Software Quality

CS 5393

FALL 2019

Gauge Testing Framework

Project Proposal
Submitted
by

Aishwarya Santhosh Nair

Texas State Id: A04908387

Email-Id: as1270@txstate.edu

Mounisha Kosana

Texas State Id: A04783897

Email-Id: m_k219@txstate.edu

Submitted To:

Dr. Guowei Yang

DEPARTMENT OF COMPUTER SCIENCE

TEXAS STATE UNIVERSITY

Project Title: Gauge Testing Framework

Project Group Members: Aishwarya Santhosh Nair & Kosana Mounisha

Goals:

- Study a new testing tool called 'Gauge'.
- Understand the framework design and its features.
- Create test cases for sample programs to understand the process.
- Analyze the features of the tool.
- Understand the merits and demerits of the tool.
- Make a final report based on the findings.

Importance of Goals:

We are trying to learn a new testing tool here and hence, the goals mentioned above are very important. Learning a new tool involves understanding all the aspects of the tool. There are many factors to consider like how user-friendly the tool is and how easy it is to learn the tool, how is this tool different from the other testing tools. To truly learn a tool, we have to go through each goal in detail that are mentioned above. Through the process of understanding and working on Gauge, we hope to get a deep practical insight into various aspects of software quality management like unit testing, continuous integration pipelines etc.

Tool Name: Gauge

Tool Description:

Gauge is a light weight cross platform open source test automation framework to create and maintain tests at a large scale. It has mainly been used for incorporating tests into a continuous integration pipeline as a testing backbone for continuous delivery. It supports the easy creation of test cases in a wide range of languages including Java, c#, Python, Ruby etc and allows for parallel test execution of scalable tests. It also presents the test results in the form of easily viewable and analyzable reports.

Study Plan

Phase	Description
Phase 1	Download and Install the tool
Phase 2	Understand the working of the tool
Phase 3	Create test cases for sample programs to understand the process
Phase 4	Analyze the features of the tool
Phase 5	Understand the merits and demerits of the tool

Milestones and Dates

Milestones	Dates
Understand the working of the tool	10/27/2019
Create test cases for sample programs to understand the process	11/3/2019
Analyze the features of the tool	11/10/2019
Understand the merits and demerits of the tool	11/10/2019
Prepare the report and slides for the presentation	11/17/2019