Day 21 Assignment

By

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NB Healthcare and Technology

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**Topics**

**Web Service**

**Content**

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| --- | --- | --- |
| S.No | Content | Page No. |
| 1. | Create a web service for Mathematical Operations. | 3 |
| 2. | Create a Console Application and consume the webservice | 4 |
| 3. | Create a Windows Forms application and consume the webservice | 5 |
| 4. | screen shots of webservice running | 6 |

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| 1. Create a web service for Mathematical Operations. |
| Steps to Create Web Service: |
| * Add .NET Framework project and item Template to Visual Studio in VS Installer * After modifying open VS and select for dropdown: C# language, Windows platform, Web type. * Find and select ASP.NET Web Application (.NET Framework) * Create the web project. |
| Code : |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Web;  using System.Web.Services;  namespace MyMathematicsWebLibrary  {  /// <summary>  /// Summary description for MathsOperations  /// </summary>  [WebService(Namespace = "http://tempuri.org/")]  [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1\_1)]  [System.ComponentModel.ToolboxItem(false)]  // To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.  // [System.Web.Script.Services.ScriptService]  public class MathsOperations : System.Web.Services.WebService  {  [WebMethod]  public int Factorial(int n)  {  int fact = 1;  for (int i = 1; i < n; i++)  fact \*= i;  return fact;  }  [WebMethod]  public int Add(int a, int b)  {  return a + b;  }  [WebMethod]  public int Mul(int a, int b)  {  return a \* b;  }  [WebMethod]  public int Div(int a, int b)  {  return a / b;  }  }  } |
| Output : |
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| 2. Create a Console Application and consume the webservice |
| Code : |
| using MyTestClientApp.ServiceReference1;  using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace MyTestClientApp  {  internal class Program  {  static void Main(string[] args)  {  MathsOperationsSoapClient obj = new MathsOperationsSoapClient();  Console.WriteLine(obj.Factorial(4));  Console.WriteLine(obj.Add(5, 10));  Console.WriteLine(obj.Mul(2, 5));  Console.WriteLine(obj.Add(6, 3));  Console.ReadLine();  }  }  } |
| Output : |
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| 3. Create a Windows Forms application and consume the webservice (Factorial). |
| Code : |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace \_2DArrayIntiIndexes  {  internal class Program  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author : Varun Sai Kumar Chegoni.  \* Purpose : Declare a 2-D array of size (3,3) and print trace of the array  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  static void Main(string[] args)  {  // Declaration and Intialization in same line  int[,] a = new int[,] { { 1, 2, 3 }, { 2, 4, 6 }, { 3, 6, 9 } };  int sum = 0;  // Nested for Loop  for (int i = 0; i <= 2; i++)  {  for (int j = 0; j <= 2; j++)  {  if (i==j)  sum = sum + a[i, j]; // Logic  }  }  Console.WriteLine("Trace of the Array= "+sum);  Console.ReadLine();  }  }  } |
| Output : |
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| 12. WACP to illustrate usage of Queue< >. Write couple of points about Queue |
| Code : |
|  |
| Output : |
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| Points about Queue |
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