

GENESIS - Learning Outcome & Mini-project Summary Report



LTTTS
GLOBAL
ENGINEERING
ACADEMY



L&T Technology Services



Details

Ver. Rel. No.	Release Date	Prepared. By	Reviewed By	To be Approved	Remarks/Revision Details
1.1	9/11/2020	Smita Senapati			Requirements
1.2	9/11/2020	Pavan SL			Design
1.3	9/11/2020	Vinay Kumar V			Test Plan
FINAL	11/11/2020	Smita Senapati, Pavan SL , Vinay Kumar V			FINAL REPORT

Contents

CONTENTS	3
MINIPROJECT [TEAM]	4
MODULE: JAVA AND SELENIUM	4
<i>Topic and Subtopics</i>	<i>4</i>
REQUIREMENTS:	4
DESIGN:	5
TEST PLAN FOR AUTOMATION PROJECT	8
TEST PLAN FOR JAVA PROJECT:	9
IMPLEMENTATION SUMMARY	9
<i>Video Summary :</i>	<i>9</i>
<i>Git Link:</i>	<i>9</i>
<i>Git Dashboard</i>	<i>10</i>
<i>Summary</i>	<i>10</i>
<i>Individual Contribution & Highlights:</i>	<i>11</i>
<i>Challenges faced and how were they overcome:</i>	<i>12</i>
<i>Future Scope:</i>	<i>12</i>

Table of figures:

Figure 1 Automation Project Structural Diagram	5
Figure 2 Automation Project Behavioral diagram	6
Figure 3 Java Project Behavioral Diagram	7
Figure 4:GIT dashboard	10
Figure 5:Maven Build	11
Figure 6:Code Quality	11

List of Tables:

Table 1:High level Requirements	4
Table 2:Low level Requirements	4
Table 3:Test Plan	8

Miniproject [Team]

Module: Java and Selenium

Topic and Subtopics

JAVA Implementation- EMAIL Application

Selenium Automation- SBI Loan Application

Objectives & Requirements:

Objective is to implement core java and selenium automation concepts.

Requirements:

Table 1:High level Requirements

ID	Description
HL_01	WebDriver- WebDriver uses browser automation APIs provided by browser vendors to control browser and run tests.
HL_02	IDE- IDE (Integrated Development Environment) is the tool you use to develop your Selenium test cases.
HL_03	Grid- Selenium Grid allows you to run test cases in different machines across different platforms.
HL_04	Email generation
HL_05	Department Choice
HL_06	Should display the details

Table 2:Low level Requirements

ID	Description
----	-------------

HL_LL_01_01	Open a SBI home loan website in chrome.
HL_LL_02_01	Automatically able to fill all the details.
HL_LL_02_02	Automatically able to submit the details.
HL_LL_04_01	First name and Last name
HL_LL_05_01	User input

Design:

UML:

Structural diagram:

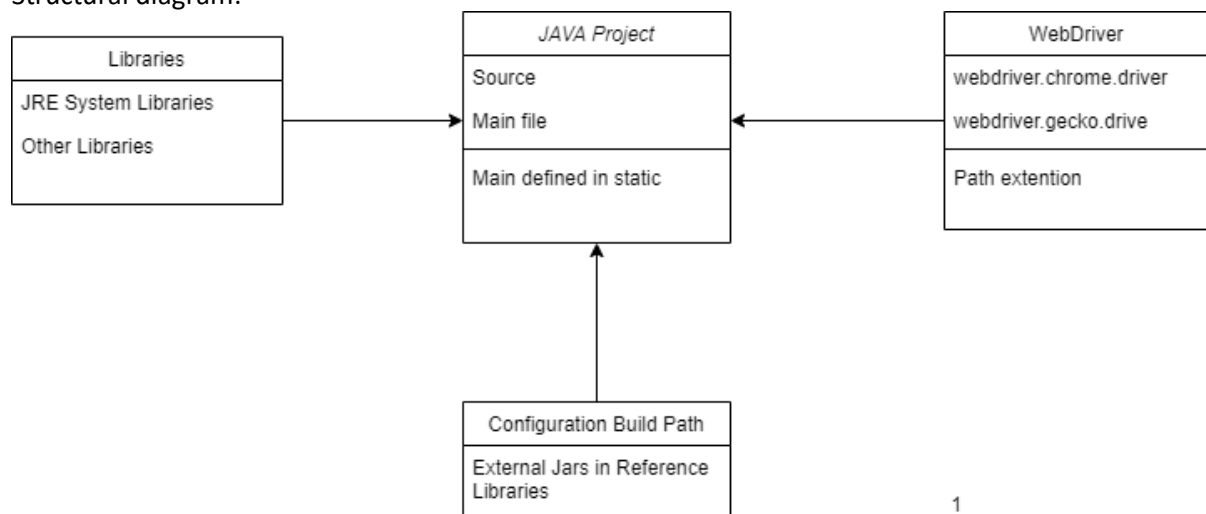


Figure 1 Automation Project Structural Diagram

Behavioral diagram:

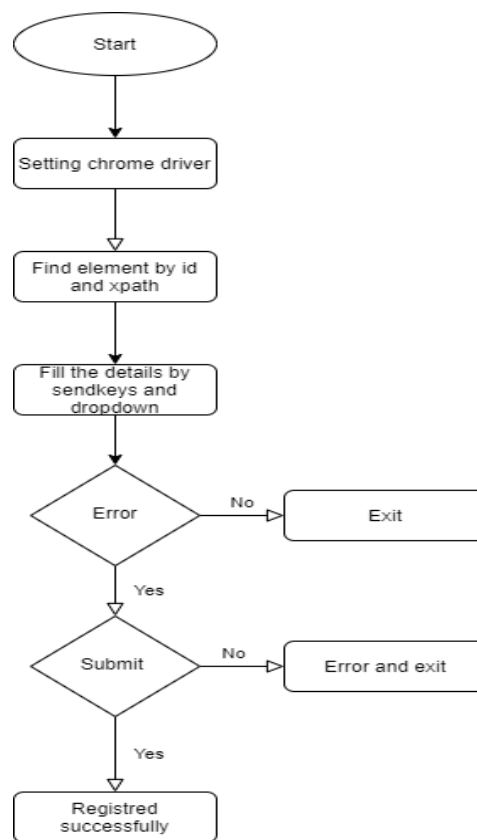


Figure 2 Automation Project Behavioral diagram

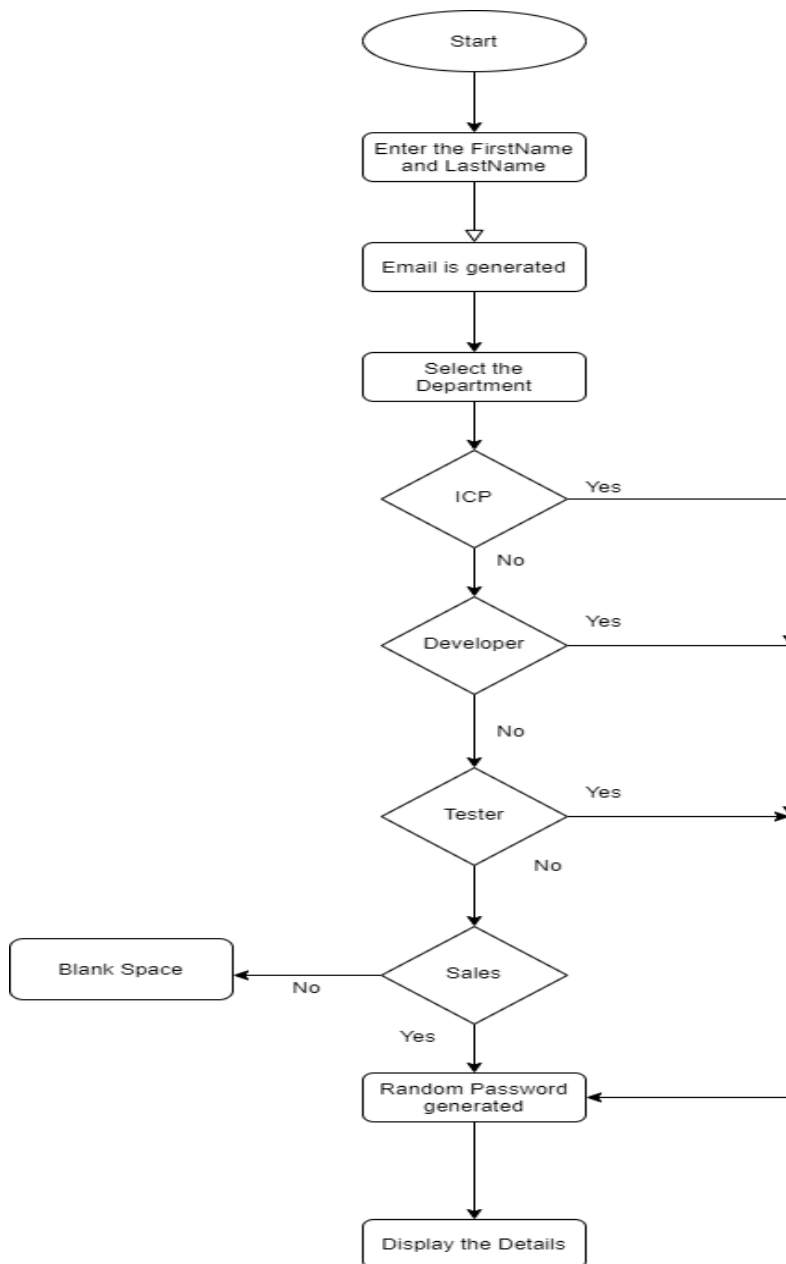


Figure 3 Java Project Behavioral Diagram

Test Plan for Automation Project

Table 3:Test Plan

No.	Test Case - ID	Test case Objective	Prerequisite	Steps	Input data	Expected Result	Actual Result	Remarks/Status
1	TC1	Compulsory fields filling(fields with * symbol)	Website is launched	Don't fill any of the field with * symbol. Click submit button	Click submit	Form should not get submitted	Form didn't submit	Pass
2	TC-2	To validate State and their corresponding state areas	Website is launched Select any State and random Pin code	Select any State and random Pin code	Invalid state with invalid pin	Form validation error	Form validation error	Pass
3	TC-3	To validate PAN number	Website is launched	Enter pan number	Aaaaa9090a	Valid pan	Valid pan	Pass
4	TC4	To validate mobile number	Website is launched	Enter mobile number according to mobile validation syntax	9900887766	Valid number	Valid number	Pass
5	TC5	To validate email	Website is launched	Enter email according to email validation syntax	abcd@gmail.com	Valid email	Valid email	Pass
6	TC6	To validate terms and conditions	Website is launched	Click terms and conditions checkbox	Click	Submission of form allowed	Submission of form allowed	Pass

Test Plan for Java Project:

No.	Test Case -ID	Test case Objective	Prerequisite	Steps	Input data	Expected Result	Actual Result	Remarks/Status
1	TC1	To validate email	Java application should run	Enter email according to email validation syntax	abcd@gmail.com	Valid email	Valid email	Pass
2	TC2	To validate mobile number	Java application should run	Enter mobile number according to mobile validation syntax	9900887766	Valid number	Valid number	Pass
3	TC3	To validate password	Java application should run	Random function Execution	Password generated by random function	Random password	Random password	Pass

Implementation Summary

We have implemented Java and selenium concepts here. Using selenium, we automated a SBI loan page and using java concepts we have developed an EMAIL application. All these things are done using eclipse IDE.

Video Summary :

A brief walkthrough of automation of SBI home-loan page

Git Link:

https://github.com/PS99002489/JAVA_MINI_PROJECT.git

Git Dashboard

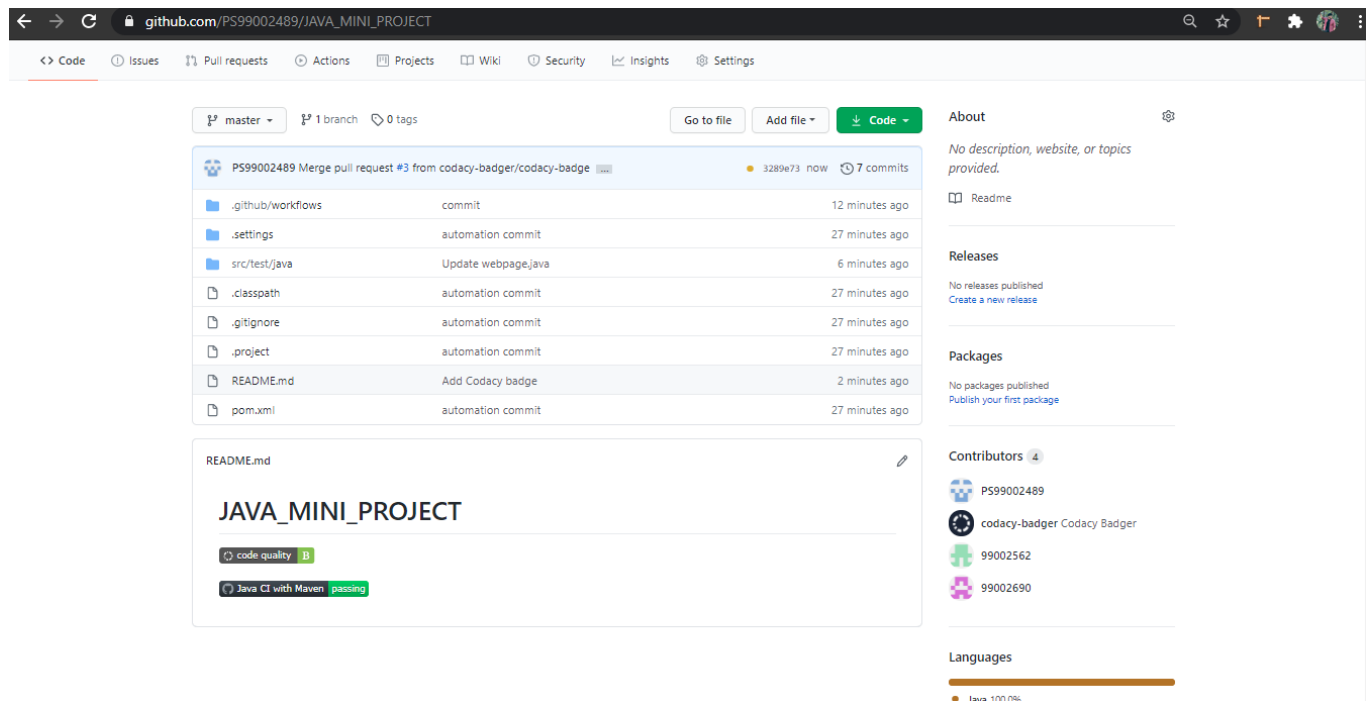


Figure 4:GIT dashboard

Summary

We have automated a SBI loan webpage by using selenium and by using java we have developed one EMAIL application where email and a random will be created for each new hire.

Build

The entire project was built in Maven Project Build Framework.

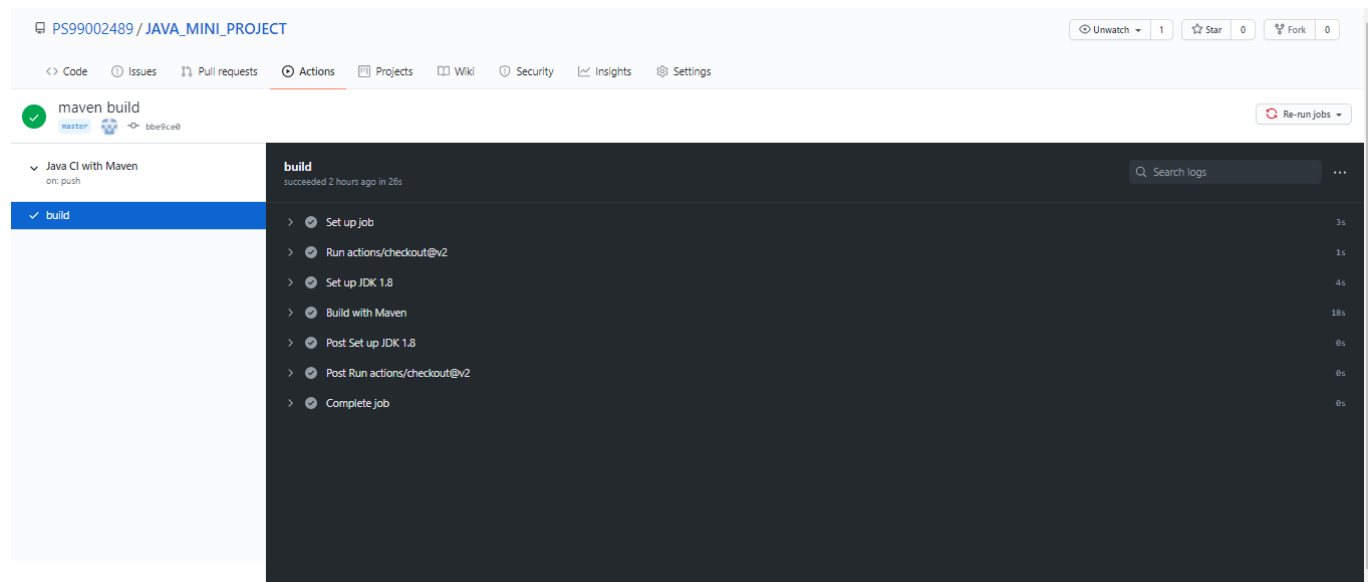


Figure 5: Maven Build

Code quality and Issues or Bug Tracking

The Quality of the code is validated in codacy and secured B grade.

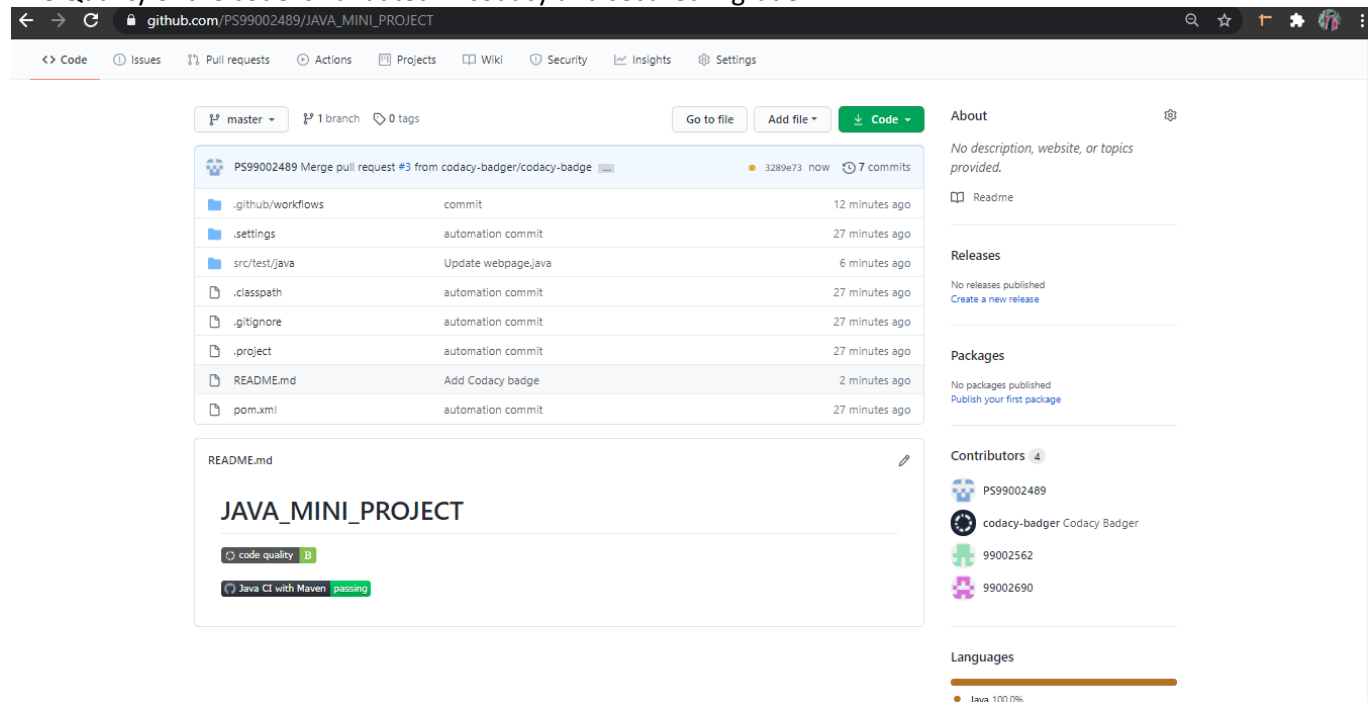


Figure 6: Code Quality

Individual Contribution & Highlights:

- Requirements was documented by Smita.
- Design was documented by Pavan.
- Test plan was documented by Vinay.

Challenges faced and how were they overcome:

- Difficulty faced while building java project in Git. Overcame this challenge by changing branch to master.
- Difficulty in automating date of birth. Overcame this challenge by giving proper Xpath.

Future Scope:

Database can be linked for the current project for storing email and password.

