# Tema Lab 4

Linkul catre tema: <https://github.com/plescaevelyn/y3-AIA/tree/main/Sem%202/II>

**Code for service**

using System;

using System.Collections.Generic;

using System.Configuration;

using System.Linq;

using System.Web;

using System.Web.Services;

namespace Exercise1\_Service

{

[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 WebService1 : System.Web.Services.WebService

{

[WebMethod(Description = "Converts temperature from C to F or vice versa based on chosen mode.")]

public int ConvertTemperature(int initialTemperature, char temperatureConversionMode)

{

switch (temperatureConversionMode)

{

case 'C':

return initialTemperature \* 9 / 5 + 32;

case 'F':

return (initialTemperature - 32) \* 5 / 9;

}

return -40;

}

[WebMethod(Description = "Returns current time.")]

public string TimeDisplay()

{

return DateTime.Now.ToString("h:mm:ss tt");

}

[WebMethod(Description = "Returns a list of 5 elements.")]

public string ListDisplay(List<string> list)

{

string elements = "";

foreach (string element in list)

{

elements += (element + "\t");

}

return elements;

}

[WebMethod(Description = "Converts currency in RON to currency in HUF.")]

public string CurrencyConversion(float ronAmount)

{

return (ronAmount \* (float)61.2796).ToString();

}

}

}

**Code for console client**

namespace MyFirstClient

{

internal class Program

{

static void Main(string[] args)

{

Exercise2ConsoleClient.ServiceReference1.WebService1SoapClient service = new Exercise2ConsoleClient.ServiceReference1.WebService1SoapClient();

int temperatureInF = service.ConvertTemperature(13, 'C');

Console.WriteLine("{0} Celsius in Fahrenheit is {1}",13, temperatureInF);

Console.ReadKey();

string currentTime = service.TimeDisplay();

Console.WriteLine("The current time is {0}", currentTime);

Console.ReadKey();

string list = service.ListDisplay(new List<string> { "one", "two", "three", "four", "five" });

Console.WriteLine("The elements of the list are {0}", list);

Console.ReadKey();

string convertToHUF= service.CurrencyConversion(100);

Console.WriteLine("{0}RON is equal to {1}HUF", currentTime);

Console.ReadKey();

}

}

}

**Code for Windows Forms client**

namespace Exercise2FormsClient

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

Exercise2FormsClient.ServiceReference1.WebService1SoapClient service = new Exercise2FormsClient.ServiceReference1.WebService1SoapClient();

}

private void FtoCbttn\_Click(object sender, EventArgs e)

{

resultTextBox.Text = service.ConvertTemperature(fahrenheitTextBox.Text, 'F');

}

private void CtoFbttn\_Click(object sender, EventArgs e)

{

resultTextBox.Text = service.ConvertTemperature(celsiusTextBox.Text, 'C');

}

private void ronTextBox\_TextChanged(object sender, EventArgs e)

{

hufTextBox.Text = service.CurrencyConversion(int.Parse(ronTextBox.Text));

}

private void dataLbl\_Click(object sender, EventArgs e)

{

dataLbl.Text = "Data: " + service.TimeDisplay();

}

}

}