**ODE Selenium Test Automation Architecture**

Current Date - 10/22/2015

Modified Date – 10/21/2015

Initial Date – 9/14/2015

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Project Name – ODE Test FrameWork

# Proof of Concept Workflows

Low Complexity Workflow –

Medium Complexity Workflow –

High Complexity Workflow –

# Dependencies

Selenium.WebDriver version 2.48.0

Selenium.Support version 2.48.0

SpecFlow version 1.9.0

# Selenium Test Automation Architecture

The framework uses SpecFlow using Cucumber and PageObjects

Cucumber1.Feature File

Given My login role “Admin”

When I create an application

Then The status is “Submitted”

Cucumber2.Feature File

Given My login role “Provider1”

When I search for application

Then The application is displayed

Cucumber(N).Feature File

Given My login role “Provider2”

When I create an application

Then An error msg is displayed

Cucumber Feature Step.cs File

Separate C# files containing unique feature steps

Step File-1 class LoginRoles Step File-2 class ProgramSelection Step File-3 class Search

GivenMyLoginRole(role) WhenISearch(application) WhenISearch(record)

WhenIClickLink(link) ThenISetProgram(program) ThenTheSearchDIsplayed(results)

PageObjects3-UI

Search.cs

Hand Coded objects

Search(Year)

Search(status)

WaitForPage()

PageObjects2-UI

ProgramSelction.cs

Hand Coded objects

SelectProgram(program)

CreateApplication()

PageObjects1-UI

SafePage.cs

Hand Coded objects

LaunchBrowser()

Login(role)

WaitForPage()

FireFox Browser

Chrome Browser

IE Browser

Edge Browser

Test Execution Environments

Local

Dev

QA

Prod

(AUT)

Application Under Test

# SpecFlow And Selenium Architecture

ODE FrameWork Selenium Solution

AcceptanceTest Project

PageObjects

Interface

Class

PageObjects

PageObjects

(AUT)

Application Under Test

Test

Context

Library

Utilities

AcceptanceTest Project



SpecFlow AcceptanceTests

Project

Cucumber

Step file

Cucumber

Step File

Cucumber

Step File

App.config file

(RunTime Vars)

Library and Support Files

# SpecFlow And Selenium Run-Time Files Architecture

Test Execution Environments

Local

Dev

QA

Prod

App.Config

file

Cucumber2.Feature File

Given I login as Role “Admin”

When I search for District 123  
Then I am able to click on result

Cucumber1.Feature File

Given I login as Role “Data Entry”

When I search for District 123  
Then I am able to click on result

Cucumber3.Feature File

Given I login as Role “Reviewer”

When I search for District 123  
Then I am able to click on result

Cucumber4.Feature File

Given I login as Role “Principal”

When I search for District 123  
Then I am able to click on result

FireFox Browser

Chrome Browser

Cucumber Feature Step.cs File

Separate C# files containing unique feature steps

Step File-1 class LoginRoles Step File-2 class ProgramSelection Step File-3 class Search

GivenMyLoginRole(role) WhenISearch(application) WhenISearch(record)

WhenIClickLink(link) ThenISetProgram(program) ThenTheSearchDIsplayed(results)

Run-Time vars file

(config vars

Can over-ride Run-Time vars)

IE Browser

Edge Browser

PageObjects1-UI

SafePage.cs

Hand Coded objects

LaunchBrowser()

Login(role)

WaitForPage()

PageObjects2-UI

ProgramSelction.cs

Hand Coded objects

SelectProgram(program)

CreateApplication()

PageObjects3-UI

Search.cs

Hand Coded objects

Search(Year)

Search(status)

WaitForPage()

(AUT)

Application Under Test

App.Config

file

# Test Design Notes

# End-of-Document