Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

\_\_\_8\_\_\_

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | Create a workflow for simple calculator. |
| 2 | Create a workflow for any real-world problem and test the asp.net mvc application using that workflow. |

Submitted On:

20-06-2023

(Date: DD/MM/YY)

**Task#1: Create a workflow for a simple calculator.**

**Solution:**

**CONTROLLER CODE:**

using System;

using System.Activities;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.Mvc;

using workflowInASP.Models;

namespace workflowInASP.Controllers

{

public class HomeController : Controller

{

public ActionResult Index()

{

return View();

}

public ActionResult About()

{

ViewBag.Message = "Your application description page.";

return View();

}

public ActionResult Contact()

{

ViewBag.Message = "Your contact page.";

return View();

}

[HttpPost]

public ActionResult FindBMI(BMI model)

{

var result = WorkflowInvoker.Invoke(new BMIruleBased.Workflow1(), new Dictionary<string, object> {

{

"input",

model.Value

}

});

model.Recommendation = result["Recommendation"] as String;

TempData["wfResult"] = model;

return RedirectToAction("ShowResult");

}

[HttpGet]

public ActionResult ShowResult()

{

BMI model = TempData["wfResult"] as BMI;

return View(model);

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

namespace workflowInASP.Models

{

public class BMI

{

public Double input1 { get; set; }

public Double input2 { get; set; }

public Double Value

{

get

{

return input1 + input2;

}

}

public string Recommendation { get; set; }

}

}

VIEW CODE:

@model workflowInASP.Models.BMI

@{

ViewBag.Title = "Home Page";

}

<div class="row">

<div class="col-md-12">

<h1 style="text-align:center">

Weight Status

</h1>

</div>

</div>

<div>

@using (@Html.BeginForm("FindBMI", "Home"))

{

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2">

@Html.LabelFor(model => model.input1)

</div>

<div class="col-md-6">

@Html.TextBoxFor(model => model.input1, new { @class = "form-control" })

</div>

</div>

<div class="row">

<div class="col-md-4"> </div>

<div class="col-md-2">

@Html.LabelFor(model => model.input2)

</div>

<div class="col-md-6">

@Html.TextBoxFor(model => model.input2, new { @class = "form-control" })

</div>

</div>

<div class="row">

<div class="col-md-6"> </div>

<div class="col-md-6">

<input type="submit" name="Submit" value="Submit" />

</div>

</div>

}

</div>

@model workflowInASP.Models.BMI

@{

ViewBag.Title = "ShowResult";

}

<p>BMI REPORT</p>

<div class="row">

<div class="col-md-12">

<h1 style="text-align:center"> Calculator</h1>

</div>

</div>

<hr />

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2"> @Html.LabelFor(model => model.input1) </div>

<div class="col-md-6"> @Html.TextBoxFor(model => model.input1, new { @class = "form-control" }) </div>

</div>

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2"> @Html.LabelFor(model => model.input2) </div>

<div class="col-md-6"> @Html.TextBoxFor(model => model.input2, new { @class = "form-control" }) </div>

</div>

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2"> @Html.LabelFor(model => model.Value)</div>

<div class="col-md-6"> @Html.TextBoxFor(model => model.Value, new { @class = "form-control" }) </div>

</div>

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2"> @Html.LabelFor(model => model.Recommendation) </div>

<div class="col-md-6"> @Html.TextAreaFor(model => model.Recommendation, new { @class = "form-control" }) </div>

</div>

<div class="row">

<div class="col-md-6"></div>

<div class="col-md-6"> @Html.ActionLink("Back", "Index") </div>

</div>

OUTPUT:

A screenshot of a calculator

Description automatically generated

A picture containing text, screenshot, font, line

Description automatically generated

**A screenshot of a computer

Description automatically generated with medium confidence**

**Task#2: Create a workflow for any real-world problem and test the asp.net MVC application using that workflow.**

**SOLUTION:**

CONTROLLER CODE:

using System;

using System.Activities;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.Mvc;

using workflowInASP.Models;

namespace workflowInASP.Controllers

{

public class HomeController : Controller

{

public ActionResult Index()

{

return View();

}

public ActionResult About()

{

ViewBag.Message = "Your application description page.";

return View();

}

public ActionResult Contact()

{

ViewBag.Message = "Your contact page.";

return View();

}

[HttpPost]

public ActionResult FindBMI(BMI model)

{

var result = WorkflowInvoker.Invoke(new BMIruleBased.Workflow1(), new Dictionary<string, object> {

{

"BMIinput",

model.BMIValue

}

});

model.Recommendation = result["Recommendation"] as String;

TempData["wfResult"] = model;

return RedirectToAction("ShowResult");

}

[HttpGet]

public ActionResult ShowResult()

{

BMI model = TempData["wfResult"] as BMI;

return View(model);

}

}

}

VIEW CODE:

@model workflowInASP.Models.BMI

@{

ViewBag.Title = "ShowResult";

}

<p>BMI REPORT</p>

<div class="row">

<div class="col-md-12">

<h1 style="text-align:center">BMI Report</h1>

</div>

</div>

<hr />

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2"> @Html.LabelFor(model => model.Height); </div>

<div class="col-md-6"> @Html.TextBoxFor(model => model.Height, new { @class = "form-control" }) </div>

</div>

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2"> @Html.LabelFor(model => model.Weight); </div>

<div class="col-md-6"> @Html.TextBoxFor(model => model.Weight, new { @class = "form-control" }) </div>

</div>

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2"> @Html.LabelFor(model => model.BMIValue); </div>

<div class="col-md-6"> @Html.TextBoxFor(model => model.BMIValue, new { @class = "form-control" }) </div>

</div>

<div class="row">

<div class="col-md-4"></div>

<div class="col-md-2"> @Html.LabelFor(model => model.Recommendation); </div>

<div class="col-md-6"> @Html.TextAreaFor(model => model.Recommendation, new { @class = "form-control" }) </div>

</div>

<div class="row">

<div class="col-md-6"></div>

<div class="col-md-6"> @Html.ActionLink("Back", "Index") </div>

</div>

BMI.CS CLASS:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

namespace workflowInASP.Models

{

public class BMI

{

public Double Height { get; set; }

public Double Weight { get; set; }

public Double BMIValue{

get

{

if (Height > 0)

{

return Weight / (Height \* Height);

}

else

return 0;

}

}

public string Recommendation { get; set; }

}

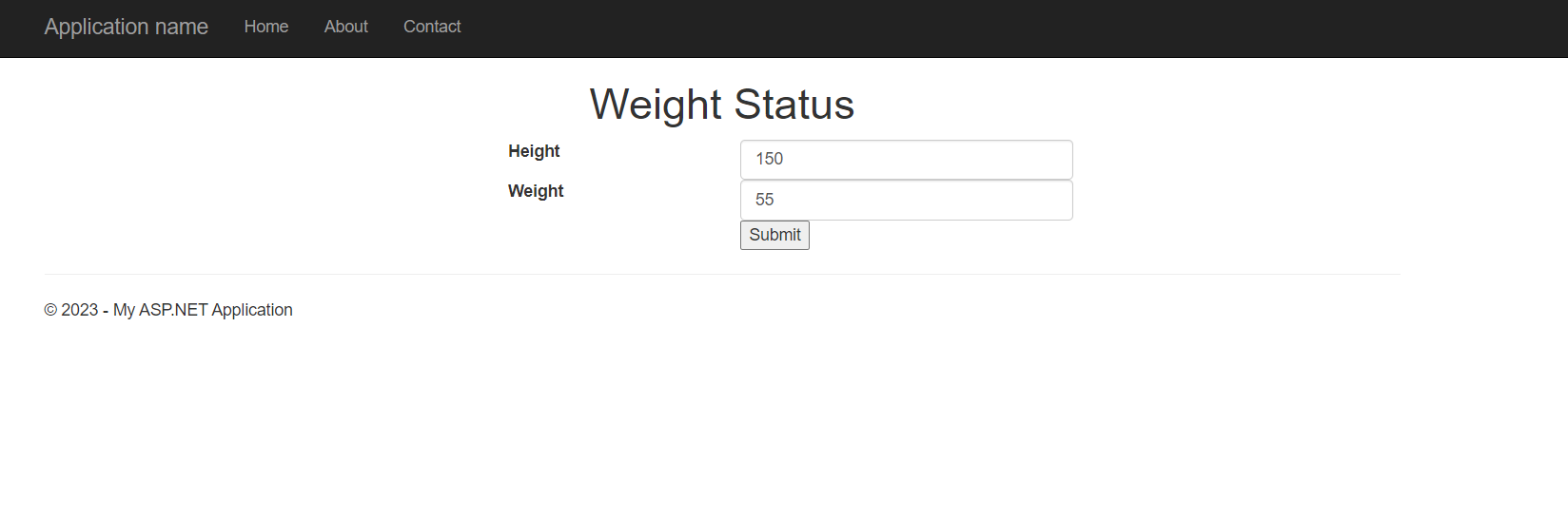
}

WORKFLOW:

A screenshot of a computer

Description automatically generated with medium confidence

**OUTPUT:**



A screenshot of a computer

Description automatically generated with medium confidence