FINOLEX ACADEMY OF MANAGEMENT AND TECHNOLOGY, RATNAGIRI

DEPARTMENT OF MCA

PRACTICAL NO. 06

ASP.NET MVC

1. **Create an MVC application to demonstrate ViewBag Object.**

   Ans :

   - **Code :**

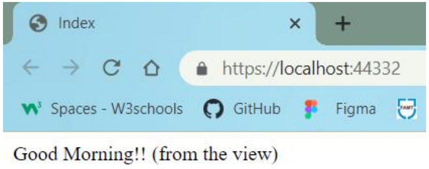
     HomeController.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;

namespace MyFirstMVCApp.Controllers
{
   public class HomeController : Controller
   {
      // GET: Home
      public ViewResult Index()
      {
         int hour = DateTime.Now.Hour;
         ViewBag.Greeting = hour < 12 ? "Good Morning!!" : "Good Afternoon!!";
         return View();
      }}}
```

Index.cshtml

```
@{
   Layout = null;
}

<!DOCTYPE html>

<html>
<head>
   <meta name="viewport" content="width=device-width" />
   <title>Index</title>
</head>
<body>
   <div>
     @ViewBag.Greeting (from the view)
   </div>
</body>
                  </html>
```

- **Output :**



Good Morning!! (from the view)

2. **Create an MVC application to accept Customer details and display the same using views. Use automatically implemented properties, strongly typed HTML Input helpers methods.**
   Ans :
   - **Code :**
     HomeController.cs

```
using CustomerApplication.Models;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;

namespace CustomerApplication.Controllers
{
    public class HomeController : Controller
    {
        // GET: Home
        public ActionResult Index()
        {
            return View();
        }
        [HttpGet]
        public ViewResult CustomerInput()
        {
            return View();
        }

        [HttpPost]
        public ViewResult CustomerInput(Customer c1)
        {
            if (ModelState.IsValid)
            {
                return View("CustomerDisplay", c1);
            }
            else
            { //There is validation error
                return View();
            }

        }
    }
}
```

Indesx.cshtml

```
@{
    Layout = null;
}

<!DOCTYPE html>
```

```
<html>
<head>
    <meta name="viewport" content="width=device-width" />
    <link href="~/Content/bootstrap.css" rel="stylesheet" />
    <link href="~/Content/bootstrap-theme.css" rel="stylesheet" />
    <title>Customer Information System</title>
    <style>
        .btn a {
            color: white;
            text-decoration: none
        }

        body {
            background-color: #F1F1F1;
        }
    </style>
</head>
<body>
    <div class="text-center">
        <p> Customer information system allows to store retrive   customer details </p>
        <div class="btn btn-success">
            @Html.ActionLink("Add Customer Details", "CustomerInput")
        </div>
</body>
                          </html>
```

CustomerInput.cshtml

```
@model CustomerApplication.Models.Customer

@{
    Layout = null;
}


<!DOCTYPE html>
<html>
<head>
    <link href="~/Content/bootstrap.css" rel="stylesheet" />
    <link href="~/Content/bootstrap-theme.css" rel="stylesheet" />
    <meta name="viewport" content="width=device-width" />
    <link rel="stylesheet" type="text/css" href="~/Content/StyleSheet1.css" />
    <title>CustomerInput</title>
</head>
<body>
    <div class="panel panel-success">
        <div class="panel-heading text-center">
            <h4>
                Customer Information
                System
            </h4>
        </div>
        <div class="panel-body">
            @using (Html.BeginForm())
            {
```

```
            @Html.ValidationSummary()
             <div class="form-group">
                <label>Customer ID :</label>@Html.TextBoxFor(x => x.CustID, new{ @class = "form-control" })
             </div>
                         <div class="form-group">
                            <label>Customer Name :</label>@Html.TextBoxFor(x =>x.CustName, new { @class = "form-control" })
                         </div><div class="form-group">
                            <label>Customer Address:</label>@Html.TextBoxFor(x =>x.CustAdd, new { @class = "form-control" })

                         </div>
                           <div class="text-center">
                             <input class="btn btn-success" type="submit" value="Submit Customer Data" />
                                     </div>         }
      </div>
   </div>
</body>
                    </html>
```

CustomerDisplay.cshtml

```
@model CustomerApplication.Models.Customer

@{
   Layout = null;
}

<!DOCTYPE html>

<html>
<head>
   <link href="~/Content/bootstrap.css" rel="stylesheet" />
   <link href="~/Content/bootstrap-theme.css" rel="stylesheet" />
   <meta name="viewport" content="width=device-width" />
   <title>CustomerDisplay</title>
   <style>
      body {
         background-color: #F1F1F1;
      }
   </style>
</head>
<body>
   <div class="text-center">
      <h1>Customer Information System</h1>
      <p>Customer ID : @Model.CustID</p>
      <p>Customer Name : @Model.CustName</p>
      <p>Customer Address : @Model.CustAdd</p>
   </div>
</body>
</html>
```

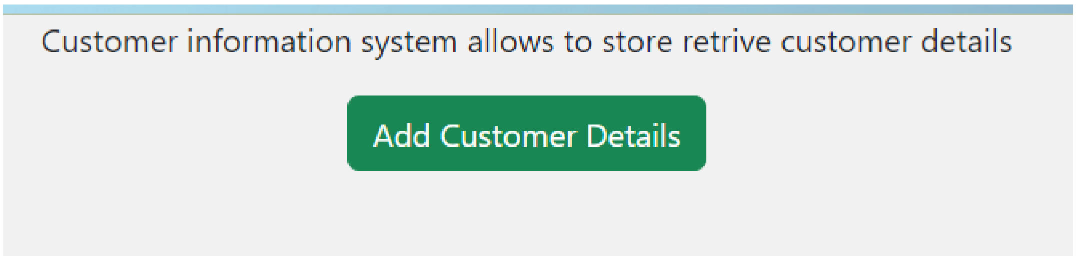
Customer.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel.DataAnnotations;
using System.Linq;
using System.Web;

namespace CustomerApplication.Models
{
    public class Customer
    {
        [Required(ErrorMessage = "Please enter Customer ID!")]
        public int CustID { get; set; }
        [Required(ErrorMessage = "Please enter Customer Name!")]
        public string CustName { get; set; }
        [Required(ErrorMessage = "Please enter Customer Address!")]
        public string CustAdd { get; set; }
    }
                    }
```

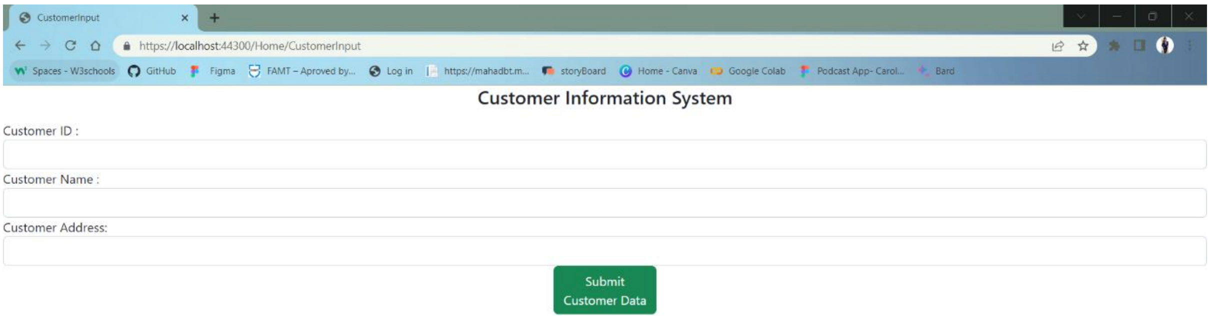
StyleSheet1.css

```
body {
    .field-validation-error

{
    color: #f00;
}

.field-validation-valid {
    display: none;
}

.input-validation-error {
    border: 1px solid #f00;
    background-color: #fee;
}

.validation-summary-errors {
    font-weight: bold;
    color: #f00;
}

.validation-summary-valid {
    display:  none;
}
```

- **Output :**



Customer information system allows to store retrive customer details

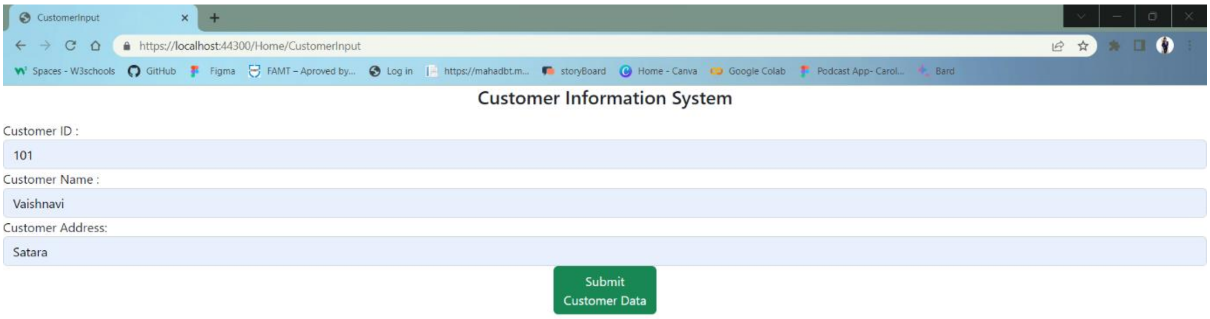


Customer Information System

Customer ID :

Customer Name :

Customer Address:

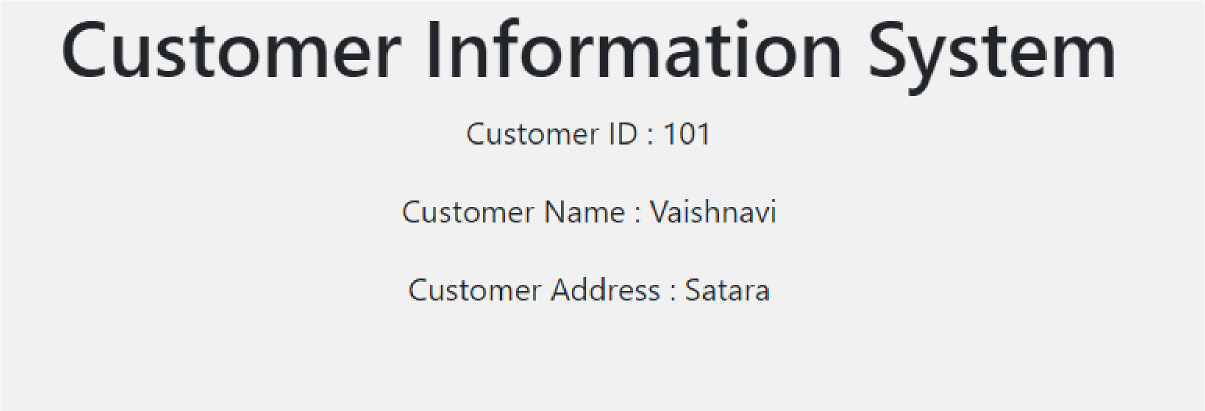


Customer Information System

Customer ID : 101

Customer Name : Vaishnavi

Customer Address: Satara



Customer Information System

Customer ID : 101

Customer Name : Vaishnavi

Customer Address : Satara

3. **Create an MVC application to demonstrate extension methods and use layout.**
   Ans :
   - **Code :**

     HomeController.cs

```
using ProductMVCApplication.Models;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Web;
using System.Web.Mvc;

namespace ProductMVCApplication.Controllers
{
  public class HomeController : Controller
  {
    // GET: Home

    public ViewResult AutoProperty()
    {
      Product p1 = new Product();
      p1.Name = "Kayak";
      string pName = p1.Name;
      return View("AutoProperty", (object)String.Format("Product name: {0}", pName));
    }
    public ViewResult CreateProduct()
    {
      Product p1 = new Product();
      p1.ProductID = 100;
      p1.Name = "Kayak";
      p1.Price = 1500;
      return View("AutoProperty", (object)String.Format("Price: {0}", p1.Price));
    }
    public ViewResult CreateCollection()
    {
      string[] stringArray = { "apple", "orange", "plum" };
      List<int> intList = new List<int> { 10, 20, 30, 40 };
      Dictionary<string, int> myDict = new Dictionary<string, int>
{ { "apple", 10 }, { "orange", 20 }, { "plum", 30 } };
      return View("Result", (object)stringArray[1]);
    }

    public ViewResult UseExtension()
    {
      ShoppingCart cart = new ShoppingCart
      {
        Products = new List<Product>
          {
            new Product {Name = "Kayak", Price = 275M},
            new Product {Name = "Lifejacket", Price = 48.95M},
            new Product {Name = "Soccer ball", Price = 19.50M},
            new Product {Name = "Corner flag", Price = 34.95M}
```

```
                }
            };
            decimal cartTotal = cart.TotalPrices();
            return View("Result", (object)String.Format("Total: {0:c}", cartTotal));
        }
        public ViewResult CreateAnonArray()
        {
            var oddsAndEnds = new[]
            {
                new { Name = "MVC", Category = "Pattern" },
                new { Name = "Hat", Category = "Clothing" },
                new { Name = "Apple", Category = "Fruit" }
            };
            StringBuilder result = new StringBuilder();
            foreach (var item in oddsAndEnds)
            {
                result.Append(item.Name).Append(" ");
            }
            return View("Result", (object)result.ToString());
        }
        Product myProduct = new Product
        {
            ProductID = 1,
            Name = "Kayak",
            Description = "A boat for one person",
            Category = "Watersports",
            Price = 275M
        };
        public ActionResult Index()

        {
            return View(myProduct);
        }
    }
}
```

Product.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

namespace ProductMVCApplication.Models
{
    public class Product
    {
        public int ProductID { get; set; }
        public string Name { get; set; }
        public string Description { get; set; }
        public decimal Price { get; set; }
        public string Category { set; get; }
    }
                    }
```

ShoppingCart.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

namespace ProductMVCApplication.Models
{
   public class ShoppingCart
   {
      public List<Product> Products { get; set; }
   }
                   }
```

MyExtensionMethods.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

namespace ProductMVCApplication.Models
{
   public static class MyExtensionMethods
   {
      public static decimal TotalPrices(this ShoppingCart cartParam)
      {
         decimal total = 0;
         foreach (Product prod in cartParam.Products)
         { total += prod.Price; }
         return total;
      }
   }
                   }
```

AutoProperty.cshtml

```
@model String
@{
   Layout = null;
}

<!DOCTYPE html>

<html>
<head>
   <meta name="viewport" content="width=device-width" />
   <title>AutoProperty</title>
</head>
<body>
   <div>
      @Model
   </div>
</body>
</html>
```

Index.cshtml

```
@model ProductMVCApplication.Models.Product

@{
    ViewBag.Title = "Product Name";
    Layout = "~/Views/_BasicLayout.cshtml";
}


<!DOCTYPE html>

<html>
<head>
    <meta name="viewport" content="width=device-width" />
    <title>Index</title>
</head>
<body>
    <div>
        Product Name = @Model.Name<br />
        Product Price=@Model.Price
    </div>
</body>
</html>
```

Result.cshtml

```
@model String
@{
    Layout = null;
}

<!DOCTYPE html>

<html>
<head>
    <meta name="viewport" content="width=device-width" />
    <title>Result</title>
</head>
<body>
    <div>
        @Model
    </div>
</body>
</html>
```

_BasicLayout.cshtml

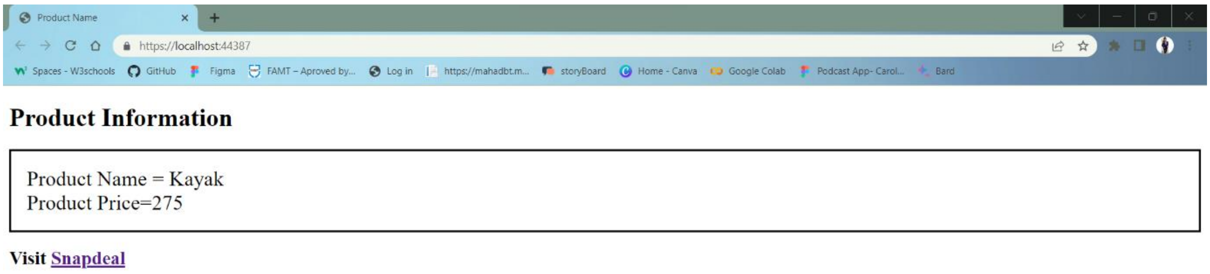
```
<!DOCTYPE html>

<html>
<head>
    <meta name="viewport" content="width=device-width" />
    <title>@ViewBag.Title</title>
</head>
```

```
<body>
   <h1>Product Information</h1>
   <div style="padding: 20px; border: solid medium black; font-size: 20pt">
      @RenderBody()
   </div>
   <h2>Visit <a href="https://www.snapdeal.com/">Snapdeal</a></h2>
</body>
</html>
```

RouteConfig.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;
using System.Web.Routing;

namespace ProductMVCApplication
{
   public class RouteConfig
   {
      public static void RegisterRoutes(RouteCollection routes)
      {
         routes.IgnoreRoute("{resource}.axd/{*pathInfo}");

         routes.MapRoute(
            name: "Default",
            url: "{controller}/{action}/{id}",
            defaults: new { controller = "Home", action = "Index", id = UrlParameter.Optional }
         );
      }
   }
}
```

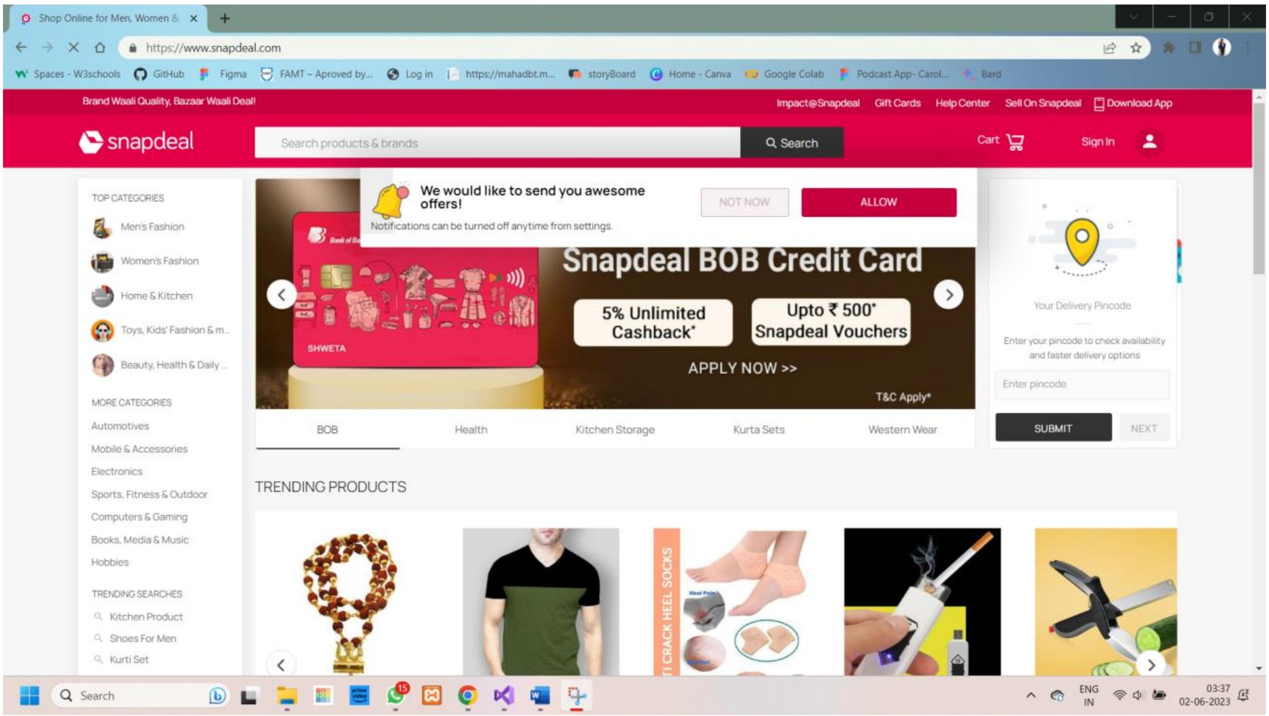
- **Output :**



Product Information

Product Name = Kayak
Product Price=275

Visit Snapdeal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Mobile & Accessories
Electronics
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Computers & Gaming
Books, Media & Music
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Kitchen Product
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