Pizza Portal

Introduction

The Pizza Portal Project is a web application aimed at managing pizza orders. It allows users to view available pizza options, select pizzas, specify quantities, provide delivery addresses, and make payments. The project is built using ASP.NET MVC and C# programming languages.

Project Structure

PizzaLibrary Namespace

PizzaProperties Class:

- Defines the properties of a pizza including its ID, type, and price.
- CODE:

```
namespace PizzaLibrary
{
    public class PizzaProperties
    {
        public int Id { get; set; }
        public string Type { get; set; }
        public float Price { get; set; }
    }
}
```

PizzaManager Class:

- Manages a list of pizzas. It provides functionality to retrieve a list of available pizzas.
- CODE:

```
using System.Collections.Generic;
```

```
namespace PizzaLibrary
   public class PizzaManager
        public List<PizzaProperties> pizzaList;
        public PizzaManager()
            pizzaList = new List<PizzaProperties>();
        public List<PizzaProperties> ListOfPizza()
            PizzaProperties pizza1 = new PizzaProperties() {
Id = 1, Type = "Pepperoni Pizza", Price = 250.99f };
            PizzaProperties pizza2 = new PizzaProperties() {
Id = 2, Type = "Margherita Pizza", Price = 200.50f };
            PizzaProperties pizza3 = new PizzaProperties()
                Id = 3,
                Type = "Veggie Delight Pizza",
                Price = 325.66f
            };
            PizzaProperties pizza4 = new PizzaProperties()
                Id = 4,
                Type = "Mushroom and Olive Pizza",
                Price = 440.99f
            };
            PizzaProperties pizza5 = new PizzaProperties()
                Id = 5,
                Type = "Veggie Delight Pizza",
                Price = 325.66f
            };
            PizzaProperties pizza6 = new PizzaProperties()
                Id = 6,
                Type = "Paneer Pizza",
                Price = 230.33f
            };
            PizzaProperties pizza7 = new PizzaProperties()
                Id = 7,
                Type = "Cheese Pizza",
                Price = 375.00f
            };
            pizzaList.Add(pizza1);
```

```
pizzaList.Add(pizza2);
pizzaList.Add(pizza3);
pizzaList.Add(pizza4);
pizzaList.Add(pizza5);
pizzaList.Add(pizza6);
pizzaList.Add(pizza7);

return pizzaList;
}
}
}
```

PizzaPortalProject Namespace

PizzaModel Class:

- Represents a pizza in the view. It includes properties like ID, type, and price.
- CODE:

```
namespace PizzaPortalProject.Models
{
    public class PizzaModel
    {
        public int Id { get; set; }
        public string Type { get; set; }
        public float Price { get; set; }
    }
}
```

PizzaController Class:

- Controller responsible for handling pizza-related actions such as displaying available pizzas, selecting items, processing orders, and managing payment.
- CODE:

```
using PizzaLibrary;
using PizzaPortalProject.Models;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web.Mvc;
namespace PizzaPortalProject.Controllers
{
```

```
public class PizzaController : Controller
        public PizzaManager pizzaManager;
        public PizzaController()
            pizzaManager = new PizzaManager();
        public ActionResult Index()
            List<PizzaModel> pizzaModelList = new
List<PizzaModel>();
            List<PizzaProperties> pizzaList =
pizzaManager.ListOfPizza();
            foreach (PizzaProperties pizza in pizzaList)
                PizzaModel pModel = new PizzaModel()
                    Id = pizza.Id,
                    Type = pizza.Type,
                    Price = pizza.Price
                };
                pizzaModelList.Add(pModel);
            return View(pizzaModelList);
        public ActionResult SelectedItems(int id)
            List<PizzaProperties> pizzaList =
pizzaManager.ListOfPizza();
            PizzaProperties pizzaItem = pizzaList.Find(p => p.Id
== id);
            PizzaModel model = new PizzaModel()
                Id = pizzaItem.Id,
                Type = pizzaItem.Type,
                Price = pizzaItem.Price
            };
            TempData["Price"] = pizzaItem.Price;
            TempData["PizzaType"] = pizzaItem.Type;
            TempData.Keep();
            return View(model);
        [HttpPost]
```

```
public ActionResult SelectedItems(string deliveryAddress,
int itemQuantity)
            string price = TempData["Price"].ToString();
            float totalPrice = float.Parse(price) * itemQuantity;
            TempData["TotalPrice"] = totalPrice;
            TempData["Address"] = deliveryAddress;
            TempData.Keep();
            return RedirectToAction("PaymentMode");
        public ActionResult PaymentMode()
            Random random = new Random();
            const string chars =
"ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789";
            int length = 10;
            string randomString = new
string(Enumerable.Repeat(chars, length).Select(s =>
s[random.Next(s.Length)]).ToArray());
            TempData["orderid"] = randomString;
            ViewBag.TotalPrice =
Convert.ToSingle(TempData["TotalPrice"]);
            ViewBag.Address = TempData["Address"].ToString();
            return View();
       public ActionResult OrderSuccess()
        {
            TempData["RandomOrderId"] = TempData["orderid"];
            return View("OrderSuccess");
        }
```

Views

Index.cshtml:

- Displays a list of available pizzas.
- CODE:

```
@model IEnumerable<PizzaPortalProject.Models.PizzaModel>
@{
   ViewBag.Title = "Index";
<h2>Pizza World!! <</h2>
<style>
    .card {
        margin: 50px;
        border: 1px solid #ccc;
        border-radius: 5px;
        height: 100px;
        background-color: pink;
        display: inline-block
    .card-header {
        background-color: #f0f0f0;
        font-weight: bold;
       padding: 10px;
    .card-body {
        padding: 15px;
</style>
@foreach (var item in Model)
    <div class="card">
        <div class="card-header">
           @Html.DisplayFor(modelItem => item.Type)
        </div>
        <div class="card-body">
            Price: @Html.DisplayFor(modelItem =>
item.Price)
            @Html.ActionLink("Details", "SelectedItems", new {
id = item.Id \}) 
        </div>
    </div>
```

SelectedItems.cshtml:

- Allows users to select pizza items and specify delivery addresses.
- CODE:

```
@{
   ViewBag.Title = "SelectedItems";
<style>
    form {
        width: 100%;
        border: 2px solid lightblue;
        background-color: aquamarine;
        text-align: center;
        margin: auto;
        padding: 10px;
</style>
<h2>Selected Items</h2>
<form method="post">
    <br />
    Enter the quantity of the @TempData["PizzaType"]:
    <input type="number" name="itemQuantity" /> <br /><br />
    Enter the Delivery Address:
    <input type="text" name="deliveryAddress" />
    <br /><br />
    <input type="submit" />
</form>
```

PaymentMode.cshtml:

- Displays payment-related information such as total price and delivery address.
- CODE:

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

```
<h2>Payment Status</h2>
The Total Price of @TempData["PizzaType"] = Rs.
@TempData["TotalPrice"]
<br />
The order will be delivered at @TempData["Address"]

     @Html.ActionLink("Order", "OrderSuccess")
```

OrderSuccess.cshtml:

- Confirms successful order placement and displays the order ID.
- CODE:

```
@{
    ViewBag.Title = "OrderSuccess";
}
<h2>Order Success</h2>
<h1>
    Your order has been placed successfully with the order id as
@TempData["RandomOrderId"]!!
    Hope to see you soon..!!
</h1>
```

Tests

ControllerTest Class:

- Contains NUnit tests to ensure proper functionality of controller actions.
- CODE:

```
[Test]
        public void IndexActionReturnsIndexView()
            string expected = "Index";
            HomeController controller = new HomeController();
            var result = controller.Index() as ViewResult;
            ClassicAssert.AreEqual(expected, result.ViewName);
        [Test]
        public void TestPizzaSelectionPage()
            PizzaController controller = new PizzaController();
            var result = controller.SelectedItems(1) as
ViewResult;
            ClassicAssert.IsNotNull(result);
            ClassicAssert.IsNotNull(result.Model);
            ClassicAssert.IsInstanceOf(typeof(PizzaModel),
result.Model);
        }
        [Test]
        public void TestOrderConfirmationPage()
            PizzaController controller = new PizzaController();
            controller.TempData["TotalPrice"] = 503.65f;
            controller.TempData["Address"] = "Varanasi";
            var result = controller.PaymentMode() as ViewResult;
            ClassicAssert.IsNotNull(result);
            ClassicAssert.IsNotNull(result.ViewBag.TotalPrice);
            ClassicAssert.IsNotNull(result.ViewBag.Address);
        [Test]
        public void TestOrderSuccessPage()
            PizzaController controller = new PizzaController();
            string expected = "OrderSuccess";
            var result = controller.OrderSuccess() as ViewResult;
            ClassicAssert.AreEqual(expected, result.ViewName);
```

Project Workflow

Index Page:

The Index page displays a list of available pizzas fetched from the PizzaManager.

1. Selecting Pizza:

Users can select a pizza from the list, which redirects them to the Selected Items page.

2. Selected Items Page:

Users specify the quantity of the selected pizza and provide a delivery address.

3. Payment Mode Page:

Displays the total price and delivery address. Users can proceed to payment.

4. Order Success Page:

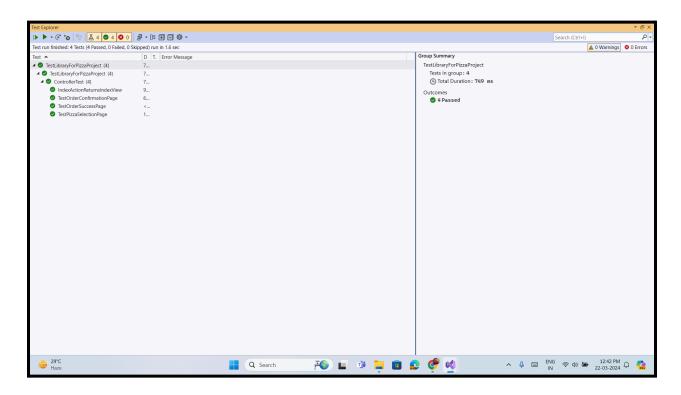
Confirms successful order placement and displays the order ID.

Deployment

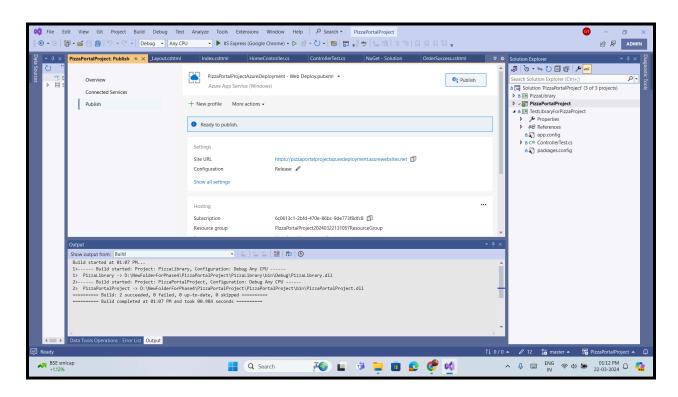
- **1.** The project is deployed on Azure using Azure App Service. The deployment process involves:
 - **a.** Creating an Azure Instance: An instance is created on Azure to host the application.
 - **b.** Publishing from Visual Studio: The application is published from Visual Studio to the Azure instance.
 - c. Deployment Center: The GitHub repository link is attached to the Deployment Center of the Azure App Service to enable continuous deployment.

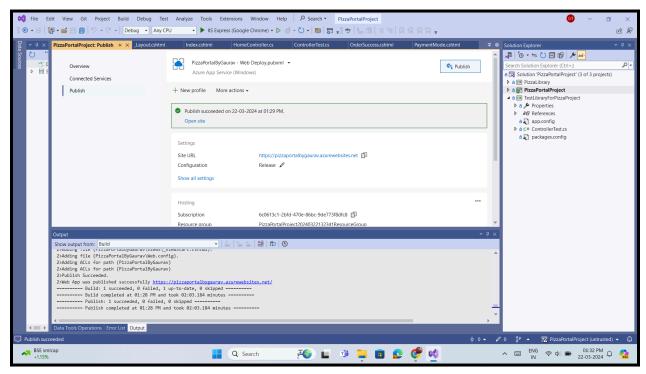
OUTPUT Screenshot:

Test Case Results:

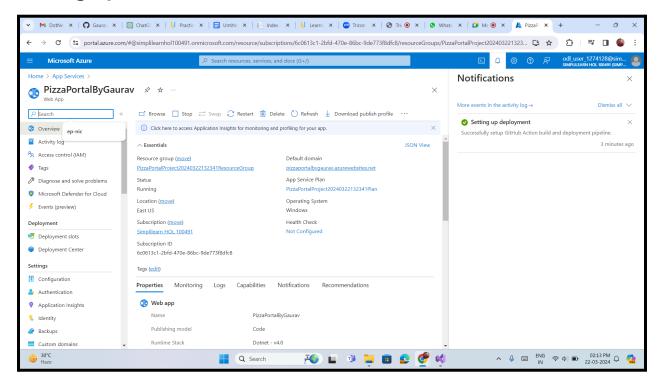


Publish using Visual Studio



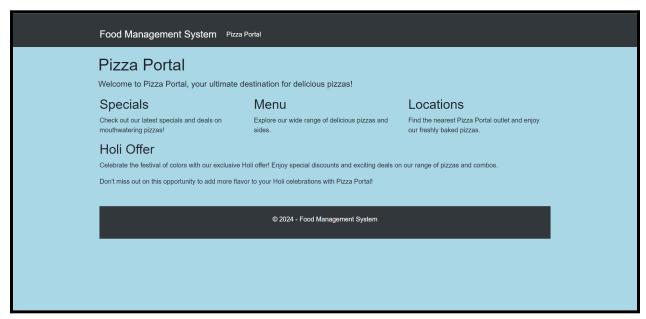


Setting up Github Action with Azure

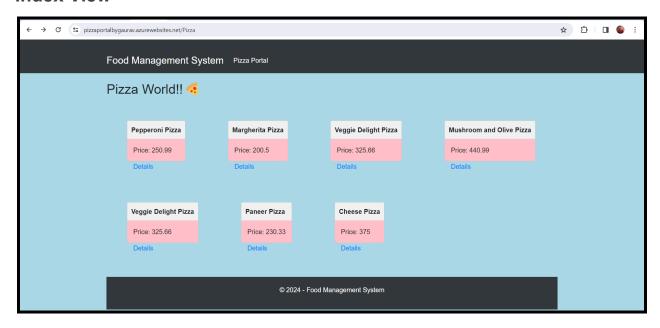


Project View

Home Page



Index View



Order View



Payment View:



Order Success View

