availability.
5. Enhanced academic schedule management and planning.

2.2. OBJECTIVES:

The objectives of the system are to:

- ❖ Create an intuitive course registration interface.
- ❖ Establish a strong database to hold student registration data and course details.
- ❖ Assure prompt verification of the availability and prerequisites for the courses.
- ❖ Give immediate feedback on available courses and scheduling conflicts.
- ❖ Provide confirmation receipts to those who successfully register for courses.

2.3. GOALS:

The goals of the system are to:

- Establish a strong database to hold student registration data and course details.
- Assure prompt verification of the availability and prerequisites for the courses.
- Give immediate feedback on available courses and scheduling conflicts.
- Provide confirmation receipts to those who successfully register for courses.

3. VALUE:

By automating and streamlining the course registration procedure, the system will cut down on administrative burden and human mistake. It will provide students the tools they need to successfully manage their academic schedules, which will boost their output and satisfaction.

4. BUSINESS CONTEXT:

The system will be especially made for educational establishments, such as departments within colleges or universities, that provide a wide range of courses in many subject areas.

5. INTENDED AUDIENCE:

Students should register for departmental courses, individual electives, and add-on courses, according to the intended audience.

Administrators: To oversee the selection of courses, keep tabs on enrollment, and produce reports.

6. INTENDED USE:

The system is intended to be used by administrators to oversee the course registration process and by students to register for courses.

7. CONSIDERATIONS:

- During hours of peak registration, the system has to manage a high number of concurrent users.
- It is necessary to put security measures in place to safeguard student data and stop illegal access.
- In the event that the curriculum or course offerings change in the future, the system must to be flexible and expandable.

8. SYSTEM OVERVIEW:

The components of the system will be as follows:

- The user interface allows students to interact with the system through a web or mobile application.
- Database: To hold registration records, student information, and course details.
- Module for managing course offerings, requirements, and availability: the course management module.
- Registration Module: To manage and verify choices during the course registration process.

9. FEATURES:

- Login and registration of users
- Searching and filtering courses
- Verifying the prerequisites for the course
- Current course availability status in real-time + optional course selection
- Confirmation of course registration
- Management of the academic timetable

10. FUNCTIONAL REQUIREMENTS:

- ❖ It should be possible for students to register and safely log in.
- ❖ It should be possible for students to look up courses using various search parameters.
- ❖ Prerequisites for the course should be verified by the system before registration is permitted.
- ❖ The system ought to show the current availability of courses in real time.
- ❖ It should be possible for students to add additional courses and electives to their registration cart.
- ❖ Confirmation receipts should be generated by the system for registrations that are successful.
- ❖ It should be possible for students to see and control their course timetables.

11. NON-FUNCTIONAL REQUIREMENTS:

Non-functional requirements encompass:

- Performance: A high number of concurrent users should be supported by the system, and it should react rapidly to user actions.
- Security: To prevent unwanted access, user data and transactions should be encrypted.
- Usability: Across a range of devices, the user interface should be responsive, easy to use, and accessible.
- Reliability: During periods of high registration, the system must to be dependable and accessible.
- Scalability: More students and courses should be accommodated by the system without causing performance issues.

12. GENERAL DESCRIPTION:

Students will be able to register for departmental courses, specific electives, and add-on courses through an intuitive user interface offered by the system. It will produce confirmation receipts, verify prerequisites, and show the availability of courses in real time. The system will provide a smooth course registration process for students by being efficient, salable, and secure.

PROCESS FLOWCHART: