Creation of a new Application Client in C# for the web Service.

Table des matières

Introduction1
Step 2 : initial project
Step 3 : Add a Web Service
Step 4 : copy the file.svg
Step 5 : Copy the sample code
Step 6 : Click on the button
Step (optional): correction of the error

Introduction

All the tutorial is made with Microsoft Visual Studio 2010, and the source code are write in C#, but as you probably know you can use a web Service with many other languages for example with Java. So if you want go to : <u>www://xxxxxxxxxx.fr</u> you will find a lot of other interesting utilisation of the web Services.Step 1 : Creation of a new project in visual

As you can see on the picture, we create a new Project in File, New, Project... and you choose in Visual C# : Application Windows Forms

Choose a name at your project. And click on OK.

Step 2 : initial project

So for our simple example, we just need a simple button, put it where you want in the Form and execute the code a first time,



Create a new function associate with this button (for that you can easily do that with double click on the button)

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Step 3 : Add a Web Service

It's the main part of this tutorial.

First make a right click on the name of the project in the windows "exploration of solution", choose "ajouter une réference de service".

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You have now to put the web Service Address, when you click on "go to". If the server address is good the program will write the different name of the operation found.

Next clique on OK.

Ajouter une référence de servi	ice	? ×				
Pour afficher une liste des services disponibles sur un serveur spécifique, entrez une URL de service et cliquez sur OK. Pour parcourir les services disponibles, cliquez sur Découvrir.						
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So now you have something like the picture.

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Step 4 : copy the file.svg

Put the file SVG where you want you on your computer, but you have to know where for the next step. So I thing the easiest is to put it with the .exe in the debug folder of the visual projet.

But for find this folder that you have to execute the debug program 1 time,

if you don't have sample of SVG file you can use our, here



Step 5 : Copy the sample code

Now you can call the different functions of the server so this is an example of a Client code very very simple, but as you can see in this function we didn't check the error return by the server

but if you want you can also download the file Form1.cs of the sample here or the full project here

you have to copy the code AND the using. And take care to change the name of the file and its localisation on the disc and also the name of the service.

```
using System.IO; // FOR THE FILE
using System.Threading; //FOR THREAD
```

```
private void button1_Click(object sender, EventArgs e)
   {
    //READ the "test.svg" file AND SAVE IT IN A byte array;
const string fileName = "test.svg";
    byte[] dataArray = new byte[1000000];
    using (FileStream fileStream = new FileStream(fileName, FileMode.Open))
    {
       fileStream.Read(dataArray, 0, (int)fileStream.Length);
    }
       // DECLARATION UTILISATION OF THE WEB SEVICE
   ServiceReference1.Service1SoapClient Client = new ServiceReference1.Service1SoapClient();
    string key="";
    string ERROR=""
       //STArT THE FUNCTIO ON THE SERVER
    key = Client.startThread_SVGtoPNG(dataArray, ref ERROR);
            //WAIT THE END OF THE PROCESS ON THE SERVER
     while (Client.isCompleteThread(key) == 0)
     {
        Thread.Sleep(100);
     }
       //CHECK IF THE FILE IS RDY
     if (Client.isCompleteThread(key) == 1)
      {
       //CALL THE FUNCTION WHICH RETURN THE FILE
          int Code_Error = 0;
          dataArray = Client.readResult(key, ref Code_Error, ref ERROR);
       //WRITE THE FILE RETURN BY THE SERVER
       if (dataArray != null)
       {
           string fileName2 = "test.png";
           using (FileStream fileStream2 = new FileStream(fileName2, FileMode.Create))
       {
          fileStream2.Write(dataArray, 0, dataArray.Length);
       }
     }
        //THE FUNCTION IS ARRIVE AT THE END
       button1.Text = "RESULT OK";
    }
}
```

Step 6 : Click on the button

So you execute the code, when the windows appear Click a first time on the button, wait ... the text in the button will change to "RESULT OK".

When that append that means you picture is on you computer, so you can go in your folder, and open "test.png"





Step (optional): correction of the error

If when you execute your code the application crash with this kind of error :



You have to change some parameters in the file app.config, as you can see in the picture we just change all the value to 2147483647, you can probably optimized and put others parameters with value lower but you have to know that all this parameters are interconnected.

And with this parameters you can re-execute your code

