<table>
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MIS 316
SPRING 2020

PROJECT 5

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Use of Classes and Session Variables

Help? I will have virtual office hours most Monday to Thursday from 9 am to Noon.

In addition on selected Tuesday/Thursday will have OPEN office hours for anyone from MIS 316 to join in and share in the learning.
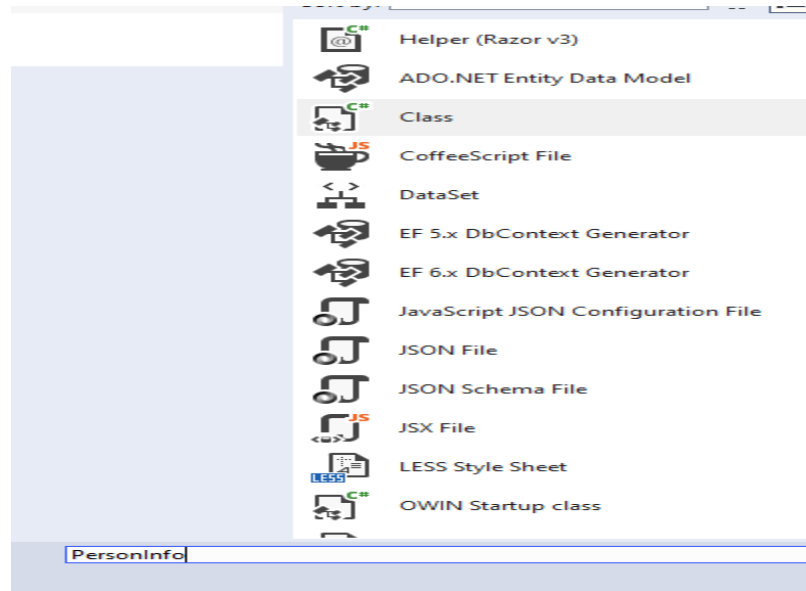
The link to click to get to my 'zoom' room is on the class web site. You might want to send me an email if I don't respond when you get to the zoom room.

1. Either open your project on the MISCapstone server using HORIZON or use VPN and VS on your own machine. See the class website for the PDF on how to use HORIZON.

2. When using Visual Studio, please start by clicking FILE OPEN WEBSITE and point toward at your folder (S20xxx) versus pointing at your .sln file

3. There should be a starting Project5.asxp file in your S20folder, as it will have all of the HTML and error checking complete for this project..

4. Fix any errors on the as noted in Entropy for Projects 4 and test any changes.

Project 5

5. Scan Chapter 12 in your text, it will give you an introduction to the concept of CLASSES, a CLASS is a way to group like properties, Like in the text we will build a CLASS for a person so we can group first name, last name, etc and only refer to the CLASS as person (versus each one independently, like strFirstName, strLastName, etc)

6. Open the Project5 aspx starting file
   a. Update the title tag – first line
   b. Update the H tag with your name
   c. Save

7. Open the site.Master and modify the black navigation bar to direct users to this page
   d. Open the site.master page
   e. Look around row 57 where you have them directed to Project 4
   f. Copy this row and modify the href portion to direct them to Project5 and change the text to be Project 5 (with space)
   g. Save and Test, when you click Project 5 does it take you to your new page?

8. Close the site.master and have open only the Project5.aspx page

9. We will now build a CLASS to group common attributes or properties about a person.

    h.   Look for the APP_CODE folder in your project.
    i.   Right Click on the folder and Click NEW
    j.   Select Class from the option list
    k.   Change the name from class1.cs to PersonInfo

Helper (Razor v3)	
ADO.NET Entity Data Model	
Class	
CoffeeScript File	
DataSet	
EF 5.x DbContext Generator	
EF 6.x DbContext Generator	
JavaScript JSON Configuration File	
JSON File	
JSON Schema File	
JSX File	
LESS Style Sheet	
OWIN Startup class	

PersonInfo

10. Add your first property for first name as in:
    l.   public string firstName {get; set}

    m. public implies that the property/attribute may be shared between web pages
    n. {get; set;} implies that you will be able to pass values to the property (set) and retrieve that value (get)

```
public class PersonInfo
{

    public string firstName { get; set; }

    public PersonInfo()
    {
        //
        // TODO: Add constructor logic here
        //
```

    o.   Repeat step 11a, for
        i.   lastName
       ii.   email
      iii.   role
      iv.   birthdate (should be datetime)

11. Save and close the PersonInfo Class for now.

12. Return to your Project5 aspx page and double click on the Submit button to generate the _submit_click event where your coding will be placed.

13. The goal will be to grab the values from the text boxes (you know how to do this) and then build an instance (occurrence) of the PersonInfo Class for us to save and use again.

14. Thus, declare five variables and then grab the values from the text boxes and place in your variables, you will only need to convert the birthdate to a datetime type of variable.

15. Now, let's build the CLASS with the data we grabbed in the step above.
    p. Under your _submit_Click, and after you declared your variables and grabbed the values from the text boxes, add the following code to 'declare' the new class and then populate it with data.

       //create a new instance of the PersonInfo Class
       PersonInfo person = new PersonInfo();
       person.firstName = strFirstName (assuming this is the name of your variable for first name)

       Repeat four more times for the other properties of the Class

    q. Now let's 'save' this new Class for use on another web page

       Session["person"] = person;

       The above creates a variable in RAM on the web server so it can be used on other pages

    r. We will move to another page, and see if we can 'recall' the Sesison variable and display its results

       Response.Redirect("Project5-2.aspx");

16. One more task on the Project5 page, we need to be able to clear the text boxes, so double click on the CLEAR DATA button, then the code under the _Click event should start as:

    _firstName.Text = "";

    Repeat for the other 4 objects

17. Open your Project5-2.aspx page, notice the HTML has been completed for you.

18. All of your code will go under the Page_Load Method. This implies do this as you are building the page and don't wait for a user to click and button

19. Create a new instance of the PersonInfo class, just like you did on the prior page.

    s.   PersonInfo person = new PersonInfo();

20. Retrieve the session variable from the server's RAM memory

    t.   person = (PersonInfo) Session ["person"];
    u.   Implies take what is in the session variable and then Convert the results to an instance of the PersonInfo Class, named person.

21. Now move the items to labels to display the results
    v.   _firstName.Text = person.firstName.ToString();

    w.   Repeat four more time and note the formatting for the birthdate (its in your project)

22. Save your work, and test, you must start with page Project5, as it has to run first in order to provide values to page Project5-2.

23. Open the personInfo Class in your App-Code folder, we will write a method (repeatable code) to calculate how old the person is in days.

24. Create this method, immediate before the last } on the page

```
public static int GetDaysOnEarth(DateTime dateIn)
    {

    }
```

25. Inside the above new method, declare an integer variable to store the number of days as in: int daysCount = 0;

26. C# can subtract two dates and give you the number of days between as in:
`daysCount = (DateTime.Now - dateIn).Days;`

27. Return daysCount as the last step of your method like you did in Project 4

28. Finally back on Project5-2, add this line to call the method inside the PersonInfo class and have it calculate the number of days on Earth, as in:
_daysOnEarth.Text = PersonInfo.GetDaysOnEarth(person.birthDate).ToString();

29. TEST your results please, you must start with the Project5 page first and populate the text boxes and hit submit.

30. When complete send me an email for me to grade, please put MIS 316 – Grade Project 5 in the subject line.