IPG521

Class Activity – May 2021

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Due Date: 20th May 2021 09:00

In order to complete this activity, use the **StudentFiles** provided along with this activity.

Instructions:

a) Make sure that you save your work appropriately.
b) Make sure that you use C# language (**Visual Studio 2019, ASP.NET 5**) for your website.
c) Do not share your work or submit someone's work.
d) **This activity is optional and does not contribute to your formal assessments.**
e) Please note that if instructions are not followed, marks will be lost.
f) See **Appendix** how your final website should be.

Question 1

In the **StudentsFiles** you are already provided with the Razor View for the home page, an image folder containing images to be used in your website and also the logo.

1.1 Adapt the provided **Index.cstml** file to your application home page to make it look as shown in the appendix.

1.2 Add the provided images folder to your application. Make sure you place this folder in a correct directory as discussed in class.

1.3 Add the logo and modify the background colour your NavBar as shown in the appendix.

1.4 Make changes to the **About.cshtml** to display your own information.

1.5 Make changes to the **Contact.cshtml** to display your own information

Question 2

Controllers necessary for this application.

HomeController

This controller contains action method to display the **Home** page, **About** page and **Contact** page. Do not make any changes to this controller.

PlantController

Create a new **Controller** and name it **PlantController,** ensure you do this in a correct directory.

This controller should allow users to perform the following actions:

- View a list of all plants (Ordered in ascending by **PlantName**).
- View details of a specific plant.
- Add information for a plant.
- Edit a specific Plant.
- Delete a specific Plant.

Hint:

- Implement the necessary action methods for the **PlantController**.
- Make use of try/catch blocks to handle all errors that occur when making changes to the database.

Question 3

Database and necessary **Model(s)**

Add a new Model class and name it **Plant,** please note the following about your model class:

- Add the following properties
    - PlantId
    - PlantName
    - PlantLifeSpan
    - PlantSize
    - PlantPrice
    - PlantDescriptions

- Data Validation
    - PlantId
        - Ensure this property is a primary key and it is automatically incremented
    - PlantName
        - This property is required, set a necessary error message if omitted.

        - Set a maximum length of 100, set a necessary error message if length exceeded.
    - PlantLifeSpan
        - This property is required, set a necessary error message if omitted.
    - PlantSize
        - This property is required, set a necessary error message if omitted
    - PlantPrice
        - This property is required, set a necessary error message if omitted
    - PlantDescriptions
        - This property is optional
        - Set a maximum length of 1000 and minimum of 10, set a necessary error message if length exceeded or not met.

Ensure to set appropriate **Display names** for each of these properties

Add a new folder to your application and name it **Data**

- Add a context class and name it **AppDbContext:**
    - Write the necessary code to create a Plants table on your database.
    - Add at least 5 plants records to ensure your application have records by default.

Hints:

- Install the necessary package(s) on your application using *Nugget Package Manager* (watch the class recording if you've forgot how to achieve this).
- Use the *Nugget Console Manage* to add and update your database.
- Make use of the *Seed* method in the *Configuration* class to add default records.

Save and submit your work

Attach a zipped folder of your application along with a short video of you showcasing your final application to **SharePoint**, share your files with me (paulon@ctucareer.co.za).