ISC 559 – IS Application Design and Implementation
Assignment 1: Starter Project (10 points)

For your assignment, create a new MVC Core project called "StarterProject". Be sure to follow the steps from the lecture for adding the required NuGet packages and make the necessary modifications to the Startup.cs file.

Follow these steps for the remainder of the assignment:

- Create folders for Models, Views, and Controllers.
- Create a new controller called HomeController.
- Under the Views folder, create a new subfolder called Home and create a new MVC View Page called Index within the Home subfolder. The content of your view should contain the basic starting HTML demonstrated in the MVC Project Basics lecture video.
- Under the Models folder, create a new C# class called TaxCalculator. The class should have two properties -- Subtotal (decimal) and TaxRate (decimal). The class should have one method -- CalculateTotal. The body of the method should contain one line of code that returns a calculation of Subtotal times 1 plus the TaxRate:
  ```
  public class TaxCalculator
  {
          public decimal Subtotal { get; set; }
          public decimal TaxRate { get; set; }

          public decimal CalculateTotal()
          {
              return Subtotal * (1 + TaxRate);
          }
  }
  ```
- In HomeController, include the following line of code in your namespace references:
  using StarterProject.Models;
- In HomeController, modify the Index method to include the following line of code just before the return statement:
  ```
  TaxCalculator tc = new TaxCalculator { Subtotal = 100,
  TaxRate = 0.10M };
  ```
- While still in the Index method, modify the return statement so that the View() method receives your new TaxCalculator object as a parameter:
  return View(tc);
- Go to your Index view. Add the following two lines of code to the top of your view's content, which will reference your Models namespace and set your view's model as a TaxCalculator:
  ```
  @using StarterProject.Models
  @model TaxCalculator
  ```
- While still in the Index view, add the following Razor code in your view's body, which will call the CalculateTotal method by referencing the view's Model property:
  @Model.CalculateTotal()
- Run the project. You should see the value of the calculated total for the TaxCalculator object passed to the view.

To submit your assignment, create a .zip file containing the contents of your project's folder (likely located under Documents\Visual Studio 2022\Projects or C:\Users\[YourWindowsUserName]\Source\Repos). Attach your .zip file to your submission.