Bahria University

Karachi Campus

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Description automatically generated

LAB EXPERIMENT NO.

09

LIST OF TASKS

|  |  |
| --- | --- |
| **TASK NO** | **OBJECTIVE** |
| 1 | Implement Chain of Responsibility Design pattern on Processing Scenario. Consider that there are multiple processors having multiple responsibilities to handle (ex: media player file is played by media player handler, calculation is carried out by calculation handler, etc…) initiate handling for opening internet browser and notepad by creating multiple handlers with different responsibilities. |

Submitted On:

**1-06-2023**

(Date: DD/MM/YY)

(1)Implement Chain of Responsibility Design pattern on Processing Scenario. Consider that there are multiple processors having multiple responsibilities to handle (ex: media player file is played by media player handler, calculation is carried out by calculation handler, etc…) initiate handling for opening internet browser and notepad by creating multiple handlers with different responsibilities.

**Program Class**

using LAB08;

Processing obj\_internet = new InternetBrowser();

Processing obj\_notpad = new Notepad();

Processing obj\_calc = new Calculator();

Console.WriteLine("What do you want to open:\n Select one from following:");

Console.WriteLine("1-Internet Browser\n2-Notepad\n3-MediaPlayer\n4-Calculator");

int inp = int.Parse(Console.ReadLine());

if (inp == 1)

{

obj\_internet.ProcessRequest(inp);

}

else if (inp == 2)

{

obj\_notpad.ProcessRequest(inp);

}

else if (inp == 3)

{

obj\_calc.ProcessRequest(inp);

}

else

{

Console.WriteLine("Invalid Input");

}

**Processing Class**

namespace LAB08

{

abstract class Processing

{

public Processing() { }

protected Processing NextLogger;

public Processing(Processing NextLogger)

{

this.NextLogger = NextLogger;

}

public abstract void ProcessRequest(int input);

}

}

**InternetBrowser Class**

namespace LAB08

{

internal class InternetBrowser : Processing

{

public override void ProcessRequest(int input)

{

if (input.Equals(1))

{

Console.WriteLine("Your Requested Browser is opening");

Console.WriteLine("Welcome to Firefox");

}

else

{

Console.WriteLine("Sorry Try again");

}

}

}

}

**Notepad Class**

namespace LAB08

{

internal class Notepad :Processing

{

public override void ProcessRequest(int input)

{

if (input.Equals(2))

{

Console.WriteLine("Notepad is Opening");

Console.WriteLine("Now you can write content");

}

else

{

Console.WriteLine("Sorry Try again");}}}}

**Calculator Class**

namespace LAB08

{

internal class Calculator : Processing

{

public override void ProcessRequest(int input)

{

if (input.Equals(4))

{

Console.Write("Calculator : ");

Console.WriteLine("You can perform calculation");

}

else

{

Console.WriteLine("Sorry Try again"); } } } }

