

T322 2022: ICT272 Web Design and Development

Tutorial 10

Topic: Data Annotation and CSS

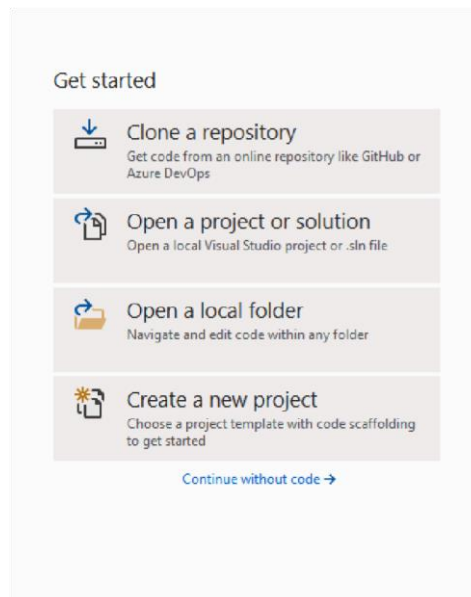
Submission: Submit to Moodle link (Week 10)

Exercise 1 – Answer the following questions:

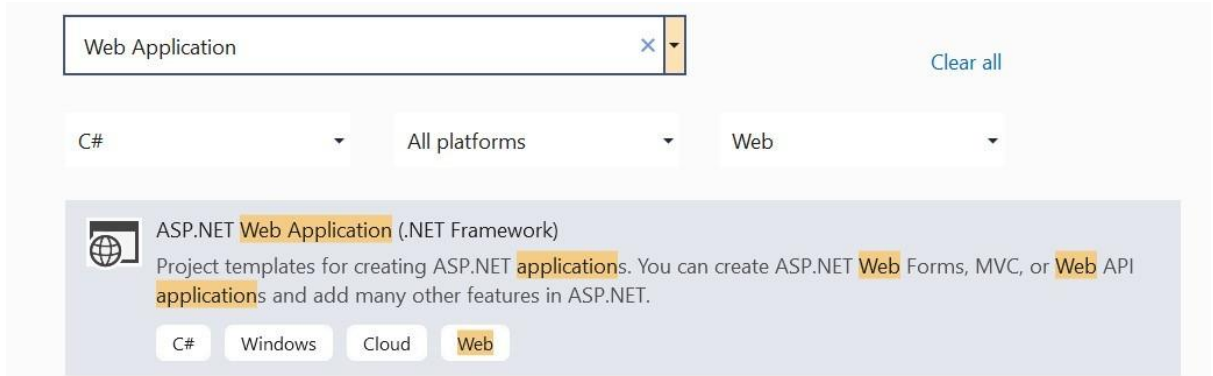
- Why we use Data annotation?
- What are selectors in CSS?
- What is difference between inline CSS and internal CSS?

Exercise 2: Create ASP.NET MVC application

1. Start your visual studio 2019
2. Click on Create a new project



3. Search for “**Web Application**” in search box and select “**ASP.NET Web Application (.NET Framework)**” with **C#** and then click Next.



4. Name your project “**Tutorial11Ex2**” and untick “Place solution and project in the same directory”. Then click **Create**.
5. Choose **MVC** and then click **Create**.
6. Create class in model and name it as **Student**. Add following code to it.

```

1  using System;
2
3  using System.ComponentModel;
4
5  using System.ComponentModel.DataAnnotations;
6
7  namespace Tutorial11Ex2.Models
8  {
9      public class Student
10     {
11         public int StudentID { get; set; }
12
13         [DisplayName("StudentName")]
14         [Required(ErrorMessage = "Enter Student Name")]
15         [StringLength(50, ErrorMessage = "Only 50 character are allowed")]
16         public string StudentName { get; set; }
17
18         [EmailAddress]
19         public string StudentEmailID { get; set; }
20
21         [Range(5000, 15000, ErrorMessage = "Please enter valid range")]
22         [Required(ErrorMessage = "Please enter Student Fees")]
23         public decimal StudentFees { get; set; }
24
25         [Required(ErrorMessage = "Please enter Student Address")]
26         [StringLength(50, ErrorMessage = "Only 50 character are allowed")]
27         public string StudentAddress { get; set; }
28
29         [DataType(DataType.Password)]
30         [Required(ErrorMessage = "Please enter password")]
31         public string Password { get; set; }
32
33         [Required(ErrorMessage = "Please enter ConfirmPassword")]
34         [DataType(DataType.Password)]
35         [Compare("Password", ErrorMessage = "Password not matching")]
36         public string ConfirmPassword { get; set; }
37     }
38 }

```

7. Create Controller:



To add a **Controller**, right-click on **Controllers** folder, click on **Add** and select the **Controller**. In Add New Scaffolded Item Window box, select **MVC5 Controller with views, using Entity Framework** and click on **Add**, give the Controller name as **StudentController** and click on **Add**, with this a new controller

8. Run the code and browse to /Student/Index. This will display following page.

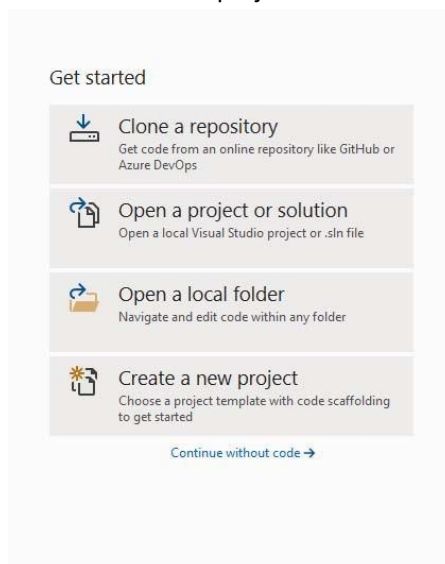


What to submit

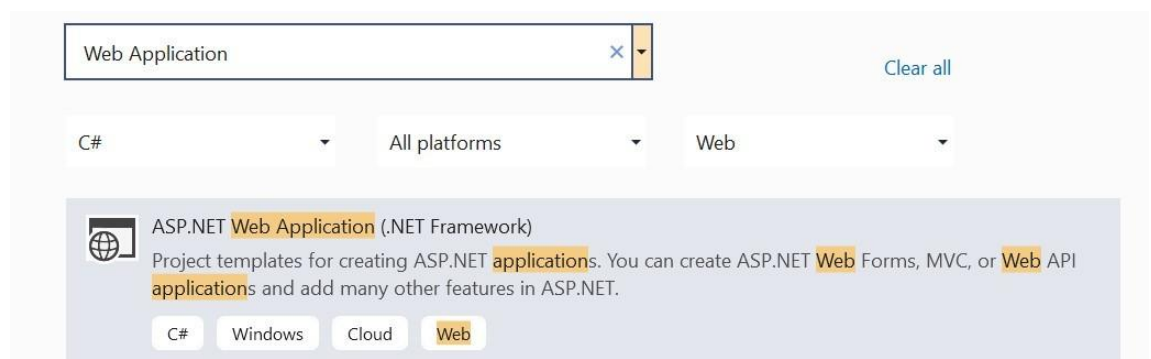
- The source code of Program file (Main function)
- The output of the program

Exercise 3: Create ASP.NET MVC application

1. Start your visual studio 2019
2. Click on Create a new project



1. Search for “**Web Application**” in search box and select “**ASP.NET Web Application (.NET Framework)**” with **C#** and then click Next.



2. Name your project “**Tutorial11Ex2**” and untick “Place solution and project in the same directory”. Then click **Create**.
3. Choose **MVC** and then click **Create**.
4. Add a **Controller** called **StudentController**.

```
namespace Tutorial11Ex2.Controllers
{
    public class StudentController : Controller
    {
        public ActionResult Index()
        {
            return View();
        }
    }
}
```

5. Right-click on **Student** folder in **Views** folder, click on **Add** and select **Add View**. In Add View window box, give the view name as the Action method name that is **Index**, template as **Empty(without model)** and click on **Add**. With this Index.cshtml view is added to the Student View folder.
6. Open the **Index.cshtml** file (In Student View folder) and add the below code.

```
@{ ViewBag.Title = "Index"; }

<style>
    body {
        background-color: lightblue;
    }
    ul {
        list-style: square inside url("sqpurple.gif");
    }
    table {
        border-collapse: collapse;
        width: 100%;
    }
    th, td {
        text-align: left;
        padding: 8px;
    }
    tr {
        background-color: #f2f2f2
    }
    th {
        background-color: #4CAF50;
        color: white;
    }
</style>
<h1 style="color:blue;text-align:center;">This is a Week 11</h1>
<p style="color:yellow;">This is a paragraph.</p>

<h1 style="color:green;text-align:center;">This is inline CSS</h1>
<p style="color:red;">This is a paragraph.</p>

<h2>Colored Table Header</h2>

<table>
    <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Savings</th>
    </tr>
    <tr>
        <td>Peter</td>
        <td>Griffin</td>
        <td>$100</td>
    </tr>
    <tr>
        <td>Lois</td>
        <td>Griffin</td>
        <td>$150</td>
    </tr>
</table>

<h2>CSS Lists</h2>
<p>The list-style property is a shorthand property, which is used to set all the list properties in one declaration.</p>

<ul>
    <li>Coffee</li>
    <li>Tea</li>
    <li>Coca Cola</li>
</ul>
```

7. Now build and run the solution by navigating to <https://localhost:XXXXX/Student/Index>.
- 8.

9. The output is shown below.

CSSS Home Privacy

This is a paragraph.

This is a paragraph.

This is a paragraph.

This is a Week 11

This is inline CSS

Colored Table Header

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150

CSS Lists

The list-style property is a shorthand property, which is used to set all the list properties in one declaration.

- Coffee
- Tea
- Coca Cola

What to submit

- The source code of Program file (Main function)
- The output of the program

END of Tutorial

