Mr. Henry,

This week I turned my attention away from Unit tests and learned a lot about other types of automated testing such as UI Testing and Load testing. Both of these types of testing are available in Visual Studio 2013 Ultimate Edition only. I have been staying with the video series on Channel 9/MSDN and there was this one on UI Testing:

<http://channel9.msdn.com/events/Visual-Studio/Visual-Studio-2012-Virtual-Launch/Automated-UI-testing-with-Visual-Studio-2012>

and this one on Load Testing:

<http://channel9.msdn.com/Shows/Visual-Studio-Toolbox/Load-Testing>

Both are really cool and I could see how it would be very, very useful for any online software company to utilize this type of testing.

Automated UI Testing

The UI testing and Load Testing are similar in that they both involve ‘Recording Actions’. What this means is you pull up your application in one instance of Visual Studio, and you pull u you UI Testing in a second. Then you begin by running your application and then starting a new Recording of your interaction with your application.

The Ui Testing will actually record your click events and you can even select values on the screen to make sure they match. After you have gone through the different events in your application you want to test for that particular case you click ‘Generate Code’ and it will generate a method in your UI Testing solution file. Now you could run this same case over and over without having to go through the process of clicking and adding in values.

With my time Orbital Shift we have done a lot of testing when there are new updates and enhancements released on our site. Currently all of our testing is done manually and we have to individually enter in all of the different case scenarios over and over.

Then when ‘bug fixes’ come out that fix errors that we have found we manually do those same tests to make sure there were no side effects of the fix. The manual testing process takes up tons of man hours and by automating the process not only would that free up resources, but it would leave less room for error having it automated.

Load Testing

Load testing is so far my favorite type of automated testing available from Microsoft. With the load test you can again start a new project and just select your current application as well as the option for new Web Performance and Load Test Application to simulate what it would be like to have hundreds or even thousands of users using your web app at one time. You have the ability to build in the amount of traffic you want as well as fluxuate the traffic based upon time of day. After you have run the tests you can see charts of stress of your site and it will point out, methods and functions that are being used more than others.

I believe as the owner of a website this type of testing would be so helpful and again, this type of testing is not something you can really test on your own unless you have access to hundreds of free volunteers to get on your website and attempt to break stuff.

I believe that after my research and am confident that Visual Studio has the tools available to me in order to build a Test Driven Web application and I have decided to proceed with Visual Studio as my IDE for this project.