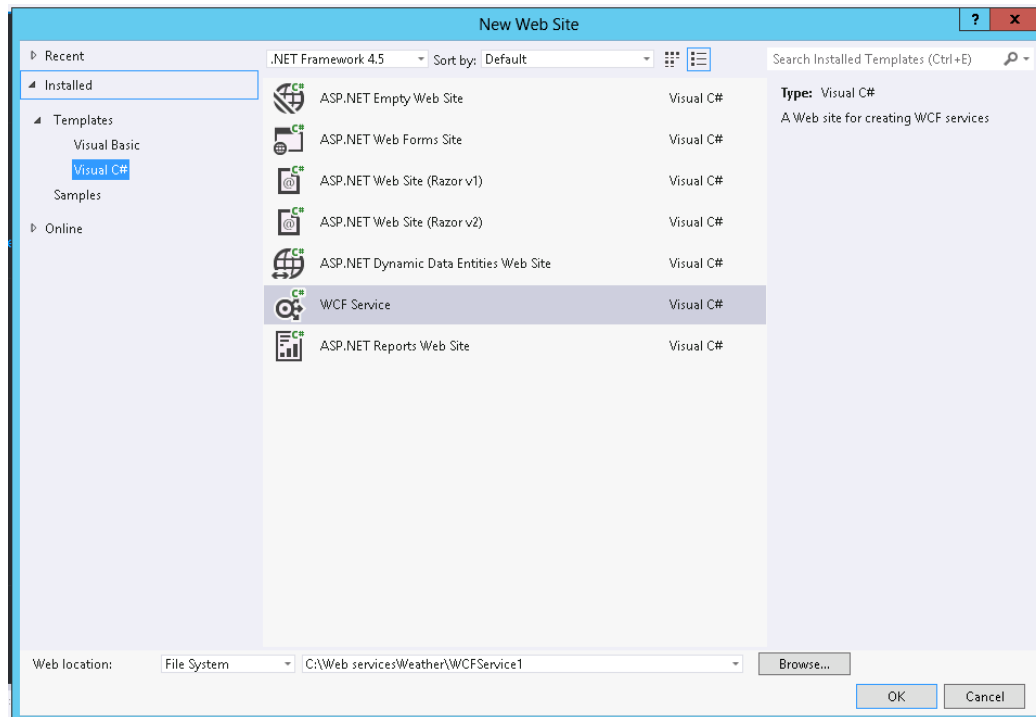# How to create Web service WCF

For creating simple web service follow the instruction.

For creating now web service using above API follow the following steps.

1. Open Microsoft Visual Studio.
2. Click on file and select new -> web site …. Following screen will appear

   Select WCF service option. Click Ok
3. New project will be created.
4. In Service.cs (can found in App_code).

You can remove GetData and GetDataUsingDataContract. We can add as many as other methods in code.

Following is the example of such method. You can create any sort method here.

This method is just to call "wunderground" to get weather details.

```csharp
string key = null;
public Service()
{
    key = "21ae1d7bb5078da2";
}
// this function will provide the forcast
public string getWeather(string city_name, string state_name)
{
    string output;
    using (WebClient client = new WebClient())
    {

        string input = "http://api.wunderground.com/api/" + key + "/conditions/q/" + state_name+"/"+city_name+".json";
        output = client.DownloadString(input);



        //JsonValue value = JsonValue.Parse(output);
        var jss = new JavaScriptSerializer();
        var dict = jss.Deserialize<Dictionary<string, dynamic>>(output);
        return (jss.Serialize(dict));
    }
}
```

In default constructor we initialized key value that we have from "wunderground"

The inputs for the method are "city_name name of city" and "state_name name of state".

WebClient might give you error saying missing references.

For removing that error we have to include libraries at the top of code as shown

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Runtime.Serialization;
using System.ServiceModel;
using System.ServiceModel.Web;
using System.Text;
using System.Web;
using System.Web.Script.Serialization;
using System.Net;
using System.Web.Services;
```

Next step is to open IService.cs which you can find in same App_Code folder.

Default it looks something like follow.

```
[ServiceContract]
public interface IService
{

    [OperationContract]
    string GetData(int value);

    [OperationContract]
    CompositeType GetDataUsingDataContract(CompositeType composite);

    // TODO: Add your service operations here
}
```

In order to use the method that we just created we have to add new methods to it.

```
[ServiceContract]
public interface IService
{

    [OperationContract]
    string getWeather(string city_name, string state_name);

    [OperationContract]
    string getWeather_hourly(string city_name, string state_name, Boolean hourly);


    [OperationContract]
    string getWeather_tenDays(string city_name, string state_name, Boolean tenday);

    // TODO: Add your service operations here
}
```

For our experiment I have remove the method declaration like GetData and GetDataUsingDataContract. I have added getWeather method. And other also.

For debugging press F5.