Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

**08**

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.** |
|  |  |

**Task No. 1: Create a workflow for a simple calculator.**

**Solution:**

**Calculator.cs:**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

namespace workflowInASP.Models

{

public class Caclculator

{

public Double Number1 { get; set; }

public Double Number2 { get; set; }

public string ch { get; set; }

public Double CalculatedValue

{

get

{

if (ch == "+")

{

return Number1 + Number2;

}

else if (ch == "-")

{

return Number1 - Number2;

}

else if (ch == "\*")

{

return Number1 \* Number2;

}

else if (ch == "/")

{

return Number1 / Number2;

}

else

return 0;

} }

public string op{ get; set; }

}

}

**Home Controller:**

using System.Activities;

using System.Collections.Generic;

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 FindValue(Caclculator model)

{

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

{

{

"Calculated Value",

model.CalculatedValue

}

});

model.op = result["op"] as string;

TempData["wfResult"] = model;

return RedirectToAction("ShowResult");

}

[HttpGet]

public ActionResult ShowResult()

{

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

return View(model);

}}}

**Index:**

@model workflowInASP.Models.Caclculator

@{

ViewBag.Title = "Home Page";

}

<div class="row">

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

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

Calculator

</h1>

</div>

<br />

<br />

</div>

<div>

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

{

<div class="row">

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

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

@Html.LabelFor(model => model.Number1)

</div>

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

@Html.TextBoxFor(model => model.Number1, new { @class = "form-control" })

</div>

</div>

<div class="row">

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

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

@Html.LabelFor(model => model.Number2)

</div>

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

@Html.TextBoxFor(model => model.Number2, new { @class = "form-control" })

</div>

</div>

<div class="row">

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

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

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

</div>

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

@Html.TextBoxFor(model => model.ch, 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>

**Show Results:**

@model workflowInASP.Models.Caclculator

@{

ViewBag.Title = "ShowResult";

}

<p>Calculated Results</p>

<div class="row">

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

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

</div>

</div>

<hr />

<div class="row">

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

<div class="col-md-2"> @Html.LabelFor(model => model.Number1) </div>

<div class="col-md-6"> @Html.TextBoxFor(model => model.Number1, new { @class = "form-control" }) </div>

</div>

<div class="row">

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

<div class="col-md-2"> @Html.LabelFor(model => model.Number2) </div>

<div class="col-md-6"> @Html.TextBoxFor(model => model.Number2, new { @class = "form-control" }) </div>

</div>

<div class="row">

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

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

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

</div>

<div class="row">

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

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

<div class="col-md-6"> @Html.TextAreaFor(model => model.op, 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 computer

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

**Task No. 2: Create a workflow for any real-world problem and test the asp.net mvc application using that workflow.**

**Solution:**

**BMI .cs:**

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

A screenshot of a computer

Description automatically generated with medium confidence

70

6.1

A screenshot of a computer

Description automatically generated with medium confidence

70

6.1