EASTERN INTERNATIONAL UNIVERSITY
SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGY

Practice Assignment – Quarter 1, 2024-2025
Course Name: .Net Programming
Course Code: CSE 443
Student's Full Name:
Student ID:

Project Assignment

As part of your learning journey in the .NET Programming course, you are encouraged to apply the concepts and skills you have acquired across various chapters to create a comprehensive project. This project will enable you to demonstrate your understanding of C# programming, ASP.NET Core MVC, Entity Framework, authentication and authorization concepts, and web APIs.

Project Overview

You will design and develop a web application that incorporates the principles and features discussed throughout the course. This project will help solidify your knowledge and give you hands-on experience in building a complete solution.

Suggested Project Ideas

1. **Library Management System**
   - **Description**: Develop a system for managing library resources, including books, authors, categories, and user accounts.
   - **Key Features**:
     - User authentication and role-based authorization (Admin, User).
     - CRUD operations for books, authors, and categories.
     - Book lending and returning functionality.
     - Search and filter options for finding books.

2. **E-Commerce Application**
   - **Description**: Create an online store where users can browse products, manage their shopping cart, and complete purchases.
   - **Key Features**:
     - User registration and login with secure authentication.
     - Product catalog with search and filter capabilities.
     - Shopping cart management.
     - Order history and user profiles.

3. **Task Management Tool**
   - **Description**: Build a tool that allows users to create, manage, and track tasks or projects.
   - **Key Features**:
     - User authentication and role management.

- CRUD operations for tasks and projects.
- Priority and due date management.
- Email notifications for task deadlines.

4. **Personal Finance Tracker**
   - **Description**: Design an application to help users track their income, expenses, and budgets.
   - **Key Features**:
     - User registration and secure login.
     - CRUD operations for income and expense records.
     - Budget setting and tracking features.
     - Data visualization for spending trends.

5. **Event Management System**
   - **Description**: Create a platform for organizing and managing events, including registrations and ticket sales.
   - **Key Features**:
     - User authentication with different roles (Admin, Attendee).
     - Event creation, management, and registration features.
     - Payment processing for ticket sales.
     - Notification system for event reminders.

Feel free to choose any project topic beyond those suggested here, but ensure it aligns with the skills and knowledge you've gained during the course. This project should reflect your understanding of the .NET programming framework and your ability to build functional, secure web applications.

Project Requirements

- Do your project in the team.
- Implement authentication and authorization using ASP.NET Core Identity.
- Use Entity Framework for database management and data access.
- Utilize AJAX for dynamic interactions with the server.
- Follow MVC architecture for structuring your application.
- Incorporate error handling and validation throughout the application.

Expected Learning Outcomes

By completing this project, you will:

- Gain practical experience in building a full-stack application using .NET technologies.
- Enhance your understanding of C# programming and object-oriented principles.
- Apply web development skills, including front-end design and back-end integration.
- Develop problem-solving abilities as you encounter and overcome challenges throughout the project.

Conclusion

This project will serve as an excellent opportunity for you to showcase your skills and creativity while reinforcing the concepts learned in the .NET Programming course. Choose a project idea that resonates with you, and start planning your development process!

1. Zip your project into the *.rar file then submit to moodle and give the github link within access is public.
2. Submit a report of at least 15 pages introducing and describing the project (Prepare the word file and no need to printed).