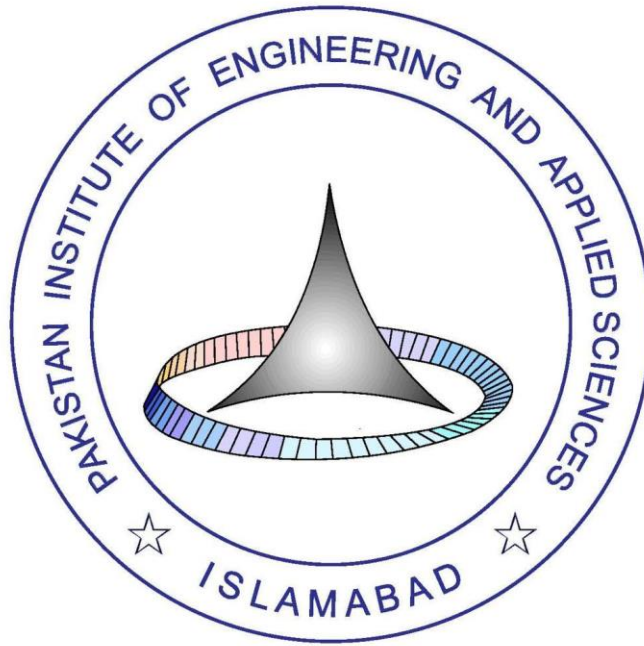




Course: IAD

Assignment: Web Services

Submitted by:

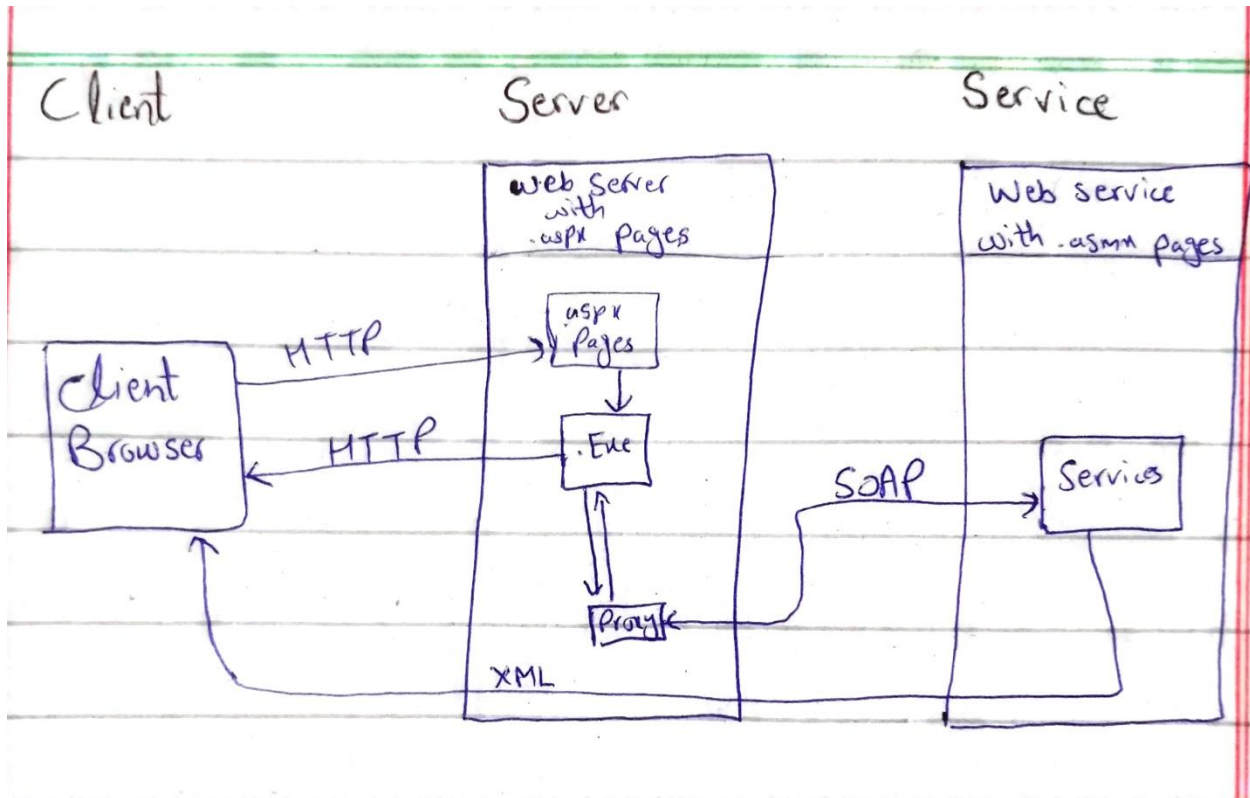
Muhammad Umer Riaz

Submitted to:

Mr. Irfan Hameed

Task 1

Web Services Execution Model:



Task 2

MathLibService.asmx:

Imports System.Web

Imports System.Web.Services

Imports System.Web.Services.Protocols

' To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.

' <System.Web.Script.Services.ScriptService()> _

<WebService(Namespace:="http://tempuri.org/")>

<WebServiceBinding(ConformsTo:=WsiProfiles.BasicProfile1_1)>

```
<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated(>
```

```
Public Class MathLibService
```

```
    Inherits System.Web.Services.WebService
```

```
<WebMethod(>
```

```
Public Function Add(a As Integer, b As Integer) As String
```

```
    Return (a + b).ToString()
```

```
End Function
```

```
<WebMethod(>
```

```
Public Function Subtract(a As Integer, b As Integer) As String
```

```
    Return (a - b).ToString()
```

```
End Function
```

```
<WebMethod(>
```

```
Public Function Multiply(a As Integer, b As Integer) As String
```

```
    Return (a * b).ToString()
```

```
End Function
```

```
<WebMethod(>
```

```
Public Function Divide(a As Integer, b As Integer) As String
```

```
    If b = 0 Then
```

```
        Return "Cannot divide by zero"
```

```
    End If
```

```
    Return (a / b).ToString()
```

```
End Function
```

End Class

Task 3

Opened **IIS Manager** → Created **Application**:

Add Website ? X

Site name: MathLibService Application pool: MathLibService Select...

Content Directory

Physical path: E:\Iad\Web Services ...

Pass-through authentication

Connect as... Test Settings...

Binding

Type: http IP address: All Unassigned Port: 80

Host name:

Example: www.contoso.com or marketing.contoso.com

☒ Start Website immediately

OK Cancel

The following operations are supported. For a formal definition, please review the [Service Description](#).

- [Add](#)
- [Divide](#)
- [Multiply](#)
- [Subtract](#)

Add Website

? ×

Site name:	Application pool:	
ServiceClient	ServiceClient	Select...

Content Directory

Physical path:

E:\lad\ServiceClient	...
---	------------------------------------

Pass-through authentication

Connect as...	Test Settings...
--	---

Binding

Type:	IP address:	Port:
http	All Unassigned	88

Host name:

Example: www.contoso.com or marketing.contoso.com

☒ Start Website immediately

OK	Cancel
-----------------------------------	---------------------------------------

Task 4

ServiceClient:

Connected this website with the web service

Default.aspx:

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Default.aspx.vb"
Inherits="_Default" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <title>Math Service Client</title>
</head>
<body>
    <form id="form2" runat="server">
        <h2>Call Math Service</h2>
        <asp:TextBox ID="txtA" runat="server" Placeholder="Enter A" />
        <asp:TextBox ID="txtB" runat="server" Placeholder="Enter B" /><br /><br />
        <asp:Button ID="btnAdd" runat="server" Text="Add" />
        <asp:Button ID="btnSubtract" runat="server" Text="Subtract" />
        <asp:Button ID="btnMultiply" runat="server" Text="Multiply" />
        <asp:Button ID="btnDivide" runat="server" Text="Divide" /><br /><br />
        <asp:Label ID="lblResult" runat="server" Font-Bold="True" ForeColor="Green" />
    </form>
```

</body>

</html>

Default.aspx.vb:

Partial Class _Default

Inherits System.Web.UI.Page

' Initialize client from web reference

Dim client As New MathService.MathLibService()

Protected Sub btnAdd_Click(sender As Object, e As EventArgs) Handles btnAdd.Click

lblResult.Text = "Result: " & client.Add(CInt(txtA.Text), CInt(txtB.Text))

End Sub

Protected Sub btnSubtract_Click(sender As Object, e As EventArgs) Handles
btnSubtract.Click

lblResult.Text = "Result: " & client.Subtract(CInt(txtA.Text), CInt(txtB.Text))

End Sub

Protected Sub btnMultiply_Click(sender As Object, e As EventArgs) Handles
btnMultiply.Click

lblResult.Text = "Result: " & client.Multiply(CInt(txtA.Text), CInt(txtB.Text))

End Sub

Protected Sub btnDivide_Click(sender As Object, e As EventArgs) Handles
btnDivide.Click

```
lblResult.Text = "Result: " & client.Divide(CInt(txtA.Text), CInt(txtB.Text))
```

```
End Sub
```

```
End Class
```

Outputs:

Call Math Service

4 5

Result: 9

Call Math Service

4 5

Result: -1

Call Math Service

4 5

Result: 20

Call Math Service

4 5

Add Subtract Multiply Divide

Result: 0.8