

BMI :

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

//Do not change the namespace name
namespace BMITrackerApp.Models
{
    public enum Gender { Select, Male, Female, Others }

    //Do not change the class name
    public class BMI
    {
        [MaxLength(20)]
        [Required(ErrorMessage = "Please Provide Person Name")]
        [Display(Name = "Person Name")]
        public string PersonName { get; set; }

        [Required, Range(1, 3, ErrorMessage = "Please Select Gender")]
        public Gender Gender { get; set; }

        [Required, Range(18, 60, ErrorMessage = "Please Enter Age")]
        public int Age { get; set; }

        [Required(ErrorMessage = "Please Provide Date of Record")]
        [DataType(DataType.Date)]
        [Display(Name = "Date of Record")]
        [DisplayFormat(DataFormatString = "{0:yyyy-MM-dd}", ApplyFormatInEditMode =
true)]
        public DateTime? DateOfRecord { get; set; }

        [Required, Range(30.0, 100.0, ErrorMessage = "Please Enter Weight in KG")]
        [Display(Name = "Weight In Kg")]
        public double WeightInKg { get; set; }

        [Required, Range(100, 300, ErrorMessage = "Please Enter Height in CM")]
        [Display(Name = "Height In CM")]
        public double HeightInCm { get; set; }

        [Display(Name = "Calculated BMI")]
        [DisplayFormat(DataFormatString = "{0:0.0}", ApplyFormatInEditMode = true)]
        public double CalculatedBMI { get; set; }

        //Write your code here
        public double GetBMI()
        {
            this.CalculatedBMI=WeightInKg/Math.Pow((HeightInCm/100),2);
            return this.CalculatedBMI;
        }
    }
}
```

BMICONTROLLER:

using BMITrackerApp.Data;

```

using BMITrackerApp.Models;
using System;
using System.Collections.Generic;
using System.Dynamic;
using System.Linq;
using System.Web;
using System.Web.Mvc;

//Do not change the namespace name
namespace BMITrackerApp.Controllers
{
    //Do not change the class name
    public class BMIController : Controller
    {
        BMIDAO bmidao = new BMIDAO();
        //Implement your code
        public ActionResult Index()
        {
            return View(bmidao.GetBMIData());
        }
        [HttpGet]
        public ActionResult Create()
        {
            return View();
        }
        [HttpPost]
        public ActionResult Create(BMI bmi)
        {
            bmi.CalculatedBMI= bmi.GetBMI();
            bmidao.AddBMIData(bmi);
            return View();
        }

        [HttpPost]
        public ActionResult CheckExisting(string personName)
        {
            foreach(BMI bmi in bmidao.GetBMIData())
            {
                if(bmi.PersonName==personName) return View(bmi);
            }
            return View();
        }
    }
}

```

BMIDAO:

```

using BMITrackerApp.Models;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

//Do not change the namespace name
namespace BMITrackerApp.Data
{
    //Do not change the class name
    public class BMIDAO

```

```

    {
        public static List<BMI> bmiData = new List<BMI>
        {
            new BMI{ PersonName="Ruchi", Age=21, DateOfRecord=new
DateTime(2001,02,15), Gender=Gender.Female , HeightInCm=156, WeightInKg=55,
CalculatedBMI=22.6 },
            new BMI{ PersonName="Ruchi", Age=21, DateOfRecord=new
DateTime(2001,03,15), Gender=Gender.Female , HeightInCm=156, WeightInKg=54,
CalculatedBMI=22.2 },
            new BMI{ PersonName="Aman", Age=25, DateOfRecord=new
DateTime(2001,02,15), Gender=Gender.Male, HeightInCm=176, WeightInKg=65,
CalculatedBMI=21.0 },
            new BMI{ PersonName="Aman", Age=25, DateOfRecord=new
DateTime(2001,03,15), Gender=Gender.Male, HeightInCm=176, WeightInKg=66,
CalculatedBMI=21.3 }
        };

        public BMIDAO()
        {
            bmiData.OrderBy(b=>b.PersonName).ThenBy(b=>b.DateOfRecord);
        }

        public List<BMI> GetBMIData()
        {
            return bmiData;
        }

        public void AddBMIData(BMI bmi)
        {
            bmiData.Add(bmi);
            bmiData.OrderBy(b=>b.PersonName).ThenBy(b=>b.DateOfRecord);
        }
    }
}

```


 Create.cshtml:

```

@model BMITrackerApp.Models.BMI

@{
    ViewBag.Title = "Create";
    Layout="_Layout.cshtml"
}

<h2>Create</h2>
<hr />

@*Implement view code here*@
@using (Html.BeginForm())
{
    <table>
        <tr>
            <td>Person Name</td>
            <td>@Html.TextBoxFor(m=>m.PersonName)</td>
        </tr>
    </table>
}

```

```

        <tr>
            <td></td>
            <td><button id="check">Check Existing Data</button></td>
        </tr>
        <tr>
            <td>Age</td>
            <td>@Html.TextBoxFor(m=>m.Age)</td>
        </tr>
        <tr>
            <td>Gender</td>
            <td>@Html.DropDownListFor(m=>m.Gender,
                new SelectList(Enum.GetValues(typeof(Gender))), "Select")</td>
        </tr>
        <tr>
            <td>Date of Record</td>
            <td>@Html.EditorFor(m=>m.DateOfRecord)</td>
        </tr>
        <tr>
            <td>Weight In Kg</td>
            <td>@Html.TextBoxFor(m=>m.WeightInKg)</td>
        </tr>
        <tr>
            <td>Height In CM</td>
            <td>@Html.TextBoxFor(m=>m.HeightInCM)</td>
        </tr>
        <tr>
            <td><input type="submit" value="Create"></td>
        </tr>
    </table>
}
<div>
    @Html.ActionLink("Back to List", "Index")
</div>

```

```

@section Scripts {
    @Scripts.Render("~/bundles/jqueryval")
}

```

```

Index.cshtml:
@model IEnumerable<BMITrackerApp.Models.BMI>

```

```

@{
    ViewBag.Title = "Index";
    Layout = "_Layout.cshtml"
}

```

```

<h2>Index</h2>

```

```

@*Implement view code here*@
@Html.ActionLink("Create New", "Create")
<table>
    <tr>
        <th>Person Name</th>
        <th>Age</th>
        <th>Gender</th>
        <th>Date of Record</th>
        <th>Height in CM</th>
        <th>Weight in Kg</th>
    </tr>

```

```

        <th>Calculated BMI</th>
    </tr>
    @foreach(var bmi in @Model)
    {
    <tr>
        <td>bmi.PersonName</td>
        <td>bmi.Age</td>
        <td>bmi.Gender</td>
        <td>bmi.DateOfRecord</td>
        <td>bmi.HeightInCm</td>
        <td>bmi.WeightInKg</td>
        <td>bmi.CalculatedBMI</td>
    </tr>
    }
</table>

```

_Layout.cshtml:

```

<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>@ViewBag.Title - BMI Tracker</title>
    @Styles.Render("~/Content/css")
    @Scripts.Render("~/bundles/modernizr")
</head>
<body>
    <div class="navbar navbar-inverse navbar-fixed-top">
        <div class="container">
            <div class="navbar-header">
                <button type="button" class="navbar-toggle" data-toggle="collapse"
data-target=".navbar-collapse">
                    <span class="icon-bar"></span>
                    <span class="icon-bar"></span>
                    <span class="icon-bar"></span>
                </button>
                @Html.ActionLink("BMI Tracker", "Index", "BMI", new { area = "" },
new { id = "home", @class = "navbar-brand" })
            </div>
            <div class="navbar-collapse collapse">
                <ul class="nav navbar-nav">

                    <li><a asp-page="/Index">Show All Data</a></li>
                    <li><a asp-page="/Create">Create</a></li>

                </ul>
            </div>
        </div>
    </div>
    <div class="container body-content">
        @RenderBody()
        <hr />
        <footer>
            <p>&copy; @DateTime.Now.Year - App</p>
        </footer>
    </div>

```

```
    @Scripts.Render("~/bundles/jquery")
    @Scripts.Render("~/bundles/bootstrap")
    @RenderSection("scripts", required: false)
</body>
</html>
```