**Description**

**Scenario :**

Pioneer University is a prestigious educational institution looking to modernize its student management system. As a skilled software developer, your task is to develop a web-based application using ASP.NET Core application. This application will allow administrators to  register and manage student information efficiently.

**Functionalities :**

Implement the model as per the below-mentioned**public**properties in**PioneerLogin.cs**

|  |  |  |
| --- | --- | --- |
| **Data Type** | **Variable Name** | **Data Annotation** |
| string | RegistrationNumber | -- Required    -- Error Message = "Please enter your registration number" |
| string | Password | -- Required    -- Error Message = "Please enter your password"    -- Annotation type should be **Password** |

Implement the model as per the below-mentioned**public**properties in**Freshman.cs**

|  |  |  |
| --- | --- | --- |
| **Data Type** | **Variable Name** | **Data Annotation** |
| int | Id | -- Key |
| string | RegistrationNumber | -- Required    -- Error Message = "Please enter your registration number" |
| string | Name | -- Required    -- Error Message = "Please enter your name" |
| string | Password | -- Required    -- Error Message = "Please enter your password"    -- Annotation type should be **Password** |
| string | ConfirmPassword | -- Required    -- Error Message = "Please re-enter your password"    -- Annotation type should be **Password**  -- Compare this ConfirmPassword with **Password** |
| int | Age | -- Required    -- Error Message = "Please enter your age" |
| long | MobileNumber | -- Required    -- Error Message = "Please enter your mobile number" |

Implement the below-mentioned public properties in **PioneerDBContext.cs**which extends the **DbContext**

|  |  |
| --- | --- |
| **Data Type** | **Variable Name** |
| DbSet<Freshman> | Freshmen |

**NOTE:**

For Creating Migration, Use this below code in the Package Manager Console

**1. add-migration SampleName**- once this migration is successful, then move to next step

**2. update-database**

You can give any name instead of SampleName

Implement the below-mentioned public methods in the **PioneerController.cs**which extends the **Controller**

|  |  |
| --- | --- |
| **Method** | **Rules** |
| public IActionResult PioneerPortal() | -- This method's view page should get the input from the user and click on the Login button or need to click the Register link to register the details    -- Get the inputs such as RegistrationNumber and Password |
| public IActionResult PioneerPortal(PioneerLogin login) | -- This method is http post request of the PioneerPortal() method    -- Check whether the given RegistrationNumber is present in the database or not. If yes then navigate to **Dashboard**page else return to the same page. |
| public IActionResult InsertFreshman() | -- This method's view page should get the inputs from the user and click on the Add button.    -- Get the inputs such as RegistrationNumber, Name,  Password, ConfirmPassword,  Age,  MobileNumber.  **Note: No need to display the Id because it should be declared as Key** |
| public IActionResult InsertFreshman(Freshman freshman) | -- This method is http post request of the InsertFreshman() method   -- Add the details to the database   -- If the RegistrationNumber and Password is same then display the message as per the sample output |
| public IActionResult Dashboard(PioneerLogin model) | -- This method's view page should display the greeting message for the freshman |

Create the following views for the **PioneerController**class with **Razor view Engine**

Create a view named**PioneerPortal.cshtml**for the PioneerPortal method that has the form, Login button id should be **'btnLogin'** and Register link's id should **'lnkRegister'**

Create a view named **InsertFreshman.cshtml** for the InsertFreshman method that has the Freshman form, Add button id should be **'btnAdd'**

Create a view named **Dashboard.cshtml** for the Dashboard method that should display the message as per the given sample output. The message should be in a **h1**tag with id **'message'**

When the user enters the valid RegistrationNumber and password in the PioneerPortal page, then it should navigate to Dashboard page and display the message.

**Sample Input/Output:**

**Step 1:**

User launches the application and PioneerPortal page is displayed to the user as follows

A screenshot of a computer

AI-generated content may be incorrect.

**Step 2:**

If there are any validation failures in the PioneerPortal page, application will display the appropriate message as follows

A screenshot of a login box

AI-generated content may be incorrect.

**Step 3:**

User click on the Register link, then InsertFreshman.cshtml page is displayed to the user as follows

A screenshot of a computer

AI-generated content may be incorrect.

**Step 4:**

If there are any validation failures in the InsertFreshman page, application will display the appropriate message as follows

A screenshot of a computer screen

AI-generated content may be incorrect.

**Step 5:**

User fill up all the required details(Same RegistrationNumber and password) and click the Add button which will display the message in the same page as follows

A screenshot of a computer

AI-generated content may be incorrect.

**Step 6:**

User fill up all the required details and click the Add button which will save the user details in the database

A screenshot of a computer

AI-generated content may be incorrect.

It should navigate to PioneerPortal page and enter the valid details

A screenshot of a computer

AI-generated content may be incorrect.

**Step 7:**

Dashboard.cshtml page will display the message as follows

A screen shot of a computer

AI-generated content may be incorrect.