



BANNARI AMMAN INSTITUTE OF TECHNOLOGY

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Software Requirement Specification Report

STUDENT NAME	SOUNDHARYAA SHRI S
ROLL NUMBER	7376221CS313
SEAT NUMBER	77
PROJECT ID	37
PROJECT TITLE	SKILL PORTAL

TECHNICAL COMPONENTS

Components	Tech Stack
Frontend	HTML,CSS,JavaScript
Backend	Node js,express js
Database	MYSQL
API	RESTful API

PROBLEM STATEMENT

The Skill Training Portal streamlines the process of skill registration, allowing students to easily track their previous semester's accomplishments. This enables students to effectively enhance their abilities while faculty efficiently manage student attendance and training programs. The portal also provides administrative tools for monitoring and improving the quality of training.

- **Student Registration** : Enable students to register for various skill training courses at the start of each semester, capturing essential details for course selection, identification, and contact purposes.
- **Course Enrollment and Tracking** : Implement a system that allows students to enroll in selected courses and track their progress, including previous semester accomplishments, certifications earned, and skills developed.
- **Attendance Management** : Incorporate functionality to record student attendance for each training session, providing faculty and administrators with accurate attendance data for performance and participation tracking.
- **Feedback and Evaluation** : Provide a mechanism for faculty to give personalized feedback to students on their course performance, helping them understand their strengths and areas for improvement.
- **Communication Module** : Integrate automated email/SMS notifications to keep students informed about course registration, enrollment confirmations, feedback, upcoming deadlines, and any changes in course schedules or content.
- **Administrative Tools for Course Management** : Develop tools for faculty and administrators to efficiently manage course offerings, including the creation, modification, and removal of courses, as well as monitoring student progress and participation.
- **Reporting and Analytics** : Implement reporting and analytics features that allow skill admins to generate reports on student performance, course effectiveness, and overall training quality, enabling data-driven decision-making.

PROJECT FLOW

INTRODUCTION

The Skill Training Portal offers a comprehensive solution for managing the skill development process within an institution. This application is designed to streamline student registration for courses, course enrollment, attendance tracking, feedback management, and communication of essential information such as course updates and schedules.

SCOPE

The system will allow students to register for skill training courses at the beginning of each semester, track their progress, and receive personalized feedback from faculty. Faculty members will be able to manage course offerings, monitor student participation, and provide evaluations. The system will also ensure timely communication of important information, such as course schedules and updates, via email/SMS to both students and faculty.

FICTIONAL REQUIREMENTS

Student Registration

- The system shall provide a user interface for students to register for skill training courses.
- Students shall input necessary details such as course selection and semester information.
- Registration shall be allowed at the start of each semester.

Course Enrollment and Tracking

- The system shall allow students to enroll in selected courses and track their progress, including previous semester accomplishments.
- The system shall maintain a record of certifications earned and skills developed by each student.

Attendance Management

- The system shall provide an interface for faculty members to record students' attendance during training sessions.
- Faculty members shall be able to mark attendance for each student enrolled in their courses.
- Only authorized faculty members shall have access to the attendance recording functionality.
- The system shall maintain a log of attendance records, including the date, time, and faculty member who recorded the attendance.

Feedback and Evaluation

- The system shall allow faculty members to provide personalized feedback to students on their course performance.
- Students shall have access to their feedback and evaluations, helping them identify areas for improvement.

Communication Module

- The system shall integrate functionality to send automated email/SMS notifications to students and faculty.
- Notifications shall include course registration confirmations, feedback, upcoming deadlines, and any changes in course schedules or content.

Administrative Tools for Course Management

- The system shall provide tools for faculty and administrators to efficiently manage course offerings, including the creation, modification, and removal of courses.
- The system shall allow skill admins to generate reports on student performance and overall training quality.

Non - Fictional Requirements

Usability

- Intuitive and user-friendly interface for students, faculty, and administrators.
- Responsive design to support different devices and screen sizes.
- Provide clear instructions and help documentation.

Reliability

- Minimal downtime and data integrity for student information and attendance records.
- Implement data backup and recovery mechanisms.
- Fault tolerance and error-handling capabilities.

Maintainability

- Well-documented code and design decisions for easy maintenance.
- Adherence to coding standards and best practices.
- Separation of concerns and loose coupling between components.

Performance

- Ability to handle high concurrency during peak registration periods.
- Prompt delivery of notifications and updates.
- Optimized database queries and caching mechanisms for faster response times.

Security

- Secure student and faculty data, as well as communication channels.
- Restricted access to sensitive information.
- Implement industry-standard encryption and authentication protocols.
- Regular security audits and vulnerability testing.

SYSTEM OVERVIEW

USERS:

➤ Student

Students can register for courses, track their progress, receive feedback, and access communication related to their enrolled courses. The portal supports their continuous skill development by providing detailed records of their achievements and attendance.

➤ Faculty

Faculty members are responsible for creating and managing courses, monitoring student participation, recording attendance, and providing personalized feedback. The system offers a user-friendly interface for faculty to perform these tasks efficiently, ensuring that students receive the guidance they need to succeed.

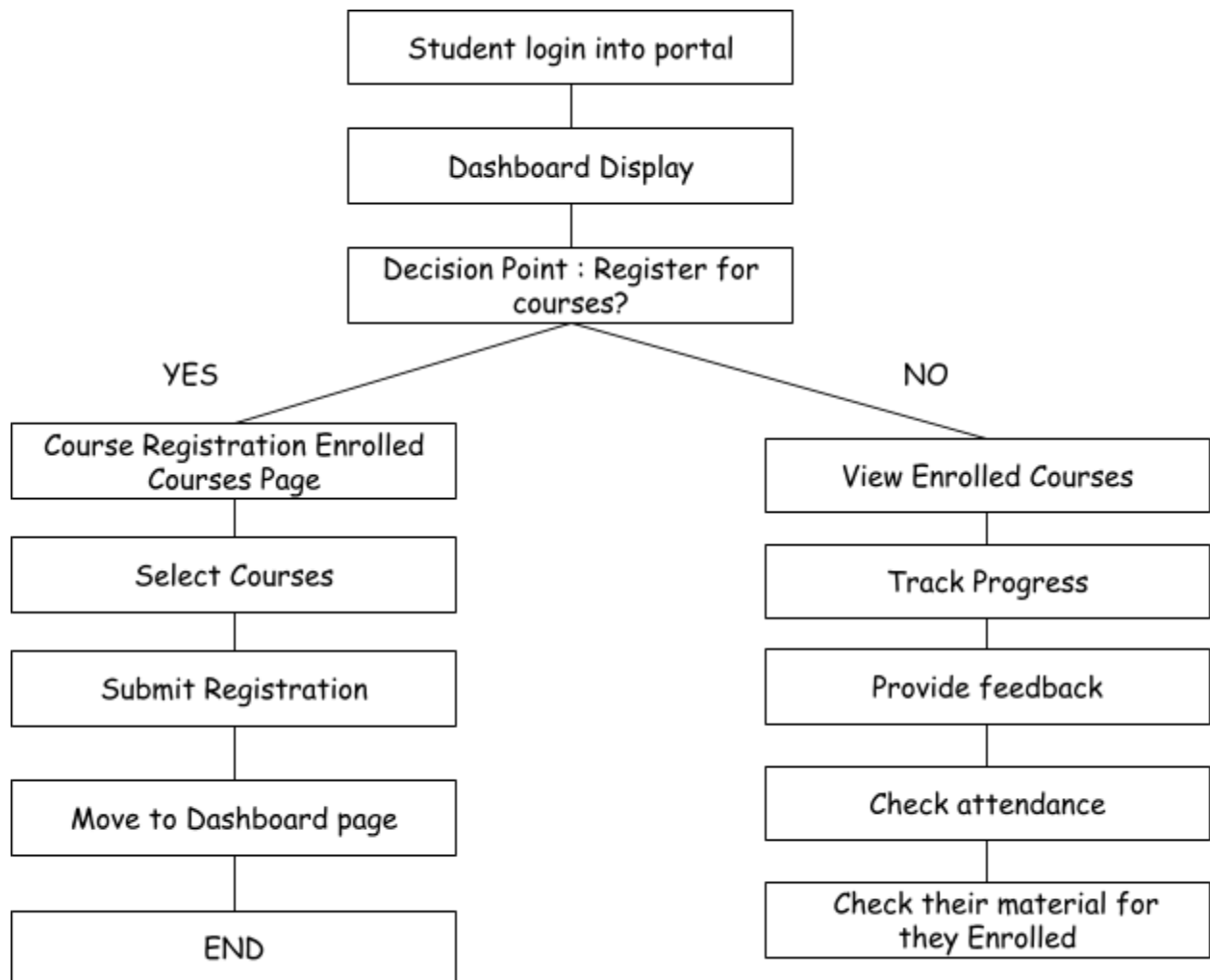
➤ Skill Admin

Skill admins oversee the entire operation of the portal, managing user roles, course offerings, and overall system functionality. They are equipped with tools to generate reports and analytics that provide insights into student performance and course effectiveness, allowing for data-driven decision-making.

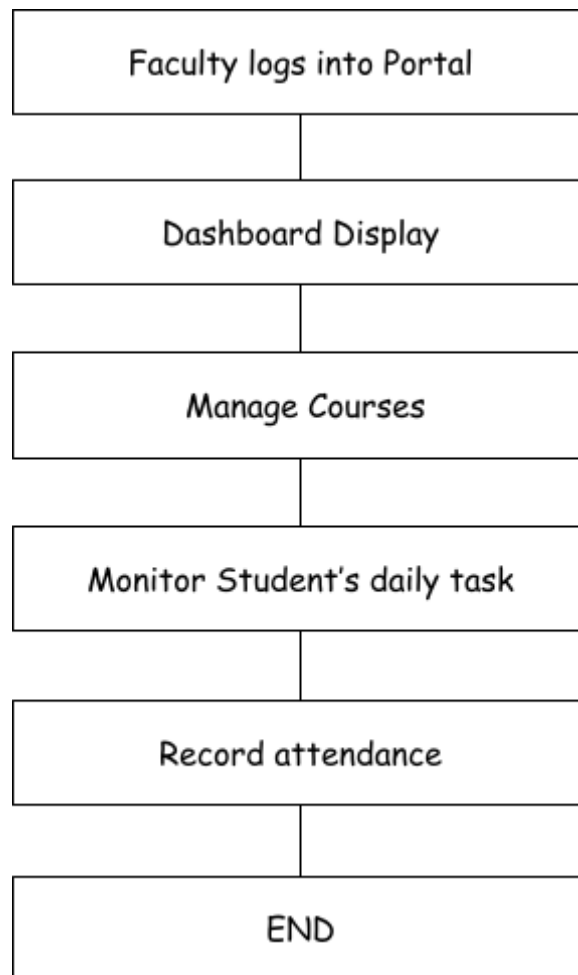
FLOW CHART

USERS:

Student's Interface



Faculty's Interface



Admin Interface

