Wrapping BBEC WebAPI with a Custom Webservice

David Moll for the University of Michigan

Hi!

I'm David Moll,
Senior Application Developer at the University of Michigan

Organization: Information Technology Services - Application and Information Services (ITS-AIS)

Hometown: Rochester, NY

Interesting fact #1! – I worked at NASA's JPL in Pasadena, CA for a summer.

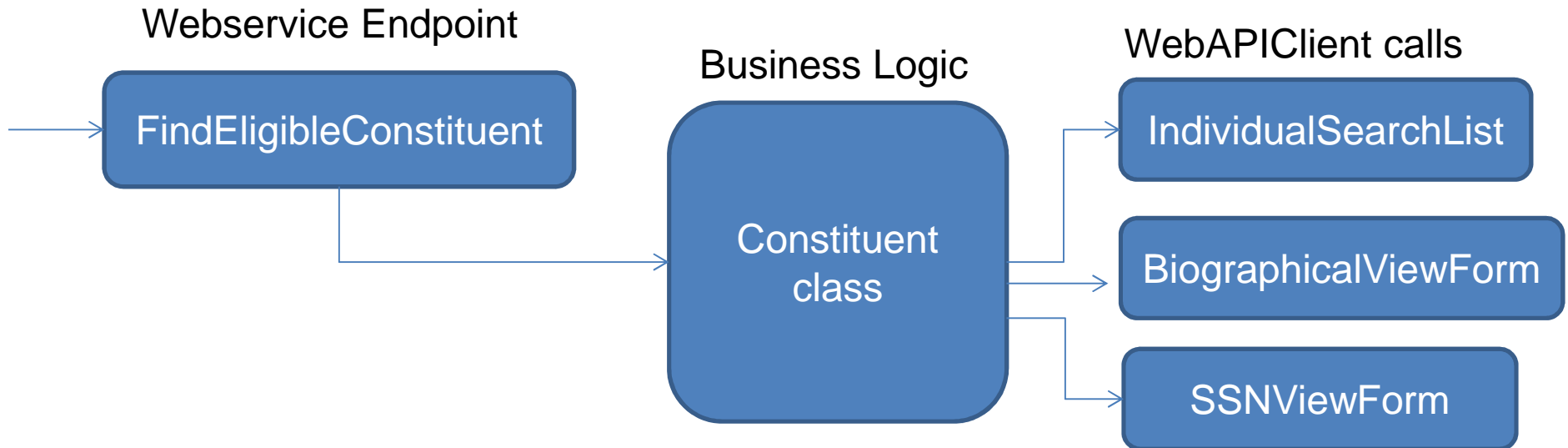Interesting fact #2! – My first computer was an Apple IIc

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BBEC at U-M

DART – **D**onor **A**lumni **R**elationship **T**ool
1.7 million individual constituents

Yes, we had a naming contest.

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Creating a new uniqname
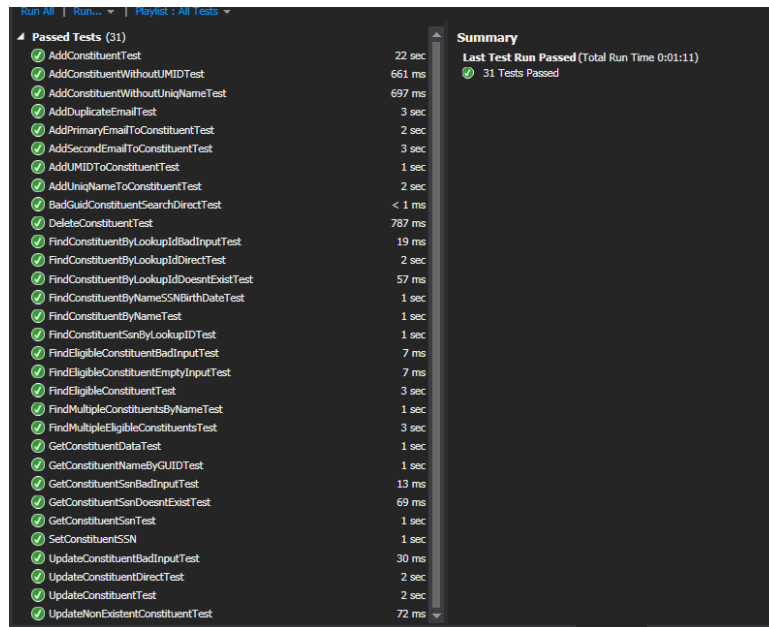
Custom Webservice Architecture

Webservice Endpoint

Business Logic

WebAPIClient calls

FindEligibleConstituent

Constituent class

IndividualSearchList

BiographicalViewForm

SSNViewForm

```
var constituentBioData =
    ViewForms.Constituent.IndividualBiographicalViewForm
        .LoadData(AppFxProvider, constitId.ToString());
```

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Unit Testing!

On to the acceptance/integration testing!

Acceptance/Integration Testing!
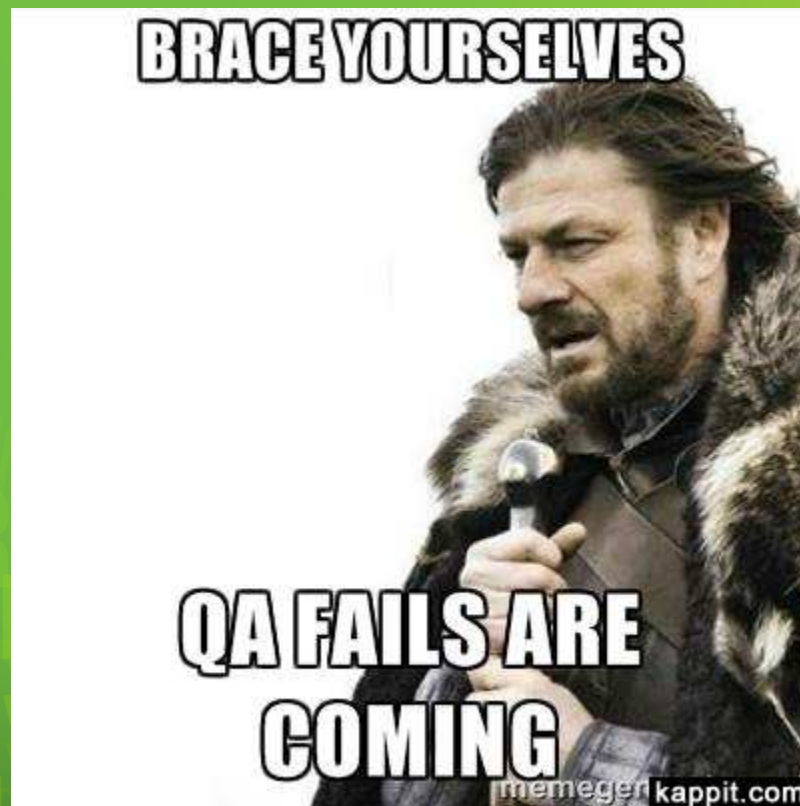
The BBEC SDK Can Save Us!

Let's create a custom SearchListSpec:

```sql
 3 ⊟CREATE procedure dbo.USR_UM_USP_SEARCHLIST_CONSTITUENTSEARCHWITHBIRTHDATE
 4  (
 5      @LASTNAME nvarchar(100) = null,
 6      @BIRTHDATE dbo.UDT_FUZZYDATE = '00000000',
 7      @MAXROWS smallint = 500
 8  )
 9  as
10 ⊟    select top(@MAXROWS)
11          c.ID,
12          c.NAME
13      from
14          dbo.CONSTITUENT c
15      where
16          (KEYNAME = @LASTNAME)
17          and (c.BIRTHDATE = @BIRTHDATE)
18      order by
19          KEYNAME asc
20
```

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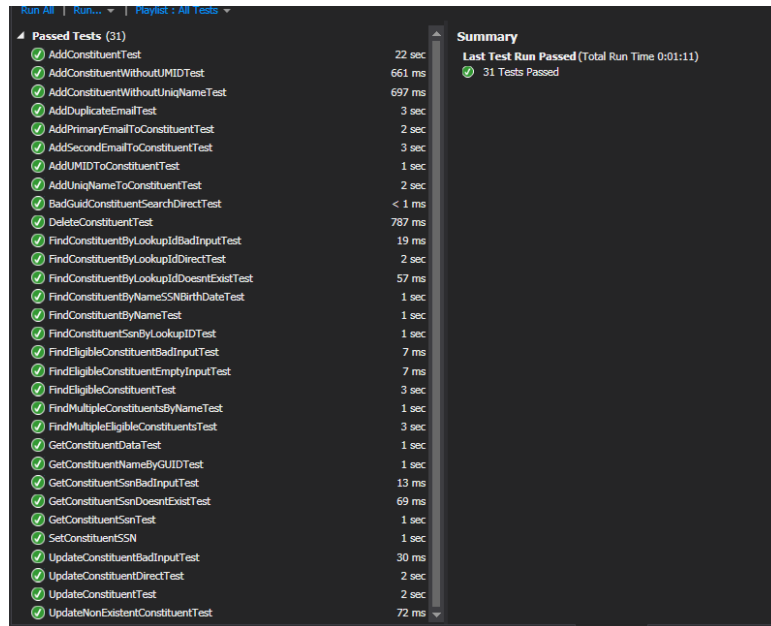UNIVERSITY OF MICHIGAN

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BBMetalWeb to the Rescue
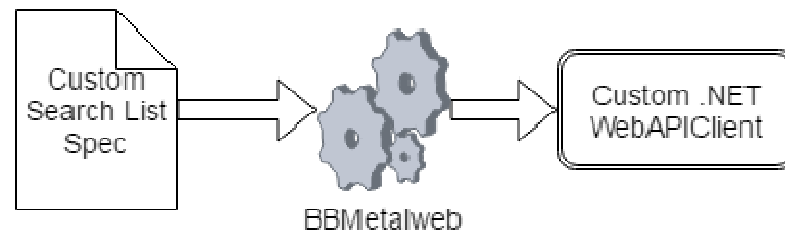

```
var searchFilter = new IndividualSearchFilterData();
searchFilter.KEYNAME = lastName;
searchFilter.EXACTMATCHONLY = true;
var constituentIds = SearchLists.Constituent.IndividualSearch.GetIDs(AppFxProvider, searchFilter);
```

```
var constituentSearchFilter = new CustomConstituentSearchByBirthdateFilterData();
constituentSearchFilter.LASTNAME = lastName;
constituentSearchFilter.BIRTHDATE = FuzzyDate.Parse(birthDate);
var constituentIds = CustomConstituentSearchByBirthdate.GetIDs(AppFxProvider, constituentSearchFilter);
```

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Back to the Unit Tests…

Still Passing!

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Selection of U-M Customizations

Customization	Description	Technology
Game Day Events	New CRM feature for tracking athletic tickets, tailgating, box suites. Created using BBEC CRM SDK.	BBEC CRM SDK
Recognition Credit	Surface BBDW rec credit data in BBEC and allow bulk rec credit updates.	BBEC CRM SDK
RabbitMQ Integration	Push messages to external message queue as changes are made to designation information to support online giving.	SQL Server Service Broker
UMP	U-M Process – generic business process with a suite of general file management operations.	BBEC CRM SDK, .NET SDK
Post to GL	Custom (fixed-width) GL journal file for U-M's PeopleSoft Financials System	BBEC CRM SDK, .NET SDK
AAUM Integration	Receive constituent updates from Alumni Association's Salesforce CRM and transmit updates from DART to AAUM.	BBEC WebAPIClient, Salesforce outbound messaging, .NET SDK.

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