



LAB EXAM

MS.Net Technologies

Total Marks: 20

Time: 2 hours

- I. Write a program in C# Sharp to display the name of the days of the week using LINQ.

FileEditViewGitProjectBuildDebugTestAnalyzeToolsExtensionsWindowHelp

Search (Ctrl+Q)

LabExamQ1

Sign in

Live Share

Program.cs

LabExamQ1

LabExamQ1.Program

Main(string[] args)

```
1
2 namespace LabExamQ1
3 {
4     using System;
5     using System.Linq;
6     internal class Program
7     {
8         static void Main(string[] args)
9         {
10             Console.WriteLine("Hello, World!");
11             string[] daysOfWeek = new string[]
12             {
13                 "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday", "Sunday"
14             };
15             var daysQuery = from day in daysOfWeek
16                             select day;
17
18             foreach (var day in daysQuery)
19             {
20                 Console.WriteLine(day);
21             }
22         }
23     }
24 }
```

100 %

No issues found

Ln: 5 Ch: 23 SPC CRLF

Output

Show output from: Build

Solution Explorer

Git Changes

Solution Explorer

Search Solution Explorer (Ctrl+;)

Solution 'LabExamQ1' (1 of 1 project)

LabExamQ1

Dependencies

Analyzers

Frameworks

Program.cs

Program

Ready

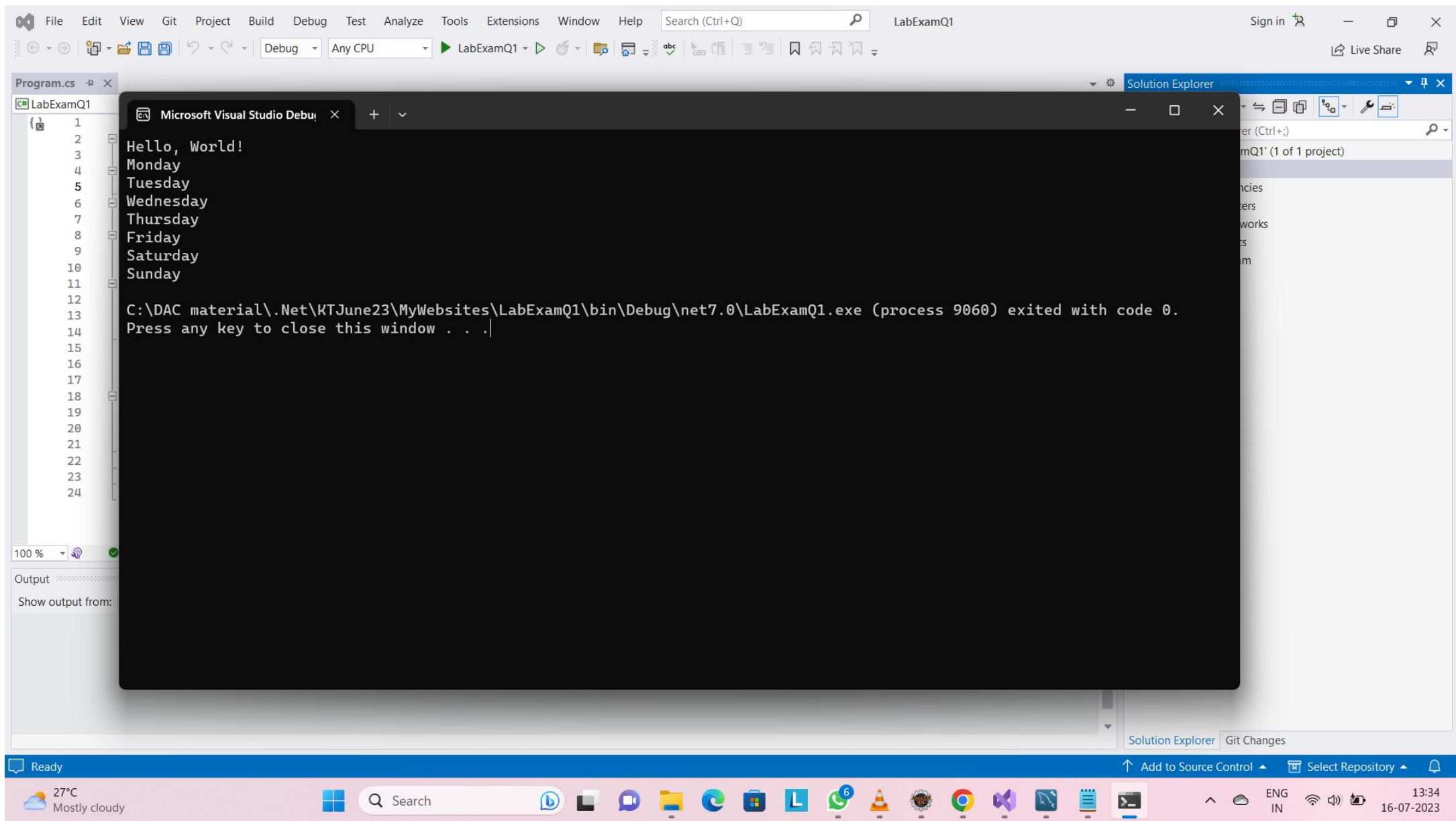
27°C Mostly cloudy

Search

6

ENG IN

13:34 16-07-2023



2. Using ASP.Net Core, create an MVC project for a college with the following pages such as Home, Employee, Student. Create functions such as Index, login and signup. Return the corresponding view pages and display it in the browser.

Visual Studio interface showing the code editor, Solution Explorer, and Windows Taskbar.

Code Editor (HomeController.cs):

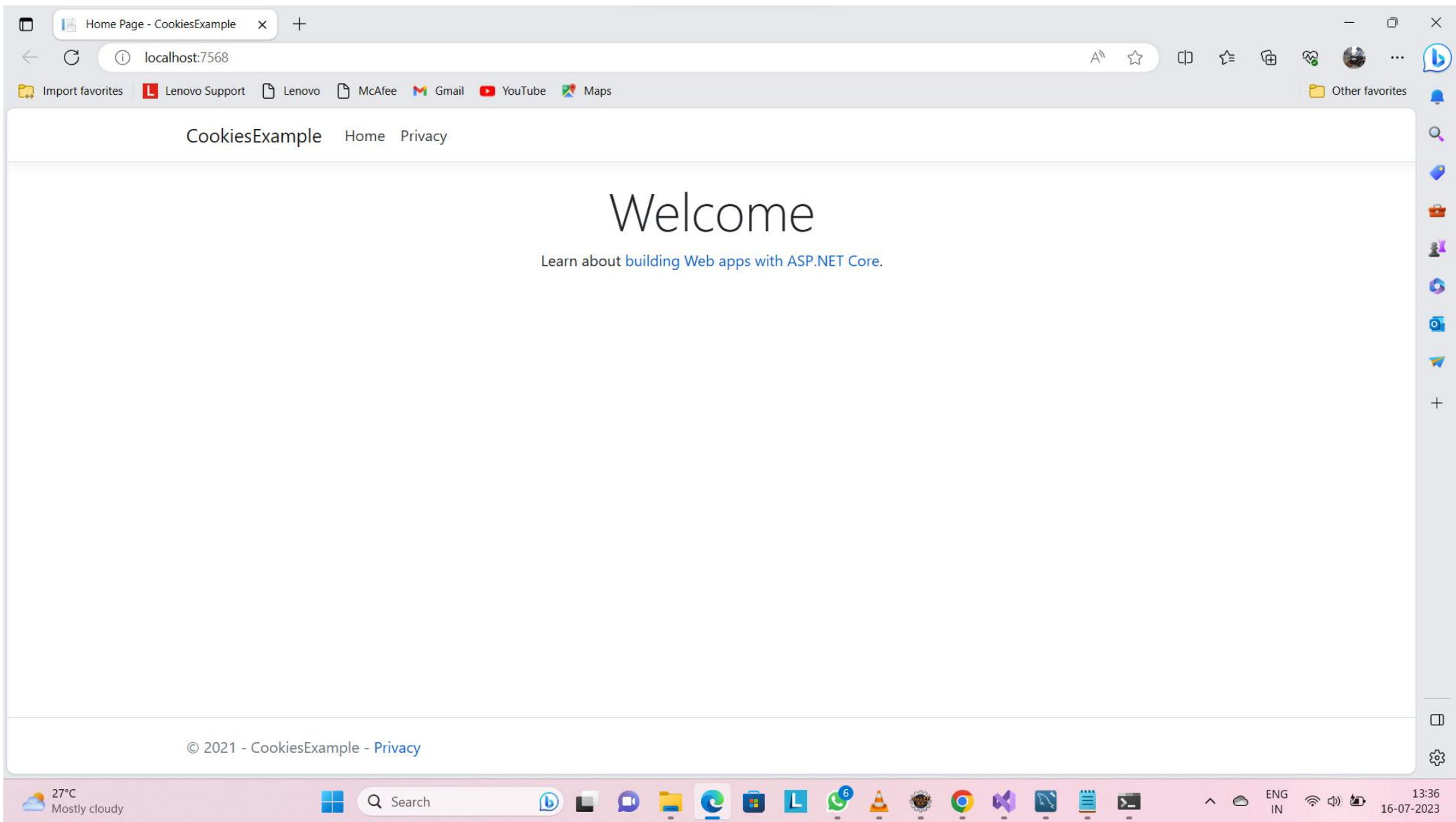
```
1 using CookiesExample.Models;
2 using Microsoft.AspNetCore.Mvc;
3 using Microsoft.Extensions.Logging;
4 using System;
5 using System.Collections.Generic;
6 using System.Diagnostics;
7 using System.Linq;
8 using System.Threading.Tasks;
9
10 namespace CookiesExample.Controllers
11 {
12     public class HomeController : Controller
13     {
14         private readonly ILogger<HomeController> _logger;
15
16         public HomeController(ILogger<HomeController> logger)
17         {
18             _logger = logger;
19         }
20
21         public IActionResult Index()
22         {
23             return View();
24         }
25
26         public IActionResult Privacy()
27         {
28             return View();
29         }
30
31         [ResponseCache(Duration = 0, Location = ResponseCacheLocation.None, NoStore = true)]
32         public IActionResult Error()
33         {
34             return View(new ErrorViewModel { RequestId = Activity.Current?.Id ?? HttpContext.TraceIdentifier });
35         }
36     }
37 }
38
```

Solution Explorer:

- LabExamQ2
 - Connected Services
 - Dependencies
 - Properties
 - wwwroot
 - Controllers
 - EmployeesController.cs
 - HomeController.cs**
 - StudentsController.cs
 - TestController.cs
 - Models
 - DummyData.cs
 - Employee.cs
 - ErrorViewModel.cs
 - Student.cs
 - Views
 - Employees
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Home
 - Index.cshtml
 - Privacy.cshtml
 - Shared
 - Students
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Test
 - Create.cshtml
 - Delete.cshtml
 - Details.cshtml

Windows Taskbar:

- Ready
- 27°C Mostly cloudy
- Search
- Taskbar icons: Edge, File Explorer, VS Code, etc.
- System tray: ENG IN, 13:36, 16-07-2023



Visual Studio interface showing the development of a web application named "CookiesExample".

File Explorer (Solution Explorer):

- Solution 'CookiesExample' (1 of 1 project)
 - LabExamQ2
 - Connected Services
 - Dependencies
 - Properties
 - wwwroot
 - Controllers
 - C# EmployeesController.cs
 - C# HomeController.cs
 - C# StudentsController.cs
 - C# TestController.cs
 - Models
 - C# DummyData.cs
 - C# Employee.cs
 - C# ErrorViewModel.cs
 - C# Student.cs
 - Views
 - Employees
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Home
 - Index.cshtml
 - Privacy.cshtml
 - Shared
 - Students
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Test
 - Create.cshtml
 - Delete.cshtml

Code Editor (EmployeesController.cs):

```
1 using CookiesExample.Models;
2 using Microsoft.AspNetCore.Http;
3 using Microsoft.AspNetCore.Mvc;
4 using System;
5 using System.Collections.Generic;
6
7 namespace CookiesExample.Controllers
8 {
9     public class EmployeesController : Controller
10     {
11         // GET: EmployeesController
12         public ActionResult Index()
13         {
14             List<Employee> lstDummy = new List<Employee>();
15             lstDummy.Add(new Employee { Name = "Kunal", Password = "Kunal@123" });
16             return View(lstDummy);
17         }
18
19         // GET: /Employee/Login
20         public IActionResult Login()
21         {
22             return View();
23         }
24
25         // POST: /Employee/Login
26         [HttpPost]
27         public IActionResult Login(Employee model)
28         {
29             if (ModelState.IsValid)
30             {
31                 // Logic to authenticate the employee
32                 if (IsValidEmployee(model.Name, model.Password))
33                 {
34                     // Redirect to employee dashboard or any other page
35                     return RedirectToAction("Dashboard");
36                 }
37             }
38             else
39             {
40                 // Handle invalid login attempt
41             }
42         }
43     }
44 }
```

Taskbar:

- Ready
- BAN - AFG In 4 hours
- Search
- Visual Studio
- 6 notifications
- 13:38 16-07-2023

Visual Studio interface showing the development of a web application named "CookiesExample".

File Explorer (Solution Explorer):

- Solution 'CookiesExample' (1 of 1 project)
 - LabExamQ2
 - Connected Services
 - Dependencies
 - Properties
 - wwwroot
 - Controllers
 - C# EmployeesController.cs
 - C# HomeController.cs
 - C# StudentsController.cs
 - C# TestController.cs
 - Models
 - C# DummyData.cs
 - C# Employee.cs
 - C# ErrorViewModel.cs
 - C# Student.cs
 - Views
 - Employees
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Home
 - Index.cshtml
 - Privacy.cshtml
 - Shared
 - Students
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Test
 - Create.cshtml
 - Delete.cshtml

Code Editor (EmployeesController.cs):

```
[HttpPost]
public IActionResult Login(Employee model)
{
    if (ModelState.IsValid)
    {
        // Logic to authenticate the employee
        if (IsValidEmployee(model.Name, model.Password))
        {
            // Redirect to employee dashboard or any other page
            return RedirectToAction("Dashboard");
        }
        else
        {
            ModelState.AddModelError("", "Invalid credentials. Please try again.");
        }
    }

    return View(model);
}

private bool IsValidEmployee(object username, string password)
{
    throw new NotImplementedException();
}

// GET: /Employee/Signup
public IActionResult Signup()
{
    return View();
}

// POST: /Employee/Signup
[HttpPost]
public IActionResult Signup(Employee model)
{
    if (ModelState.IsValid)
    {
        // Logic to create a new employee account
        CreateEmployeeAccount(model);
    }
}
```

Taskbar:

- Ready
- BAN - AFG In 4 hours
- Search
- Visual Studio
- 13:38 16-07-2023

Visual Studio interface showing the development of a web application named "CookiesExample".

File Explorer (Solution Explorer):

- Solution 'CookiesExample' (1 of 1 project)
 - LabExamQ2
 - Connected Services
 - Dependencies
 - Properties
 - wwwroot
 - Controllers
 - C# EmployeesController.cs (selected)
 - C# HomeController.cs
 - C# StudentsController.cs
 - C# TestController.cs
 - Models
 - C# DummyData.cs
 - C# Employee.cs
 - C# ErrorViewModel.cs
 - C# Student.cs
 - Views
 - Employees
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Home
 - Index.cshtml
 - Privacy.cshtml
 - Shared
 - Students
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Test
 - Create.cshtml
 - Delete.cshtml

Code Editor (EmployeesController.cs):

```
48 {  
49     throw new NotImplementedException();  
50 }  
51 // GET: /Employee/Signup  
52 public IActionResult Signup()  
53 {  
54     return View();  
55 }  
56  
57 // POST: /Employee/Signup  
58 [HttpPost]  
59 public IActionResult Signup(Employee model)  
60 {  
61     if (ModelState.IsValid)  
62     {  
63         // Logic to create a new employee account  
64         CreateEmployeeAccount(model);  
65  
66         // Redirect to login page or any other page  
67         return RedirectToAction("Login");  
68     }  
69  
70     return View(model);  
71 }  
72  
73 private void CreateEmployeeAccount(Employee model)  
74 {  
75     throw new NotImplementedException();  
76 }  
77 }  
78  
79 }
```

Taskbar:

- Ready
- BAN - AFG In 4 hours
- Search
- Visual Studio
- 13:38 16-07-2023

Visual Studio interface showing a C# project named 'CookiesExample'.

Code Editor (Employee.cs):

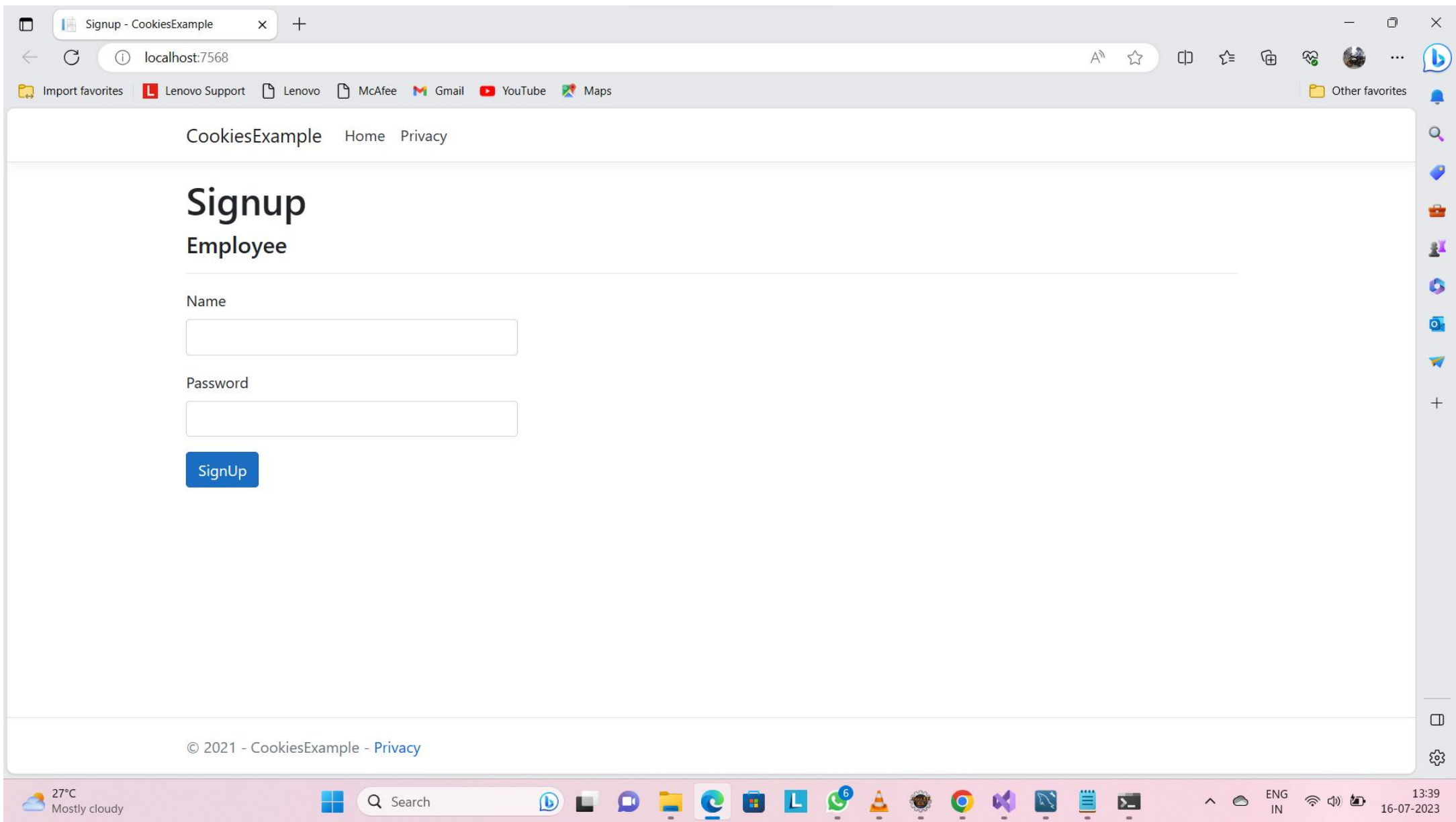
```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5
6 namespace CookiesExample.Models
7 {
8     public class Employee
9     {
10         public string Name { get; set; }
11         public string Password { get; set; }
12     }
13 }
14
```

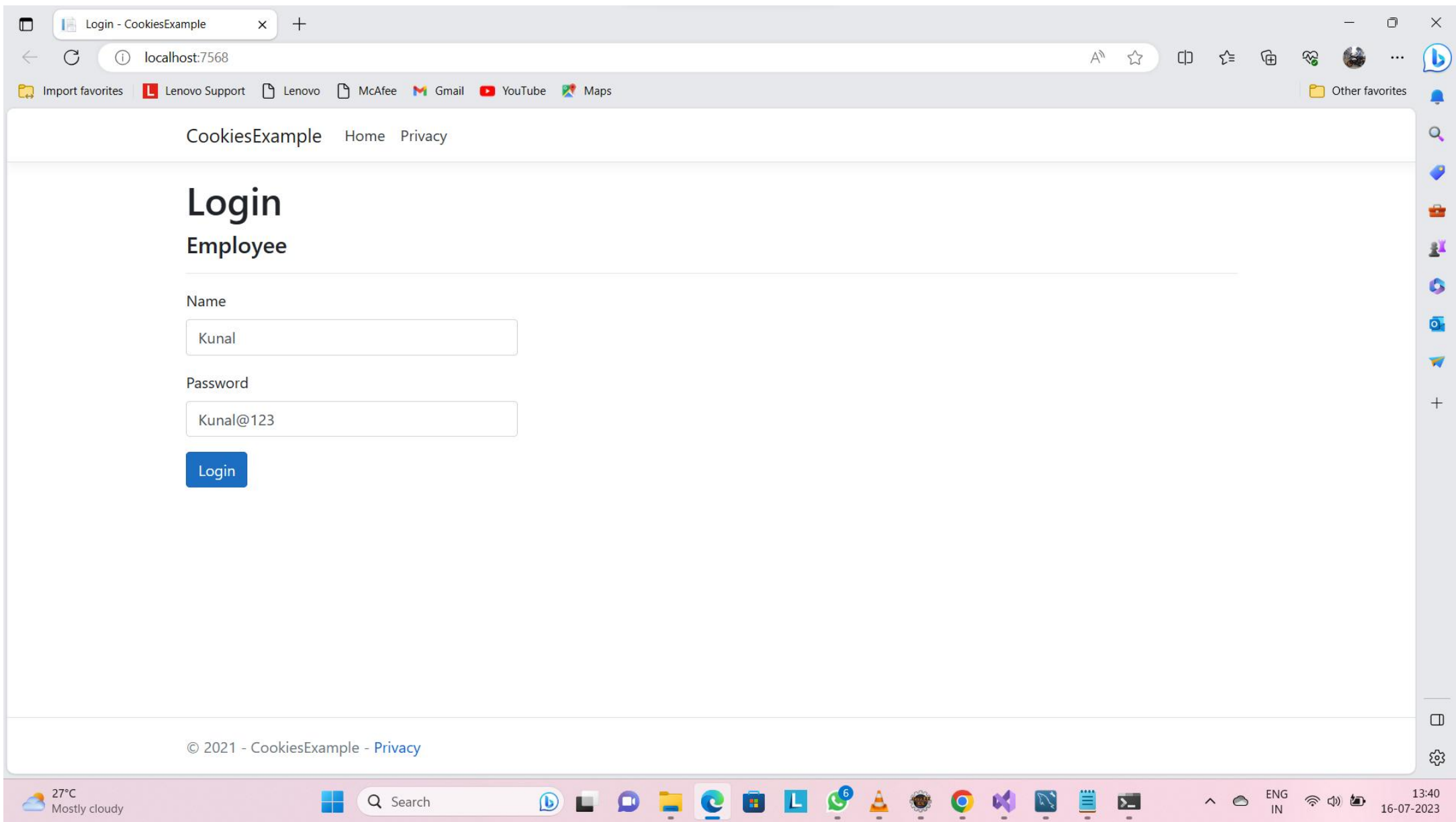
Solution Explorer:

- Solution 'CookiesExample' (1 of 1 project)
 - LabExamQ2
 - Connected Services
 - Dependencies
 - Properties
 - wwwroot
 - Controllers
 - EmployeesController.cs
 - HomeController.cs
 - StudentsController.cs
 - TestController.cs
 - Models
 - DummyData.cs
 - Employee.cs (selected)
 - ErrorViewModel.cs
 - Student.cs
 - Views
 - Employees
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Home
 - Index.cshtml
 - Privacy.cshtml
 - Shared
 - Students
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Test
 - Create.cshtml
 - Delete.cshtml

Taskbar:

- Ready
- BAN - AFG In 4 hours
- Search
- Taskbar icons: File Explorer, Edge, Visual Studio, etc.
- System tray: ENG IN, 13:38, 16-07-2023





Visual Studio interface showing the code for `StudentsController.cs` in the `CookiesExample` project.

Code in `StudentsController.cs`:

```
1 using CookiesExample.Models;
2 using Humanizer;
3 using Microsoft.AspNetCore.Http;
4 using Microsoft.AspNetCore.Mvc;
5 using System;
6 using System.Collections.Generic;
7
8 namespace CookiesExample.Controllers
9 {
10     public class StudentsController : Controller
11     {
12         // GET: StudentsController
13         public ActionResult Index()
14         {
15             List<Student> lstDummy = new List<Student>();
16             lstDummy.Add(new Student { Name = "Kunal", Password = "Kunal@123" });
17             return View(lstDummy);
18         }
19
20         // GET: /Employee/Login
21         public IActionResult Login()
22         {
23             return View();
24         }
25
26         // POST: /Employee/Login
27         [HttpPost]
28         public IActionResult Login(Student model)
29         {
30             if (ModelState.IsValid)
31             {
32                 // Logic to authenticate the employee
33                 if (IsValidStudent(model.Name, model.Password))
34                 {
35                     // Redirect to employee dashboard or any other page
36                     return RedirectToAction("Dashboard");
37                 }
38             }
39             else
40             {
41                 // Handle invalid login
42             }
43         }
44     }
45 }
```

Solution Explorer:

- LabExamQ2
 - CookiesExample.Controllers.StudentsController
 - Index()

File Explorer (Solution Explorer):

- EmployeesController.cs
- HomeController.cs
- StudentsController.cs
- TestController.cs
- Models
 - DummyData.cs
 - Employee.cs
 - ErrorViewModel.cs
 - Student.cs
- Views
 - Employees
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Home
 - Index.cshtml
 - Privacy.cshtml
 - Shared
 - Students
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Test
 - Create.cshtml
 - Delete.cshtml
 - Details.cshtml
 - Index.cshtml
 - _ViewImports.cshtml
 - _ViewStart.cshtml
- appsettings.json
- Program.cs
- Startup.cs

Taskbar:

- Ready
- USD/JPY +0.51%
- Search
- Taskbar icons: Edge, File Explorer, Visual Studio, Teams, WhatsApp, VLC, Chrome, etc.
- System tray: ENG IN, 13:40, 16-07-2023

Visual Studio interface showing the development of a web application named "CookiesExample".

Menu Bar: File, Edit, View, Git, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help.

Toolbar: Includes icons for saving, undo, redo, and running the application (IIS Express).

Search Bar: Search (Ctrl+Q)

Project Name: CookiesExample

Sign in: Sign in (with a user icon)

Live Share: Live Share (with a share icon)

Tab Bar: StudentsController.cs, Index.cshtml, Employee.cs, EmployeesController.cs, HomeController.cs, Startup.cs.

LabExamQ2: CookiesExample.Controllers.StudentsController, Index()

Code Editor: Displays the code for `StudentsController.cs`. The code includes a `Login` action method and a `IsValidStudent` helper method.

```
24 }
25
26 // POST: /Employee/Login
27 [HttpPost]
28 public IActionResult Login(Student model)
29 {
30     if (ModelState.IsValid)
31     {
32         // Logic to authenticate the employee
33         if (IsValidStudent(model.Name, model.Password))
34         {
35             // Redirect to employee dashboard or any other page
36             return RedirectToAction("Dashboard");
37         }
38         else
39         {
40             ModelState.AddModelError("", "Invalid credentials. Please try again.");
41         }
42     }
43
44     return View(model);
45 }
46
47 private bool IsValidStudent(string name, string password)
48 {
49     throw new NotImplementedException();
50 }
51
52 // GET: /Employee/Signup
53 public IActionResult Signup()
54 {
55     return View();
56 }
57
58 // POST: /Employee/Signup
59 [HttpPost]
60 public IActionResult Signup(Student model)
61 {
62     if (ModelState.IsValid)
```

Solution Explorer: Shows the project structure.

- C# EmployeesController.cs
- C# HomeController.cs
- C# StudentsController.cs
- C# TestController.cs
- Models
 - C# DummyData.cs
 - C# Employee.cs
 - C# ErrorViewModel.cs
 - C# Student.cs
- Views
 - Employees
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Home
 - Index.cshtml
 - Privacy.cshtml
 - Shared
 - Students
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Test
 - Create.cshtml
 - Delete.cshtml
 - Details.cshtml
 - Index.cshtml
 - _ViewImports.cshtml
 - _ViewStart.cshtml
- appsettings.json
- Program.cs
- Startup.cs

Diagnostic Tools: No issues found.

Footer: Ready, Add to Source Control, Select Repository, USD/JPY +0.51%, Search, 13:40 16-07-2023.

Visual Studio interface showing the code editor, Solution Explorer, and the Windows taskbar.

Code Editor (StudentsController.cs):

```
45 }
46
47 private bool IsValidStudent(string name, string password)
48 {
49     throw new NotImplementedException();
50 }
51
52 // GET: /Employee/Signup
53 public IActionResult Signup()
54 {
55     return View();
56 }
57
58 // POST: /Employee/Signup
59 [HttpPost]
60 public IActionResult Signup(Student model)
61 {
62     if (ModelState.IsValid)
63     {
64         // Logic to create a new employee account
65         CreateStudentAccount(model);
66
67         // Redirect to login page or any other page
68         return RedirectToAction("Login");
69     }
70
71     return View(model);
72 }
73
74 private void CreateStudentAccount(Student model)
75 {
76     throw new NotImplementedException();
77 }
78
79 // Additional actions, such as Dashboard, Edit, Delete, etc., can be added here
80 }
81
82 }
```

Solution Explorer:

- LabExamQ2
 - CookiesExample.Controllers.StudentsController
 - Index()

Windows Taskbar:

- Ready
- USD/JPY +0.51%
- Search
- Taskbar icons: File Explorer, Edge, VS Code, etc.
- System tray: ENG IN, 13:40, 16-07-2023

Visual Studio interface showing a C# project named "CookiesExample".

Code Editor (Student.cs):

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5
6 namespace CookiesExample.Models
7 {
8     public class Student
9     {
10         public string Name { get; set; }
11         public string Password { get; set; }
12     }
13 }
14
```

Solution Explorer:

- EmployeesController.cs
- HomeController.cs
- StudentsController.cs
- TestController.cs
- Models
 - DummyData.cs
 - Employee.cs
 - ErrorViewModel.cs
 - Student.cs
- Views
 - Employees
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Home
 - Index.cshtml
 - Privacy.cshtml
 - Shared
 - Students
 - Index.cshtml
 - Login.cshtml
 - Signup.cshtml
 - Test
 - Create.cshtml
 - Delete.cshtml
 - Details.cshtml
 - Index.cshtml
 - _ViewImports.cshtml
 - _ViewStart.cshtml
- appsettings.json
- Program.cs
- Startup.cs

Taskbar:

- Ready
- GBP/INR -0.32%
- Search
- Taskbar icons: Teams, File Explorer, Edge, Visual Studio, etc.
- System tray: ENG IN, 13:41, 16-07-2023

