2.1 Using Controllers



This section will guide you to:

* Create an ASP.NET MVC project and work with controllers.

This guide has seven subsections, namely:

2.1.1 Creating an ASP.NET MVC project

2.1.2 Changing Index.cshtml to demonstrate **querystrings** and form data capturing

2.1.3 Creating a View StudentDetails.cshtml

2.1.4 Making changes to HomeController to work with the Views

2.1.5 Building the Project

2.1.6 Publishing and running the Project

2.1.7 Pushing the code to your GitHub repositories

**Step 2.1.1:** Creating an ASP.NET MVC project

* Open Visual Studio.
* From the top menu select **File->New->Project**
* **In Create A New Project** screen, select **ASP.NET Core Web Application** from the list of available Project types. Click on **Next**
* Enter **Project Name** as Phase3Section2.3 and Click on **Create**
* From the list of project sub-types choose **Web Application (Model-View-Controller)** and uncheck **Configure for HTTPS.** Click on **Create**
* This will create the files for an ASP.NET MVC Project

**Step 2.1.2:** Changing Index.cshtml to demonstrate querystrings and form data capturing.

* In the **Solution Explorer,** expand **Views->Home** and double click Index.cshtml
* Enter the following script:

@{

ViewData["Title"] = "Home Page";

}

<**div** class="container">

<**div** class="col-sm-12 text-center">

<**h4**>Rainbow School</**h4**>

</**div**>

<**div** class="clearfix row">

<**div** class="col-sm-12">

<**a** href="Home/Info?t=teachers">Show Info About Teachers</**a**><**br** />

<**a** href="Home/Info?t=infrastructure">Show Info About Infrastructure</**a**><**br** />

<**a** href="Home/Info?t=admissions">Show Info About Admissions</**a**><**br** />

</**div**>

</**div**>

<**div** class="clearfix row">

<**div** class="col-sm-5">

<**h4**>Enter student details in the form below</**h4**>

<**form** action="Home/StudentDetails" method="post">

<**div** class="row">

<**div** class="col-sm-3">Name</**div**>

<**div** class="col-sm-9"><**input** class="form-control" name="name" maxlength="40" /></**div**>

</**div**>

<**div** class="row">

<**div** class="col-sm-3">Address</**div**>

<**div** class="col-sm-9"><**input** class="form-control" name="address" maxlength="100" /></**div**>

</**div**>

<**div** class="row">

<**div** class="col-sm-3">Subject</**div**>

<**div** class="col-sm-9"><**input** class="form-control" name="subject" maxlength="40" /></**div**>

</**div**>

<**div** class="row">

<**div** class="col-sm-12 text-right">

<**button** class="btn btn-default">Submit</**button**>

</**div**>

</**div**>

</**form**>

</**div**>

</**div**>

</**div**>

**Step 2.1.3:** Creating a View StudentDetails.cshtml

* In the **Solution Explorer,** expand **Views->Home,** right-click **Home,** and choose **Add->View**
* Enter **View name** as StudentDetails.cshtml and click **Add**
* Enter the following script

@{

ViewData["Title"] = "StudentDetails";

}

<**h2**>StudentDetails</**h2**>

<**div** class="container">

<**div** class="row">

<**div** class="col-sm-12 text-center">

@Html.Raw(ViewData["message"]);

</**div**>

</**div**>

</**div**>

**Step 2.1.4:** Making changes to HomeController to work with the Views.

* In the **Solution Explorer,** expand **Controllers** and double click **HomeController**
* Enter the following code:

**using** System;

**using** System.Collections.Generic;

**using** System.Diagnostics;

**using** System.Linq;

**using** System.Threading.Tasks;

**using** System.Text;

**using** Microsoft.AspNetCore.Mvc;

**using** Phase3Section2.\_3.Models;

**namespace** Phase3Section2.\_3.Controllers

{

**public** **class** HomeController : Controller

{

**public** IActionResult Index()

{

**return** View();

}

**public** IActionResult About()

{

ViewData["Message"] = "Your application description page.";

**return** View();

}

**public** IActionResult Contact()

{

ViewData["Message"] = "Your contact page.";

**return** View();

}

**public** IActionResult Error()

{

**return** View(**new** ErrorViewModel { RequestId = Activity.Current?.Id ?? HttpContext.TraceIdentifier });

}

**public** IActionResult Info(String t)

{

ViewData["Message"] = "You have requested info for " + t;

**return** View();

}

[HttpPost]

**public** IActionResult StudentDetails(String t)

{

StringBuilder sb = **new** StringBuilder("<b>Student details entered:</b><br>");

sb.Append("Name: " + Request.Form["name"].ToString() + "<Br>");

sb.Append("Address: " + Request.Form["address"].ToString() + "<Br>");

sb.Append("Subject: " + Request.Form["subject"].ToString() + "<Br>");

ViewData["message"] = sb.ToString();

**return** View();

}

}

}

**Step 2.1.5:** Building the Project

* From the top menu choose **Build->Build Solution**
* If any compile errors are shown, fix them as required.

**Step 2.1.6:** Publishing and running the Project

* From the top menu select **Debug->Start Without Debugging**
* This will execute the program in the default browser

**Step 2.1.7:** Pushing the code to your GitHub repositories

Open your command prompt and navigate to the folder where you have created your files.

cd <folder path>

Initialize your repository using the following command:

git init

Add all the files to your git repository using the following command:

git add .

Commit the changes using the following command:

git commit -m “Changes have been committed.”

Push the files to the folder you created initially using the following command:

git push -u origin master