# ITCS 333: Course Project

Responsive Web-Based IT College Room Booking System

Due Date: Saturday 07/12/2024

October 6, 2024

## **Basic Requirements**

- Form groups of 5 to 7 students each.
- Use current web and Internet development tools and techniques to create a small web-application.
- Submit a team list on Blackboard.
- Submit a GitHub repository containing the entire project.
- Demonstrate the completed project to the instructor.

# Project Main Goal

Develop a responsive web-based room booking system for the IT College, incorporating various features to enhance user experience and administrative capabilities.

# Design Requirements

- Use PicoCSS, Bootstrap, or any other CSS framework of your choice.
- Ensure responsiveness in at least 3 views (Desktop, Tablet, Mobile).
- Make it visually appealing and consistent across all pages.

• DO NOT USE READY-MADE TEMPLATES.

## Main Programming Tools

- Implement using PHP, HTML/CSS, and JavaScript.
- Use MySQL database with PDO/PHP interface for database access.
- Assume the website will run on an Apache server.

### Task Distribution

### 1. User Registration and Login

- Implement user registration system
- Create login functionality
- Develop advanced validation for UoB emails
- Design and implement the registration and login pages

### 2. User Profile Management

- Develop user profile management features
- Implement profile editing functionality
- Create profile picture upload and management
- Design and implement the user profile pages

#### 3. Room Browsing and Details

- Create room browsing functionality
- Implement room details view
- Display room capacity, equipment, and available timeslots
- Design and implement the room browsing and details pages

## 4. Booking System

• Implement room booking functionality

- Develop conflict checking algorithm
- Create booking cancellation feature
- Design and implement the booking interface

### 5. Admin Panel

- Design and implement admin dashboard
- Create room management system (add, edit, delete rooms)
- Implement room schedule management
- Design and implement the admin interface

### 6. Reporting and Analytics

- Develop reporting system for room usage and popularity
- Create user dashboard for viewing upcoming and past bookings
- Implement a dashboard for viewing room usage statistics
- Design and implement the reporting and analytics pages

### 7. Comment System

- Implement a comment system for users to leave feedback about rooms
- Create functionality for admins to view and respond to comments
- Develop a notification system for new comments and admin responses
- Design and implement the comment interface for both users and admins

# Collaborative Responsibilities

- Agree on a consistent design language and user experience
- Design the overall database schema
- Perform integration testing of the full system