

Tweet Retrieval as a Web Service

A WCF implementation

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Introduction

The Tweet Retrieval as a Web Service has been realized using the Windows Communication Foundation (WCF) version .NET 4.5.

Path to Create a WCF project:

1. Open Visual Studio
2. Click File
3. Click New
4. Click Project
5. Select WCF Service Application from list of available projects for Visual C#
6. Give Name for Project Below

This is how you create the WCF project.

In the Solution Explorer in the right hand side of Visual Studio you will see the files generated for the project.

Technologies

Technologies

The public API i.e. Tweet Sharp was used.

Newtonsoft Json.NET

JSON.Net is used to parse the JSON String. It can be achieved by using the JObject notation or by creating an JArray which contains individual sections of the JSON string.

```
using (WebClient wc = new WebClient())
{
    string json = wc.DownloadString(apiCall);
    var jArray = JArray.Parse(json);
}
```

OR it can be done in the following manner :

```
JObject obj = JObject.Parse(json);
while (temp < count)
{
```

```
category = new Category();  
category.categoryID = (string)obj["categories"]["category"][temp]["id"];  
category.categoryName = (string)obj["categories"]["category"][temp]["name"];  
temp++;  
}
```

Usage of Web Service

Search for Tweets on basis of Hash Tags

```
public string GetTweetsOnHashTags(string hashTags)
```

Input Parameters :

hashTags : It contains the user query to search twitter data on the particular hash Tag .

This Web Service call will return the searched tweets in the customized JSON format.

Setting root of the Binary Search Tree

```
public string GetTweetsFromPhrase(String phrase)
```

Input Parameters :

phrase : It contains the user query to search twitter data on the particular phrase.

This Web Service call will return the searched tweets in the customized JSON format.

Class Structure

IService1.cs

Contains the OperationContracts i.e. the definition of the possible set of operations that can be performed using this web service.

Service1.svc.cs

Contains the implementations of the OperationContracts i.e. the implementations of the possible set of operations that can be performed using this web service.

TweetInstance.cs

Contains the singular representation of a Tweet in Object Format

MulTweetInstance.cs

Contains the representation of multiple Tweets in Object Format