



SRI VENKATESWARA COLLEGE OF ENGINEERING
An Autonomous Institution-Affiliated to Anna University
Pennalur, Sriperumbudur 602 117

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Solicit your esteemed presence for the
One Day Industry Based Hands-on Workshop

On

Selenium Automation Testing

By

Mr. R. Vijayakumar, Project Manager and Senior Test Automation Architect
with 15+ years of experience in Cognizant Technologies Solution,
Chennai

Ms. G. Bhuvaneshwari, Team Lead and Senior Testing Analyst with 9+ years of
experience in Cognizant Technologies Solution, Chennai.

Venue: CSLAB 4 Laboratory

Date: 29th August 2019

Time : 09:00 AM - 03:15 PM



SRI VENKATESWARA COLLEGE OF ENGINEERING
An Autonomous Institution -Affiliated to Anna University
Pennalur, Sriperumbudur - 602117

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

One Day Industry Based Hands-on Workshop on Selenium Automation Testing

INTRODUCTION & HANDS-ON SESSION

AGENDA

Date : 29/08/2019

- 9:00 AM Software Testing and Selenium
- 10:00 AM Tea Break
- 10:15 AM Software Installation
- 11:00 AM Simple Selenium Java Project for Beginners
- 12.15 PM Lunch break
- 12:45 PM Working Project using Selenium Framework - TestNG and Maven
- 03:00 PM Interactive Session
- 03:10 PM Vote of Thanks

Selenium Automation Testing

The Department of Computer Science and Engineering, Sri Venkateswara College of Engineering conducted One day industry based Hands-on workshop on “**Selenium Automation Testing**” on 29th August 2019 at CS Lab 4. The guest speaker was Mr. R. Vijaya kumar, Project Manager and Senior Test Automation Architect and Ms. G. Bhuvaneshwari, Team Lead and Senior Testing Analyst of Cognizant Technologies Solutions.

Selenium and its components:

Selenium is a free (open source) automated testing suite for web applications across different browsers and platforms. It is quite similar to HP Quick Test Pro (QTP now UFT) only that Selenium focuses on automating web-based applications. Testing done using Selenium tool is usually referred as Selenium Testing.

Selenium is not just a single tool but a suite of software's, each catering to different testing needs of an organization. It has four components.

- **Selenium Integrated Development Environment (IDE)**

Selenium IDE is a complete integrated development environment (IDE) for Selenium tests. It is implemented as a Firefox Add-On and as a Chrome Extension. It allows for recording, editing and debugging of functional tests. It was previously known as Selenium Recorder.

- **Selenium Remote Control (RC)**

Selenium Remote Control (RC) is a server, written in Java, that accepts commands for the browser via HTTP. RC makes it possible to write automated tests for a web application in any programming language, which allows for better integration of Selenium in existing unit test

frameworks. To make writing tests easier, Selenium project currently provides client drivers for PHP, Python, Ruby, .NET, Perl and Java.

- **WebDriver**

Selenium WebDriver is the successor to Selenium RC. Selenium WebDriver accepts commands (sent in Selenese, or via a Client API) and sends them to a browser. This is implemented through a browser-specific browser driver, which sends commands to a browser and retrieves results.

- **Selenium Grid**

Selenium Grid allows running tests in parallel on multiple machines and to manage different browser versions and browser configurations centrally (instead of in each individual test).

Advantages of Using Selenium for Automated Testing

- Language and Framework Support
- Open Source Availability
- Multi-Browser Support
- Support across Various Operating Systems
- Ease of Implementation
- Reusability and Integrations
- Flexibility
- Parallel Test Execution and Faster Go-to-Market.

The Program started with a welcome address given by Mr. B. Praveen Kumar, Assistant Professor / CS regard the introduction and importance of testing and its types.



Dr. R. Anitha, HoD/CS introduced the guest's of the day and also she explained the need for automation and selenium tool.



Ms. G. Bhuvaneshwari started with the introduction of how testing tool is used in IT industry and how it is creating a significant demand in the corporate sector especially in the testing domain. The speaker elaborated about the places

where human can do mistake and why we need to go for automation testing. Also she explained about the types of software testing and software life cycle development. Later on, she demonstrated how to install selenium and necessary drivers from the scratch.



HANDS ON SESSION COVERED:

1. Software and Drivers Installation (Selenium, Chrome Driver, Java, Eclipse).
2. Elements / objects in a web pages and how to find out the ID of each elements.
3. Overview of Libraries, Classes, JAR's, Methods.
4. Simple selenium java project for beginners.
5. Working project using selenium framework – TestNG and Maven.
6. Task allotment to students



After tea break, Mr. Viajayakumar and Ms. G. Bhuvanewari session started with the fundamentals of selenium project, they explained about the each and every component of selenium, how to import the JAR files and how to code into the eclipse IDE. They taught our students how to test a simple selenium java project.



The post lunch session started with concept of selenium framework. Our students started testing the GMAIL elements that is, whether all the text boxes are working properly or not after writing a script in the java language. Guest was assigned the task to our students and also resource persons have started increasing the complexity of the logic. The session ended with verification of assigned jobs from our students. Finally, all the student participants were tested GMAIL, AMAZON web pages with different criteria's and also with different frameworks available in the TestNG and Maven.

At last, Mr. C. S. Sanoj, Assistant Professor / CS, asked our participants to give feedback about the workshop and our students expressed their thanks to all members which includes Resource persons, Principal, HoD/CS and faculty members, for arranging the industry based Hands-on workshop.





The workshop ended with feedback from the participants, and distribution of certificate by Dr. C. Jayakumar, Professor/CS on behalf of HoD/CS then followed by vote of thanks by Mr. K. Kumanan, Assistant Professor / CS



Mr. K. Kumanan
CO - ORDINATOR,

Mr. B. Praveen Kumar,
Mr. K. Kumanan,
Mr. C.S. Sanoj

Dr. R. Anitha
HoD/CS