PHASE PROJECT 4

Title: Pizza Portal

The Pizza Portal project aims to provide users with a seamless online platform for ordering pizzas. The system consists of several interconnected pages facilitating the selection of pizzas, customization of orders, payment processing, and order confirmation.

Project Workflow

Index Page:

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

1. **Selecting Pizza:**
   This serves as the landing page displaying a comprehensive list of available pizzas sourced from the PizzaManager. Users can browse through the options and select their desired pizza, initiating the ordering process.
2. **Selected Items Page:**
   Upon selecting a pizza, users are redirected to this page where they can specify the quantity of the chosen pizza and provide essential delivery information such as address details.
3. **Payment Mode Page:**
   This page displays a summary of the order including the total price and the delivery address. Users can proceed to choose their preferred payment method for completing the transaction.
4. **Order Success Page:**
   Upon successful completion of the payment process, users are directed to this page which confirms the placement of their order and provides them with a unique order ID for reference.

Deployment

The project is deployed on Microsoft Azure using Azure App Service, ensuring accessibility and scalability. The deployment process involves the following steps:

a) **Creating an Azure Instance:** An instance is provisioned on Azure to host the application, providing a stable environment for its execution.

b) **Publishing from Visual Studio:** The application is published directly from Visual Studio, streamlining the deployment process and ensuring seamless integration with Azure services.

c) **Deployment Center:** The GitHub repository link is connected to the Deployment Center of the Azure App Service, enabling continuous deployment. This ensures that any updates or modifications pushed to the GitHub repository are automatically reflected in the deployed application, enhancing agility and efficiency in the development lifecycle.

SOURCE CODE

PizzaLibrary Namespace:

PizzaProperties Class:

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

PizzaManager Class:

```
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 = "Chicken Delight Pizza",
            Price = 350.99f
         };
         PizzaProperties pizza2 = new PizzaProperties() {
            Id = 2,
```

```
    Type = "Margherita Pizza",
    Price = 169.90f
};
PizzaProperties pizza3 = new PizzaProperties()
{
    Id = 3,
    Type = "Chocolate and Banana Pizza",
    Price = 225.66f
};
PizzaProperties pizza4 = new PizzaProperties()
{
    Id = 4,
    Type = "Chicken Pepporoni Pizza",
    Price = 290.99f
};
PizzaProperties pizza5 = new PizzaProperties()
{
    Id = 5,
    Type = "Mushroom and Olive  Pizza",
    Price = 235.66f
};
PizzaProperties pizza6 = new PizzaProperties()
{
    Id = 6,
    Type = "Farm House Pizza",
    Price = 240.13f
};
PizzaProperties pizza7 = new PizzaProperties()
{
    Id = 7,
    Type = "Cheese and Paneer Pizza",
    Price = 275.90f
};
PizzaProperties pizza8= new PizzaProperties()
{
    Id = 8,
    Type = "Cheese and Corn Pizza",
    Price = 234.90f
};
pizzaList.Add(pizza1);
pizzaList.Add(pizza2);
pizzaList.Add(pizza3);
pizzaList.Add(pizza4);
pizzaList.Add(pizza5);
```

```
            pizzaList.Add(pizza6);
            pizzaList.Add(pizza7);
            pizzaList.Add(pizza8);

            return pizzaList;
        }
    }
}
```

PizzaPortalProject Namespace

Model

PizzaModel Class:

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

Controller

PizzaController:

```
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");
        }

    }
}
```

View

Index.cshtml:

```
@model IEnumerable<PizzaPortalProject.Models.PizzaModel>

@{
    ViewBag.Title = "Pizza World!!🍕";
    Layout = "~/Views/Shared/_Layout.cshtml";
}

<h2 style="text-align:left; margin-bottom: 30px;">Pizza World!!🍕</h2>
```

```
<div class="container">
  <div class="row">
    @foreach (var item in Model)
    {
      <div class="col-md-4">
        <div class="card">
          <div class="card-header" style="color:crimson">
            @Html.DisplayFor(modelItem => item.Type)
          </div>
          <div class="card-body">
            <p class="price" style="color:deepskyblue">Price: $@Html.DisplayFor(modelItem
=> item.Price)</p>
            <p>
              <a href="@Url.Action("SelectedItems", new { id = item.Id })" class="btn btn-
primary">Select</a>
            </p>
          </div>
        </div>
      </div>
    }
  </div>
</div>

<style>
  .card {
    margin-bottom: 30px;
    border: 1px solid #ddd;
    border-radius: 10px;
    background-color:antiquewhite;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    transition: transform 0.3s;
  }

    .card:hover {
      transform: translateY(-5px);
    }

  .card-header {
    background-color:bisque;
    font-weight: bold;
```

```
        padding: 15px;
        border-bottom: 1px solid #ddd;
        border-radius: 10px 10px 0 0;
    }

    .card-body {
        padding: 15px;
    }

    .price {
        font-size: 18px;
        margin-bottom: 10px;
    }

    .btn-primary {
        background-color: #ff6347;
        border-color: #ff6347;
    }

        .btn-primary:hover {
            background-color: #ff4c32;
            border-color: #ff4c32;
        }
</style>
```

SelectedItems.cshtml:

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <title >@ViewBag.Title</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #f8f9fa;
            padding: 20px;
            text-align: center;
        }
```

```
      h2 {
         color: #ff6347;
         font-size: 28px;
         margin-bottom: 20px;
      }

      form {
         max-width: 400px;
         margin: auto;
         background-color: #fff;
         border: 1px solid #ccc;
         border-radius: 10px;
         padding: 20px;
         box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
      }

      input[type="number"],
      input[type="text"],
      input[type="submit"] {
         width: calc(100% - 20px);
         padding: 10px;
         margin-top: 10px;
         margin-bottom: 20px;
         border: 1px solid #ccc;
         border-radius: 5px;
         box-sizing: border-box;
      }

      input[type="submit"] {
         background-color: #ff6347;
         color: #fff;
         cursor: pointer;
         transition: background-color 0.3s;
      }

         input[type="submit"]:hover {
            background-color: #ff4c32;
         }
   </style>
</head>
<body>
```

```
    <form method="post">

        <h2 style="margin-bottom: 30px;">Selected Items 🍕</h2>
        <label for="itemQuantity" style="color: #ff6347;">Enter the quantity of the
@TempData["PizzaType"]:</label>
        <input type="number" value="1" id="itemQuantity" name="itemQuantity" required>

        <label for="deliveryAddress" style="color: #ff6347;">Enter the Delivery Address 🚚:</label>
        <input type="text" id="deliveryAddress" name="deliveryAddress" required>

        <input type="submit" value="Submit">
    </form>
</body>
</html>
```

PaymentMode.cshtml:

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <title>@ViewBag.Title</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #f8f9fa;
            padding: 20px;
            text-align: center;
        }

        h2 {
            color: #007bff;
            font-size: 28px;
            margin-bottom: 20px;
        }

        .payment-info {
            background-color:whitesmoke;
```

```
            border: 1px solid #ccc;
            border-radius: 10px;
            padding: 20px;
            box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
            margin-bottom: 20px;
        }

            .payment-info p {
                margin-bottom: 10px;
                color: #333;
                font-size: 18px;
            }

        .btn-success {
            background-color: #28a745;
            border-color: #28a745;
            color: #fff;
            padding: 10px 20px;
            font-size: 16px;
            border-radius: 5px;
            cursor: pointer;
            transition: background-color 0.3s;
        }

            .btn-success:hover {
                background-color: #218838;
            }
    </style>
</head>
<body>
    <h2>Payment Status</h2>

    <div class="payment-info">
        <p>The Total Price of @TempData["PizzaType"] = Rs. @TempData["TotalPrice"]</p>
        <p>The order will be delivered at @TempData["Address"]</p>
    </div>

    <input type="button" class="btn btn-success" value="Order"
onclick="redirectToOrderSuccess()" />

    <script>
```

```
    function redirectToOrderSuccess() {
        window.location.href = '@Url.Action("OrderSuccess")';
    }
  </script>
</body>
</html>
```

OrderSuccess.cshtml:

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

<h2>Order Success</h2>
<h1>
  Your order has been placed successfully with the order id as
@TempData["RandomOrderId"]!!
</h1>
```

Tests

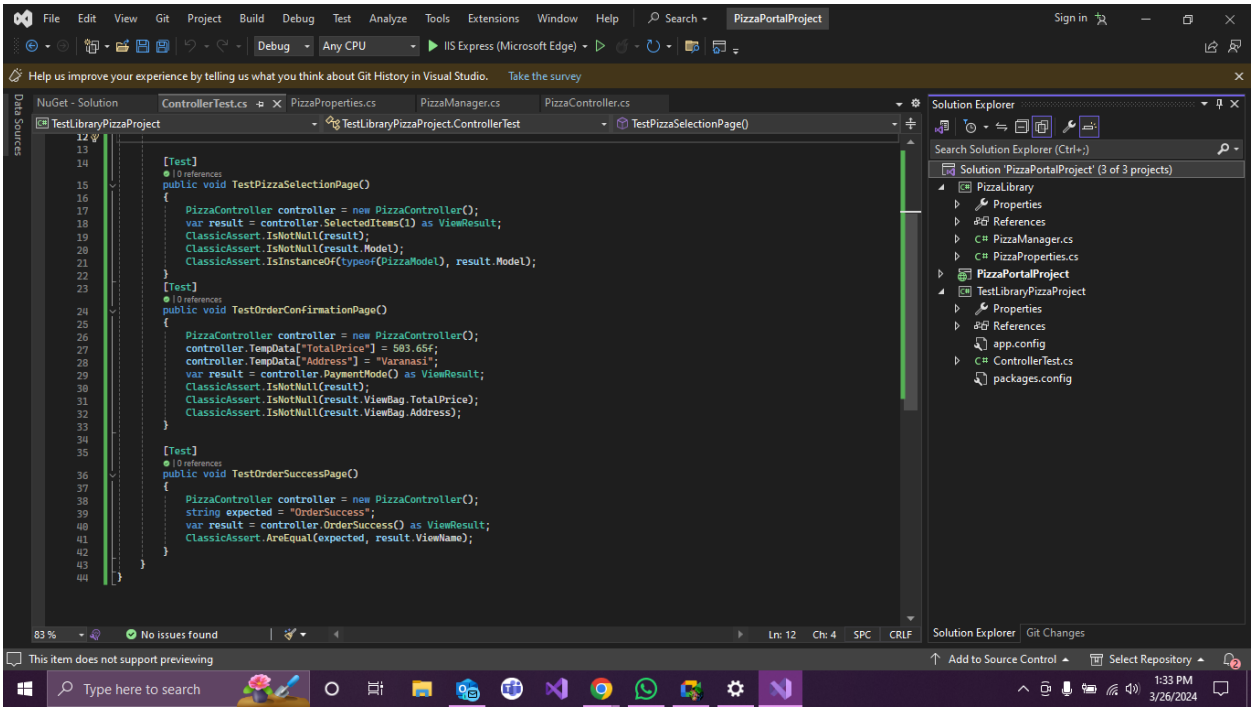
ControllerTest Class:

```
using NUnit.Framework;
using NUnit.Framework.Legacy;
using PizzaPortalProject.Controllers;
using PizzaPortalProject.Models;
using System.Web.Mvc;

namespace TestLibraryPizzaProject
{
  [TestFixture]
  public class ControllerTest
  {


    [Test]
    public void TestPizzaSelectionPage()
    {
      PizzaController controller = new PizzaController();
```

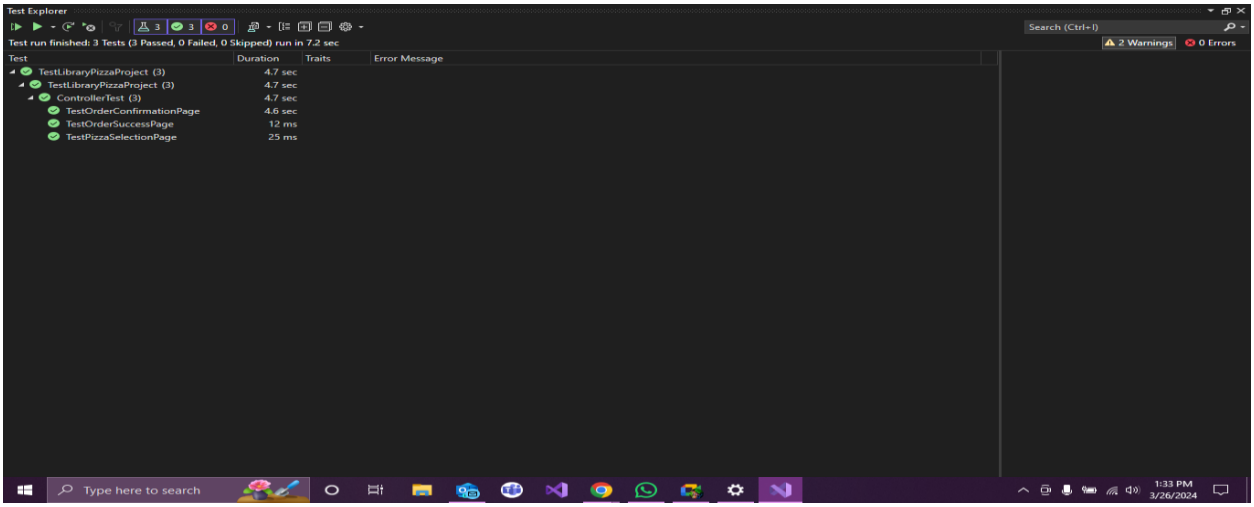
```
            var result = controller.SelectedItems(1) as ViewResult;
            ClassicAssert.IsNotNull(result);
            ClassicAssert.IsNotNull(result.Model);
            ClassicAssert.IsInstanceOf(typeof(PizzaModel), result.Model);
        }
        [Test]
        public void TestOrderConfirmationPage()
        {
            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);
        }
    }
}
```

OUTPUT SCREENSHOTS:

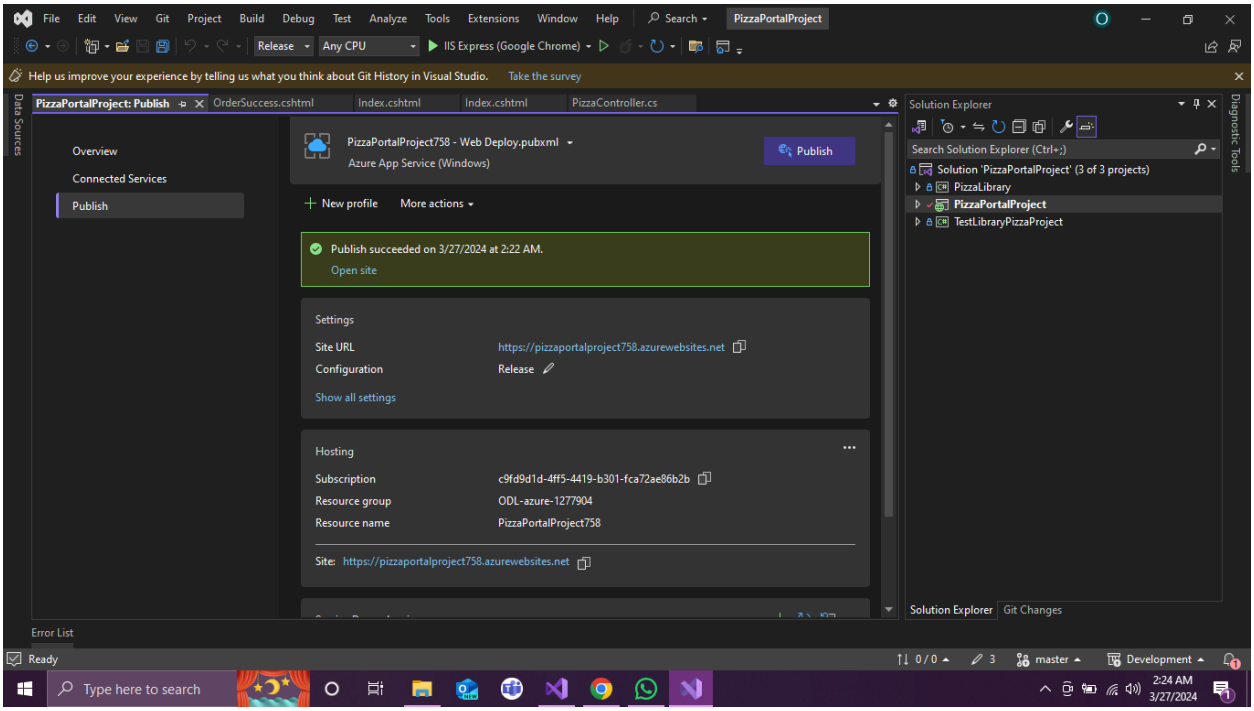
Test Case:



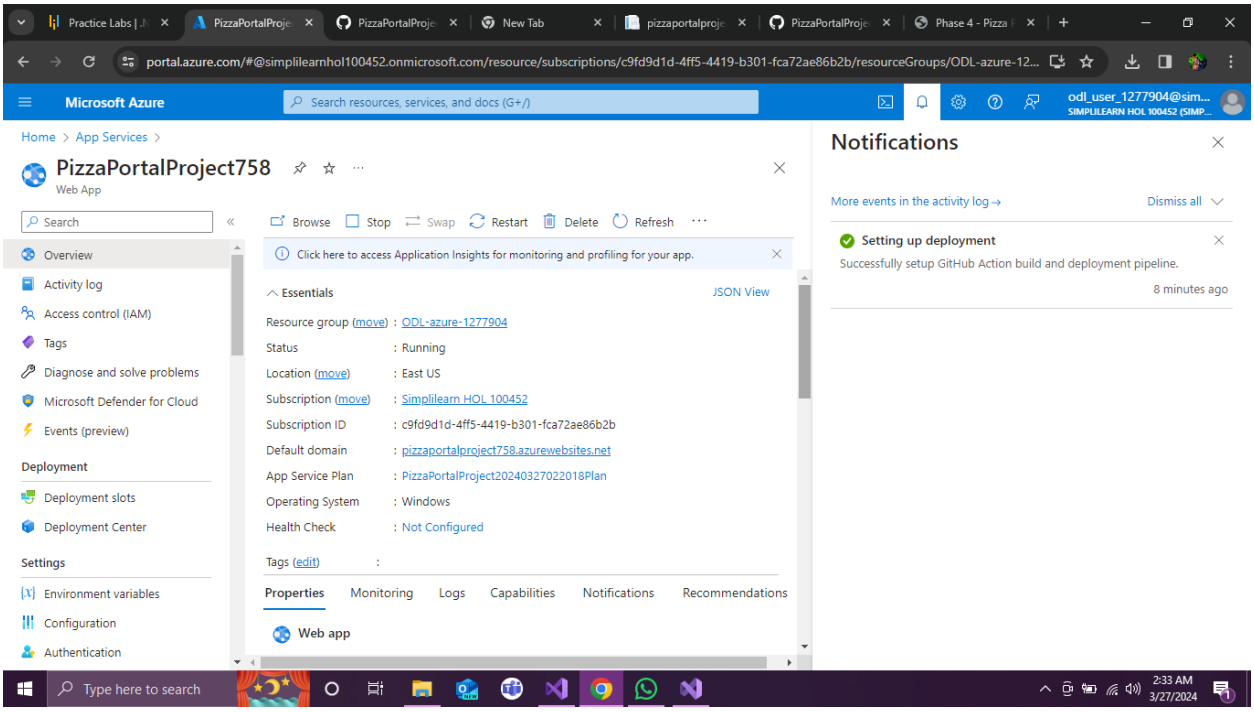
Test Case Results:



Publish using Visual Studio

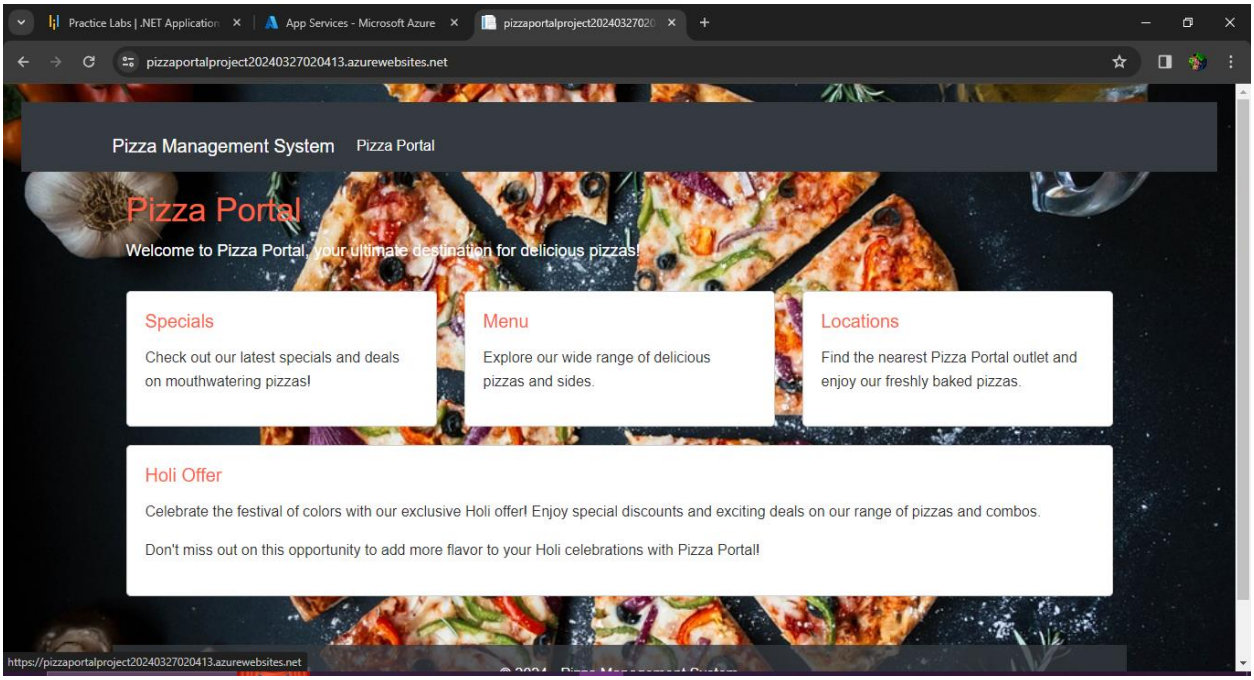


Setting up Github Action with Azure

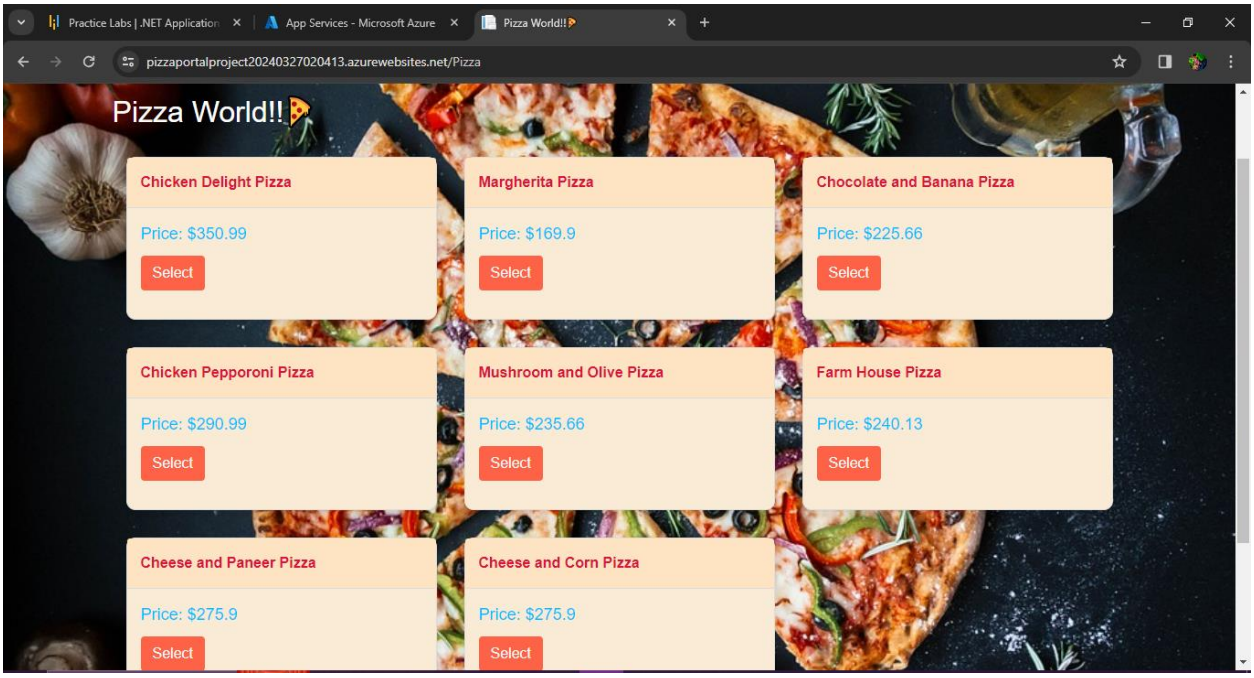


Project View

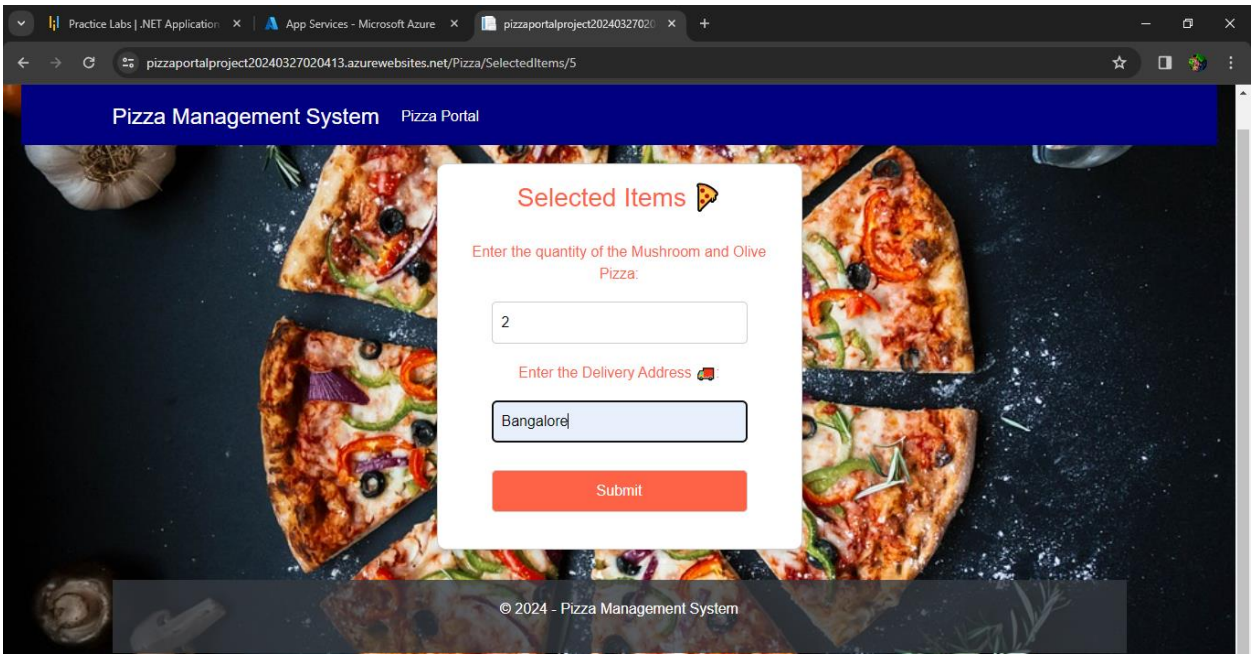
Home page:



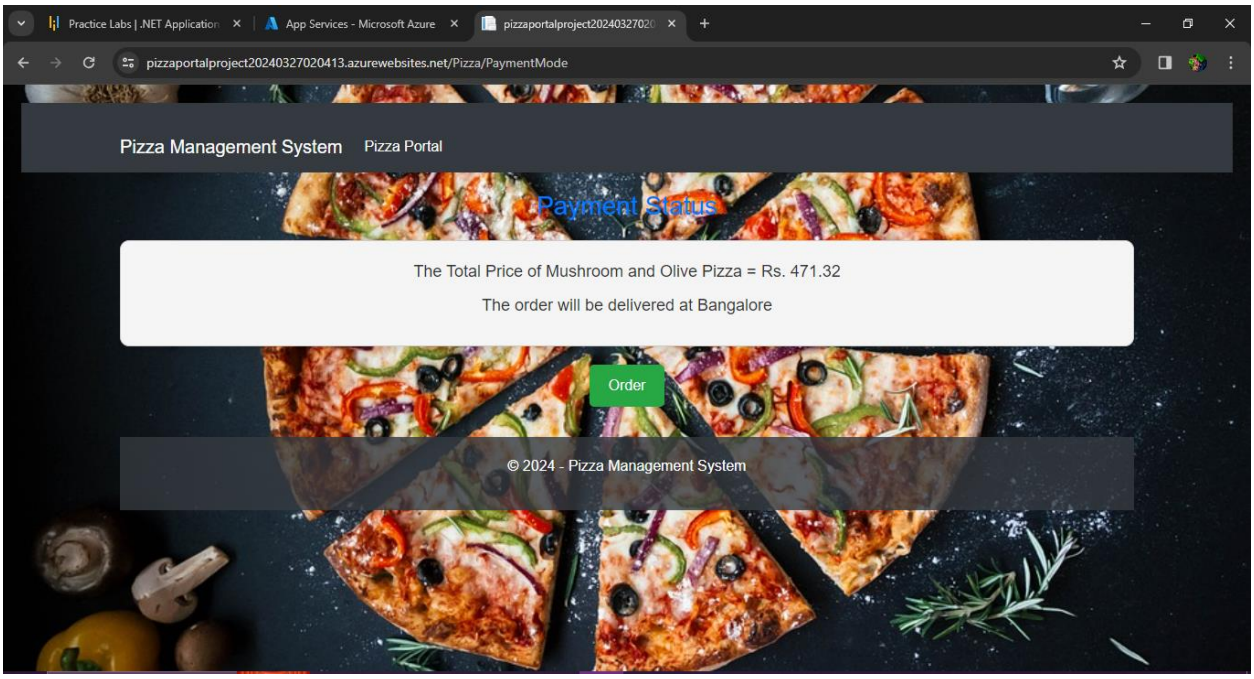
Index Page:



Selected Items Order Page:



Payment Page:



OrderSuccess Page: