



Code Sample: Using the Kayak API with C#

This code sample comes from J Wynia at <http://wynia.org>. It is completely free to be used for whatever purpose, including commercial use, without citation or any other acknowledgement.

This is a quick and dirty prototype/proof of concept for using the Kayak travel search API. You can find out more about how the API works at the documentation page: <http://www.kayak.com/labs/api/search/spec.html>

This shouldn't be used as-is. It was developed to see whether or not I'd be able to later accomplish what I'm after with the API and possibly as the starting point for my own library using Kayak. A proper version would have the settings in a config file and would do setters and getters on the properties.

Kayak.cs

This is a class library that does the actual communication with Kayak

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Net;
using System.Web;
using System.Xml;

namespace KayakLib
{
    public class Kayak
    {
        //Keys are from http://www.kayak.com/labs/api/search/developerkey.html
        //You have to have an account and log in. If you get an "anonymous" user
        //name, it won't work.
        private String KayakUser = "EMAILADDRESS";
        private String KayakKey = "KAYAKKEY";
        private String KayakBaseUrl = "http://api.kayak.com";
        private DateTime SessionExpiration;
        public String SessionId = "";
        public String HomeAirport = "MSP";
        public Kayak()
    }
}
```

```

    {
        SessionId = GetSession();
    }
    private string GetSession()
    {
        String Url = KayakBaseUrl + "/k/ident/apisession?version=1&token="
+ KayakKey;
        WebClient Web = new WebClient();
        byte[] DownloadedData = Web.DownloadData(Url);
        UTF8Encoding objUTF8 = new UTF8Encoding();
        String SessionXmlString = objUTF8.GetString(DownloadedData);
        XmlDocument KayakSessionXml = new XmlDocument();
        KayakSessionXml.LoadXml(SessionXmlString);
        XmlNode TokenNode = KayakSessionXml.SelectSingleNode("//sid");
        String Token = TokenNode.FirstChild.Value.ToString();
        return Token;
    }
    public XmlDocument FlightSearch(String DestinationAirport, DateTime
DepartDate, DateTime ReturnDate)
    {
        String DepartDateString = DepartDate.ToShortDateString();
        String ReturnDateString = ReturnDate.ToShortDateString();

        //Start Search
        String Url = KayakBaseUrl + "/s/apisearch?";
        Url += "basicmode=true&";
        Url += "oneway=n&";
        Url += "origin="+HomeAirport+"&";
        Url += "destination=BOS&";
        Url += "depart_date=" + DepartDateString + "&";
        Url += "return_date=" + ReturnDateString + "&";
        Url += "depart_time=a&return_time=a&";
        Url += "travelers=1&";
        Url += "cabin=e&";
        Url += "action=doFlights&";
        Url += "apimode=1&";
        Url += "_sid_" + this.SessionId;
        WebClient Web = new WebClient();
        byte[] DownloadedData = Web.DownloadData(Url);
        UTF8Encoding objUTF8 = new UTF8Encoding();
        String InitialSearchXmlString = objUTF8.GetString(DownloadedData);
        XmlDocument SearchIdXml = new XmlDocument();

```

```

SearchIdXml.LoadXml(InitialSearchXmlString);
XmlNode SearchIdNode = SearchIdXml.SelectSingleNode("//searchid");
String SearchId = SearchIdNode.FirstChild.Value.ToString();

//Get Flight Results
Url = KayakBaseUrl + "/s/basic/flight?";
Url += "searchid="+ SearchId+"&";
Url += "c=100&";
Url += "apimode=1&";
Url += "s=price&d=up&";
Url += "_sid_" + this.SessionId;
Web = new WebClient();
DownloadedData = Web.DownloadData(Url);
objUTF8 = new UTF8Encoding();
String FlightResultsXmlString = objUTF8.GetString(DownloadedData);

XmlDocument FlightResultsXml = new XmlDocument();
FlightResultsXml.LoadXml(FlightResultsXmlString);

return FlightResultsXml;
}
}
}

```

KayakTester.cs

This is a quick console app to do a basic search using the library. "QSF" is the airport code for any airport in San Francisco.

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using KayakLib;

namespace KayakTester
{
    class Program
    {
        static void Main(string[] args)
        {

```

```
DateTime DepartDate = new DateTime(2008,9,12);
```

```
DateTime ReturnDate = new DateTime(2008,9,16);
```

```
Kayak KayakSession = new Kayak();
```

```
KayakSession.FlightSearch("QSF", DepartDate, ReturnDate);
```

```
}
```

```
}
```

```
}
```