

## TEST AUTOMATION FOR WEB APPLICATIONS

V.Petrenko, *student IT-71*

Most software applications today are written as web-based applications to be run in Internet browser. The effectiveness of these applications testing varies widely among companies and organizations. In the era of highly interactive and responsible software processes when a lot of organizations use some forms of Agile methodology, test automation is becoming a current requirement for software projects. Test automation often gives the answer. This process means using a software tool to run repeatable tests against the application to be tested. It provides quality of regression testing.

Test automation has a lot of advantages. Most of them are related to the repeatability of tests and the speed at which tests can be done. There are a number of commercial and open source tools available for assisting in the development of test automation. Selenium is possibly the most widely-used open source solution.

Test automation has some special advantages for improving the long-term efficiency of software team's testing processes. Test automation supports fast regression testing, rapid feedback to developers, virtually unlimited iterations of test case doing, support for Agile and extreme development methodologies, disciplined documentation of test cases, customized defect reporting, finding defects missed by manual testing.

It is not always useful to automate test cases. In some cases manual testing may be more appropriate. For instance, if the application user's interface changes considerably in the nearest future, any automation might need to be rewritten anyway. Also, sometimes there is simply not enough time to build test automation. For the short term, manual testing may be more effective. If an application has a very tight deadline and there is no test automation available, and you need to do testing within that time frame, then manual testing is the best solution.

Selenium is a set of different software tools, each of them has different approach to supporting test automation. Most Selenium QA Engineers focus on the tools that meet the needs of their project best of all. However, learning these tools will give you a lot of different options for approaching different test automation problems. The entire suite of tools results in a rich set of testing functions particularly suitable for the needs of all types web applications testing.

S.V.Podolkova – *EL Adviser*