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**Seat No: 237**

**Project ID: 37**

**Project title: SKILL TRAINING PORTAL**

#### Technical Components

Component	Tech Stack
Backend	Django
Frontend	HTML,CSS,JS
Database	MySQL
API	RESTful services

#### Implementation Timeline

Phase	Deadline	Status	Notes
Stage 1	03/05/2024	Approved	Planning and Requirement gathering
Stage 2		In Progress	Design and Prototyping
Stage 3		Not Started	DB Designing
Stage 4		Not Started	Backend Implementation
Stage 5		Not Started	Testing & Implementation

## **PROBLEM STATEMENT:**

The Skill Training Portal is intended to streamline and automate the management of skill-based courses within BIT. It will facilitate the registration of courses by students and teachers, manage classroom allocations based on student strength, monitor attendance, and handle the submission of marks. The portal will also include a feedback collection system to gather insights from students about the courses. The system will ensure a seamless experience for all users, including administrators, teachers, and students.

## **PROJECT-FLOW:**

### **Purpose:**

The purpose of the Skill Training Portal is to provide a unified platform for managing skill-based courses, ensuring efficient registration, attendance tracking, mark submission, and feedback collection. The system aims to automate and centralize these processes, reducing manual effort and enhancing communication between students, teachers, and administrative staff.

### **Scope:**

- **Course Registration:** Students and teachers will be able to select available courses to attend and teach, respectively.
- **Classroom Allocation:** Based on the number of students enrolled in a course, the system will automatically allocate appropriate classrooms and notify students and staff.
- **Attendance Management:** Instructors will be able to mark and track attendance for each course and venue.
- **Mark Submission:** Teachers will submit marks for students enrolled in their courses.
- **Feedback Collection:** Students can provide feedback on the courses they have attended.

### **Consideration:**

- **User Access Control:** The portal will have separate access levels for admins, teachers, and students, with distinct functionalities available to each user type.
- **Scalability:** The system should be scalable to accommodate an increasing number of users and courses.
- **Notification System:** Automated notifications will be sent to students and staff regarding course

selections, classroom allocations, and other important updates.

- **Data Security:** The portal will ensure the confidentiality and integrity of student data, marks, and feedback.

### Dependencies:

- **Database:** A robust database to manage user profiles, course details, classroom allocations, attendance records, marks, and feedback
- **Authentication System:** Secure login and role-based access control mechanisms.
- **Notification System:** Integration with email or messaging services to send notifications.
- **Classroom Information:** Admin staff will provide a list of classrooms with their capacity, which the system will use for automatic allocation.

### User personas:

#### 1.Student:

- **Role:** Students use the portal to register for skill courses, attend classes, submit feedback, and view their attendance and marks.
- **Needs:**
  - Easy course registration process.
  - Notifications about classroom allocation and schedule.
  - A straightforward interface to view attendance records and marks.
  - Ability to submit feedback on courses.

#### 2.Teacher:

- **Role:** Teachers use the portal to select courses they wish to teach, mark attendance, submit grades, and review student feedback.
- **Needs:**
  - Efficient course selection process.
  - Tools for marking and reviewing attendance.
  - Interface for submitting student marks.
  - Access to student feedback for course improvement.

#### 3.Admin Staff:

- **Role:** Admin staff manage the backend of the portal, including adding courses, managing user access, allocating classrooms, and overseeing the overall functioning of the system.
- **Needs:**
  - Ability to add and manage courses and classrooms.
  - Tools to allocate classrooms based on course enrollments.
  - Monitoring and reporting features for attendance, marks, and feedback.
  - User management capabilities, including roles and permissions.

## User Stories:

### 1.Student:

- As a student, I want to register for skill courses so that I can attend and earn credits.
- As a student, I want to receive notifications about classroom allocations so that I know where to attend my classes.
- As a student, I want to view my attendance records and marks so that I can track my performance.
- As a student, I want to provide feedback on courses so that I can express my opinions and suggestions.

### 2.Teacher:

- As a teacher, I want to select the courses I wish to teach so that I can prepare for the upcoming semester.
- As a teacher, I want to mark attendance for my classes so that I can track student participation.
- As a teacher, I want to submit marks for my students so that their performance can be recorded.
- As a teacher, I want to review student feedback so that I can improve my teaching methods.

### 3.Admin Staff:

- As an admin, I want to manage courses and classrooms so that the portal functions smoothly.
- As an admin, I want to allocate classrooms based on student strength so that classes are conducted efficiently.
- As an admin, I want to monitor attendance and marks submissions to ensure accuracy and completeness.
- As an admin, I want to manage user roles and permissions so that each user has appropriate access.

## Functional Requirements

### 1. Course Registration:

- Students can view and register for available skill courses.
- Teachers can select the courses they want to teach.
- The system verifies prerequisites and ensures that students meet the criteria for course registration.

### 2. Classroom Allocation:

- The system automatically allocates classrooms based on the number of students enrolled in each course.
- The admin can set up classrooms with details like capacity and location.
- Notifications are sent to students and teachers with details of classroom allocation.

### 3. Attendance Management:

- Teachers can mark attendance for students in each class.
- Attendance records are stored and can be viewed by students and teachers.
- Reports can be generated for attendance records for admin use.

#### 4. Mark Submission:

- Teachers can submit marks for each student in their courses.
- Students can view their marks after submission.
- The system provides secure storage for marks and ensures data integrity.

#### 5. Feedback Collection:

- Students can submit feedback on courses they have attended.
- Feedback is collected anonymously and can be reviewed by teachers and admin staff.
- The system aggregates feedback for analysis and reporting,

### SYSTEM FLOWCHART:



