Software Testing of Web Based Application Using Selenium

Project Based
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Abstract:
Software testing is one of the most important phases of software development life cycle and main objective is to find bugs and ensure quality of software. Software testing can be done manually or can be automated. Manual testing is done by tester with any tool. Where as in automation testing, testing is done with the help of automated testing tools. Automation testing simplifies the work of tester by automating the execution of test scripts with the use of a special software. Selenium IDE is a Firefox plugin which helps testers to recorded their actions and then export them as a reusable script in one of many programming languages and Selenium WebDriver is a tool for automating web application testing, and in particular verify that they work as expected. It aims to provide a friendly API that is easy to explore and understand, which will help to make your tests easier to read and maintain. It also provides a test domain-specific language to write tests in a number of popular programming languages, including C#, Java, Php, Python, Ruby, Scala, Groovy, etc.

In this project we are planning to develop one web based application called Virtual Management System. This application is used to book flight tickets, rental car and rental car reservation. We will develop this application in JAVA using eclipse IDE and then perform unit testing and automation testing. As Selenium is one of the famous testing tool in the worldwide, so we decided to take this tool to test our web application. First, we are planning to develop web application which we mentioned above. Second, we will learn how to use Selenium IDE and Web-Driver. Third, we will start understanding the tool by testing a project developed by us and also perform different test cases on our web application. At the end we also compare both Selenium IDE and Selenium Web-Driver.