

## WEEK 5

### **Implementation of basic UI components for key screens. Initial integration of frontend and backend for basic functionality**

#### **Aim:**

To develop and integrate essential UI components for the **One Credit Course Registration and Course Exemption** system, enabling seamless student interaction and backend connectivity for core functionalities.

#### **Objectives:**

- Design and implement key UI components for **Course Registration** and **Course Exemption** workflows.
- Establish frontend-backend communication to handle course selection, registration, and exemption requests.
- Ensure a responsive and user-friendly interface for students and administrators.
- Implement validation rules to ensure proper course selection and eligibility criteria.
- Enable secure data exchange between frontend and backend through APIs.
- Perform functional testing to verify system reliability.

#### **Overview:**

The **One Credit Course Registration and Course Exemption** system allows students to register for short-term courses and apply for exemptions based on predefined criteria. The project includes developing UI components for course selection, submission forms, status tracking, and notifications. Backend integration ensures data persistence, eligibility verification, and approval workflows.

#### **Scope:**

##### **1. Frontend Implementation**

- **Course Registration UI:**
  - List of available one-credit courses with details (name, schedule, instructor).
  - Search and filter functionality.
  - Course selection and enrollment form.
  - Registration confirmation and status tracking.
- **Course Exemption UI:**

- Form for exemption request submission (including reason and supporting documents).
- Status tracking for exemption requests.
- Notifications for approval/rejection.
- **General UI Components:**
  - Login/Authentication Page (if required).
  - Dashboard for managing registered/exempted courses.
  - Navigation and accessibility features.

## 2. Backend Integration

- **Course Registration API:**
  - Endpoints for retrieving course details.
  - API for handling student registrations.
  - Validation checks for eligibility and seat availability.
- **Course Exemption API:**
  - Endpoints for submitting exemption requests.
  - API for approval workflow (faculty/admin review).
  - Storage for supporting documents.
- **Database Setup:**
  - Tables for storing course details, student registrations, and exemptions.
  - Status tracking for approvals and registrations.