

Assignment: Developing an Online Bookstore with ASP.NET Core

This assignment aims to simulate a real-world project scenario, enhancing your understanding of ASP.NET Core's capabilities and preparing you for further web development challenges.

Overview

This assignment involves developing key features of an online bookstore using ASP.NET Core. The primary focus will be on understanding and implementing Razor Pages, linking external CSS files, using the `FirstOrDefault` method, passing models through controllers to views, and utilizing Tag Helpers. Through these tasks, students will gain practical experience in web development while addressing real-world scenarios.

Objectives

- Implement and understand Razor Pages in ASP.NET Core for dynamic web UI development.
- Link external CSS files to enhance the visual consistency of web pages.
- Use the `FirstOrDefault` method to retrieve data from the database.
- Pass models from controllers to views to display data dynamically.
- Employ Tag Helpers to create dynamic HTML content.

Tasks and Deliverables

Task 1: Implementing Razor Pages

- **Scenario:** The bookstore requires dynamic pages for displaying book categories, individual book details, and user profiles.
- **Requirement:** Create a Razor Page for displaying individual book details. Include HTML markup and C# code in the same file.
- **Example:** Implement a `BookDetailModel` Razor Page that displays the title and description of a book.

Task 2: Linking an External CSS File

- **Scenario:** The online bookstore should maintain a consistent and appealing visual style across all pages.
- **Requirement:** Link an external CSS file to a Razor View to ensure consistent styling.
- **Example:** Add a link to an external CSS file named `site.css` in the `<head>` section of a Razor View.

Task 3: Using the `FirstOrDefault` Method

- **Scenario:** Retrieve book details from the database when a user selects a book.

- **Requirement:** Use the `FirstOrDefault` method in the data context to find a book by its ISBN.
- **Example:** Write a method in your data context to retrieve a book's details using its ISBN.

Task 4: Passing a Model to a View Through the Controller

- **Scenario:** Display detailed information of a book on a separate page when a user clicks on the book title.
- **Requirement:** Pass a model containing book details from the controller to the view.
- **Example:** Implement an `ActionResult` method in the controller that retrieves a book by ID and passes it to a view.

Task 5: Using Tag Helpers for Dynamic Link Creation

- **Scenario:** Dynamically create navigation links to different book categories in the bookstore's menu.
- **Requirement:** Utilize Tag Helpers to generate dynamic links based on book categories.
- **Example:** Use Tag Helpers to create a link to the "Science" category in the bookstore navigation menu.

Submission Guidelines

- Complete all tasks listed above and submit your source files.
- Provide screenshot(s) of the output in the browser when your project is up and running.