EPAM TRAINING

REPORT

On

(TESTING AUTOMATION ON KYLIE COSMETICS WEBSITE)

Submitted by

SMITA BOSE

Registration No: 11913062

Program Name: Computer Science & Engineering

Under the Guidance of

ASST. PROFESSOR SAKSHI

School of Computer Science & Engineering

Lovely Professional University, Phagwara

(April-May, 2023)

Annexure-IX (b): Student Declaration

To whom so ever it may concern

I, **SMITA BOSE, Registration Number 11905121,** hereby declare that the work done byme on *"**Testing Automation on Kylie Cosmetic website and Google Cloud**"* from **April, 2023** to **May,2023**, under the supervision of **Miss.Sakshi**, Assistant Professor**, EPAM** and Lovely professional University, Phagwara, Punjab, is a record of original work for the partial fulfillment of the requirements for the award of the degree**.**

Name of the Student (Registration Number)
Tenzin Wangmo, 11905121

Signature of the student
smita bose

Dated: 30th April, 2023

Annexure-IX (c): Declaration by the supervisors

To whom so ever it may concern

This is to certify that **SMITA BOSE**,11913062 from Lovely Professional University, Phagwara, Punjab, has worked as a trainee in **EPAM** on "**Testing Automation with Selenium**" under my supervision from **January, 2023**to **April, 2023**. It is further stated that the work carried out by the student is a record of original work to the best of my knowledge for the partialfulfillment of the requirements for the award of the degree, degree name.

Name of External Supervisor	Name of Internal Supervisor
Designation of the External Supervisor	Designation of the Internal Supervisor
Signature of the external Supervisor	Signature of the Internal Supervisor
Dated:	Dated:

ACKNOWLEDGEMENT

If words are considered as a symbol of approval and token of appreciation then let the word play the heralding role expressing my gratitude.

I would like to express my greatest appreciation to the all individuals who have helped and supported me throughout the project. I am thankful to my teacher for his ongoing support during the project, from initial advice, and encouragement, which led to the final report of this project.

A special acknowledgement goes to my teammates who helped me in completing the project by exchanging interesting ideas and working together as a team.

I wish to thank my parents as well for their undivided support and interest who inspired me and encouraged me to go my own way, without whom I would be unable to complete my project.

At the end, I want to thank my friends who displayed appreciation to my work and motivated me to continue my work.

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INTRODUCTION OF EPAM:

Company's Vision and Mission:

At EPAM India, we enable our clients' business transformation by engaging multi-disciplinary teams who combine deep business expertise with design thinking, world-class engineering, modern operations practices and leading tools and frameworks for optimizing performance. We are Digital Orchestrators, and we deliver agile transformation at scale. Hear more from our Technology Leaders on how we do this in different teams:

EPAM VALUES:

Value the individual

- Perceive our people as a source of our success
- do not micromanage and we judge by results
- provide limitless opportunities for smart, self-motivated, proactive and collaborative individuals
- encourage and motivate people to grow
- tolerate mistakes, and learn from them

Act as a team

- treat one another with respect and communicate openly
- encourage the best ideas to come from anywhere within the organization
- collaborate seamlessly with others and we value our diversity

Act with integrity

- operate legally, honestly and ethically
- strive to conduct business with uncompromising integrity
- take responsibility for our actions

Focus on the customer

- build long term customer relationships by delivering quality and superior value
- strive to always understand our customers' business and needs
- We are responsive, responsible, straight-forward, direct, and honest in our dealings with our customers

Strive for excellence

- strive to achieve the highest standards of excellence
- continuously learn, develop, innovate and improve
- take pride in our engineering and accomplishments

Company's Origin and Growth of Company

The founders, Arkadiy Dobkin and Leo Lozner, met in grade school. More than 20 years later, in 1993, they started EPAM, a global software engineering services company. EPAM's global headquarters are located in Arkadiy's apartment in Princeton, NJ, USA.
Since 1993, we've relied on our Engineering DNA to underpin our work with clients, leading to major innovations, digital transformations and business results.

Various Departments and their Functions

1. ***Delivery Management:*** The delivery management department is responsible for overseeing project delivery, ensuring that projects are delivered on time, within budget, and to the client's satisfaction. The department is responsible for project planning, resource allocation, risk management, and quality control.

2. ***Engineering:*** The engineering department is responsible for designing and developing digital platforms and software solutions. The department includes software engineers, architects, and designers who use the latest technologies and tools to develop cutting-edge solutions.

3. ***Quality Assurance:*** The quality assurance department is responsible for ensuring that EPAM's products and services meet the highest quality standards. The department is responsible for testing software, identifying and reporting defects, and providing feedback to the engineering department to improve the quality of EPAM's products.

4. ***Business Analysis:*** The business analysis department is responsible for analysing clients' business needs and translating them into technical requirements. The department works closely with clients to understand their business processes, identify pain points, and recommend solutions that improve efficiency and productivity.

5. ***Sales:*** The sales department is responsible for identifying new business opportunities, developing relationships with potential clients, and closing deals. The department includes sales representatives, account managers, and business development managers who work closely with clients to understand their needs and propose solutions that meet their requirements.

6. ***Marketing:*** The marketing department is responsible for promoting EPAM's products and services to potential clients. The department includes digital marketers, content creators, and event planners who use various channels, such as social media, email marketing, and events, to raise awareness of EPAM's offerings.

7. ***Human Resources:*** The human resources department is responsible for recruiting, training, and retaining EPAM's employees. The department is responsible for creating a positive work environment, developing employee skills, and providing competitive compensation and benefits packages.

8. ***Finance:*** The finance department is responsible for managing EPAM's financial resources, including budgeting, forecasting, and financial reporting. The department is responsible for ensuring that EPAM's financial performance is healthy and sustainable.

9. ***Legal:*** The legal department is responsible for ensuring that EPAM's operations comply with legal and regulatory requirements. The department includes lawyers and legal specialists who provide advice and support on legal matters, such as contracts, intellectual property, and data protection.

10. ***Operations:*** The operations department is responsible for managing EPAM's infrastructure and facilities. The department includes IT specialists, facilities managers, and logistics coordinators who ensure that EPAM's operations run smoothly and efficiently.

11. ***Innovation:*** The innovation department is responsible for exploring new technologies and trends and identifying opportunities to apply them to EPAM's products and services. The department includes researchers, designers, and strategists who work on developing new ideas and approaches that can help EPAM stay ahead of the competition and offer cutting-edge solutions to its clients.

12. ***Global Business Units***: EPAM has several global business units (GBUs) that specialize in different industries and domains. The GBUs include healthcare, financial services, travel and hospitality, retail and distribution, media and entertainment, and software and high-tech. Each GBU has a team of experts who understand the specific challenges and opportunities in their respective industries and provide customized solutions to clients.
13. ***Talent Development:*** The talent development department is responsible for developing EPAM's employees' skills and capabilities. The department includes trainers, coaches, and mentors who provide training programs, certifications, and career development opportunities to help employees grow and advance their careers within the company.

14. ***Customer Experience***: The customer experience department is responsible for ensuring that EPAM's clients have a positive experience working with the company. The department includes customer success managers, customer support specialists, and account managers who work closely with clients to understand their needs and provide solutions that meet their requirements.

15. ***Cybersecurity***: The cybersecurity department is responsible for ensuring that EPAM's products and services are secure and protected from cyber threats. The department includes cybersecurity experts who identify and mitigate potential vulnerabilities, provide security assessments and audits, and develop cybersecurity strategies and policies.

16. ***Cloud and Infrastructure***: The cloud and infrastructure department is responsible for managing EPAM's cloud-based infrastructure and ensuring that it is scalable, reliable, and secure. The department includes cloud architects, DevOps engineers, and infrastructure specialists who use the latest cloud technologies and tools to provide optimal solutions for EPAM's clients.

17. ***Data Science and Analytics:*** The data science and analytics department is responsible for analyzing data and providing insights that help clients make informed decisions. The department includes data scientists, analysts, and engineers who use advanced analytics tools and technologies to extract value from data and provide actionable insights.

INTRODUCTION OF THE PROJECT:

Kylie Cosmetics, LLC is an American cosmetics company founded by Kylie Jenner. The company began selling Kylie Lip Kits, a liquid lipstick and lip liner set, on November 30, 2015. Formerly known as Kylie Lip Kits, the company was renamed Kylie Cosmetics.

In 2018, Forbes reported that the company was valued at $800 million and in March 2019 valued the company at $900 million. Coty, Inc. bought a 51% controlling stake in the company for $600 million in November 2019 valuing the company at approximately $1.2 billion However, in early 2020 Forbes reported—citing documentation from the Coty deal—that Kylie Cosmetics had overvalued itself.

1. Scope

Designing and implementing a large scale test automation framework for functional testing in component and system level. The framework must be able to execute tests, verify results and report results. It must also be both easy to use and maintain. It does not need to provide support for automation of test planning and design. Knowing how to automate something is clearly not enough to make an automation project a success and some of the other important things to take into account are necessary for the project. They also help to understand how many issues there are to handle when conducting test automation projects and how big and challenging these projects can be. For this project all the important aspects of automation testing has been implemented. It will be helpful to increase the test coverage, automated unit test suite helps find the problems at an earlier stage and solve them, Automating also reduces the time taken for testing.

Functional Requirements:

1. Mobile Responsive
2. Order and Checkout Flow
3. Social Sharing

Non-Functional Requirements:

1. Usability:
2. Security
3. Performance
4. Maintainability
5. Scalability

2. Overview

https://kyliecosmetics.com/en-in

Online shopping have become increasingly popular in recent years, with many customers using them to find new Cosmetic products readily available on the internet. The websites offer a range of features and tools that can help customers streamline their search and increase their chances of finding the right product.

3. Test Approach

- Test levels
- Test types
- Roles and responsibilities
- Environment requirements (hardware and software requirements).

4. Test Levels:

During the testing process the testers tested application in various levels. Such as, Unit testing, Integration testing, system testing and user acceptance testing.

5. Modules

The web service Kylie Cosmetic (https://kyliecosmetics.com/en-in)is used for Teamwork Project

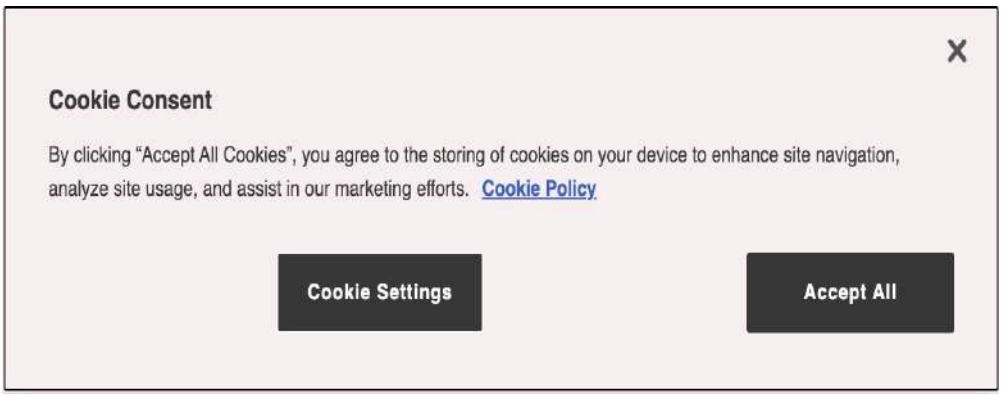
The aim of Teamwork Project is to develop the *Test Automation Framework* (TAF) and *test User interface*(UI) application Programming interface(API).

Requirements

- JDK 1.8, Maven(pom.xml)
- Junit4 or 5 or TestNG
- WebDriver

1.Compatibility testing: This module would involve testing the Kylie Cosmetic website's compatibility with different browsers[Chrome, Safari],to ensure that it works seamlessly on all platforms.

1) Verify Cookie Consent
2) Open the website in chrome
3) Open the website in safari



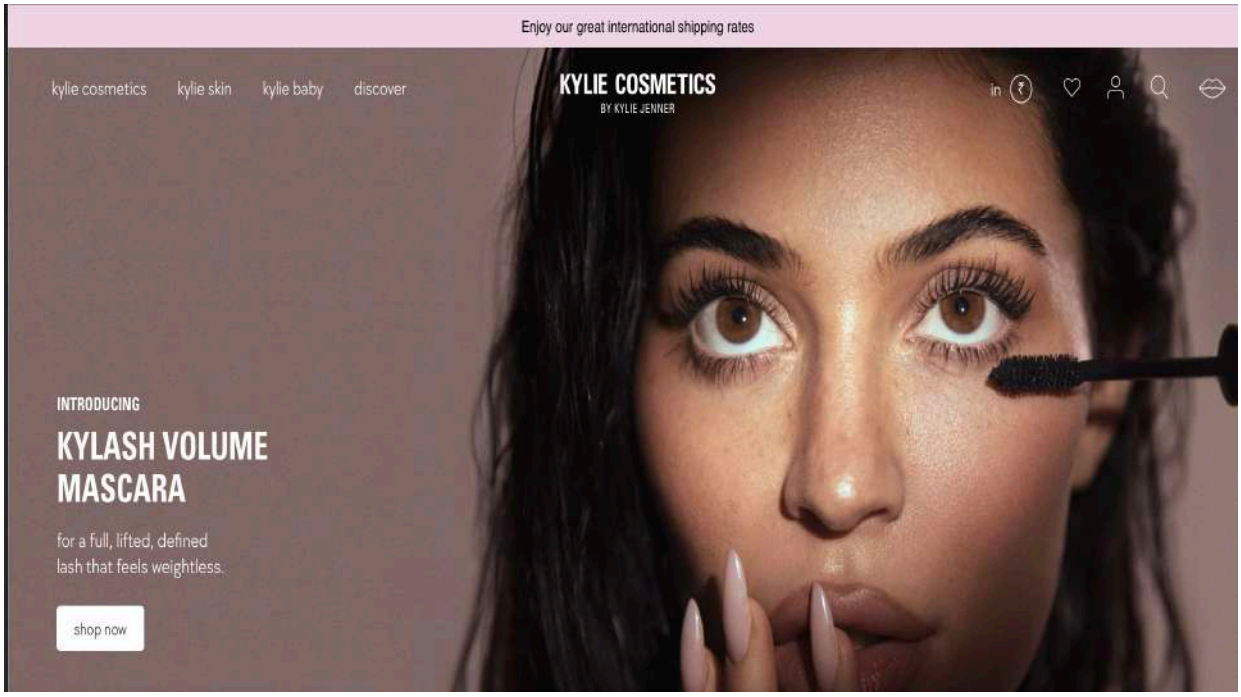
2. Security testing: This module would involve testing the Kylie Cosmetic website's security features, such as encryption, authentication, and access control, to ensure that customer data is protected.

3.Load Time testing: This module would involve testing the Kylie Cosmetic website's loading time taken, to ensure efficiency.

4.Mobile Responsive: This module would involve testing the Kylie Cosmetic website's Mobile responsiveness,

5.Home Page Title: This module would involve testing the Kylie Cosmetic website's Page Title, to verify the home page Title.

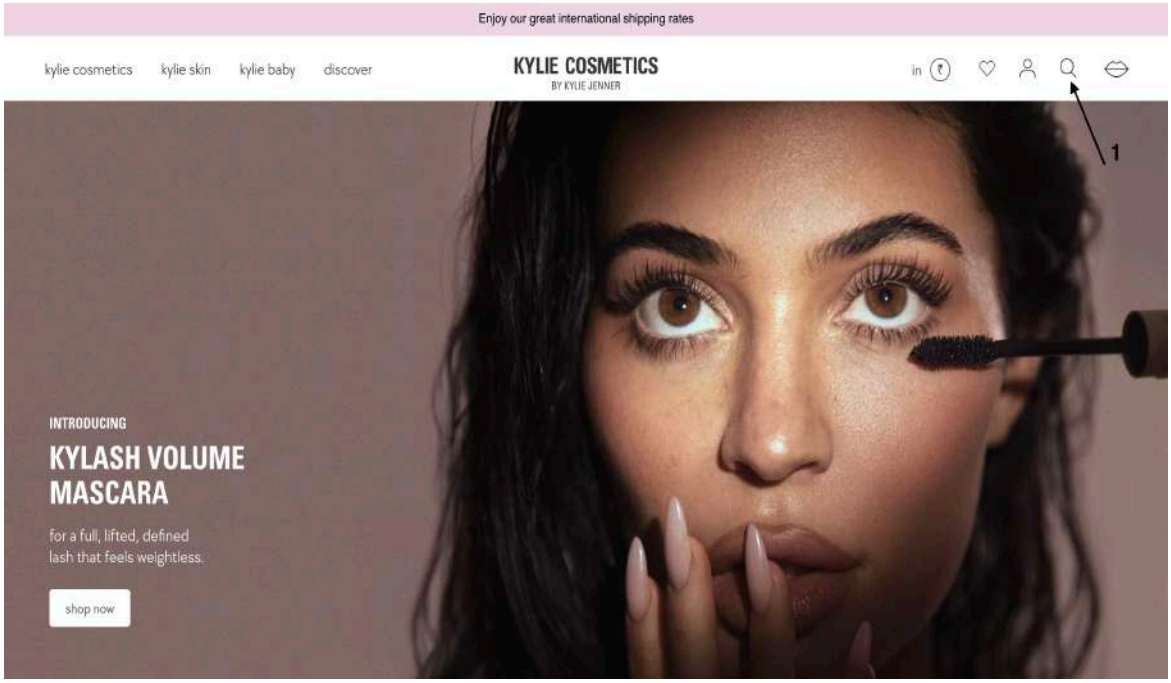
1) Verify Homepage title
2) Expected Title; Kylie Cosmetics by Kylie Jenner | Kylie Skin | Kylie Baby
3) Verifying Expected with the actual home page title

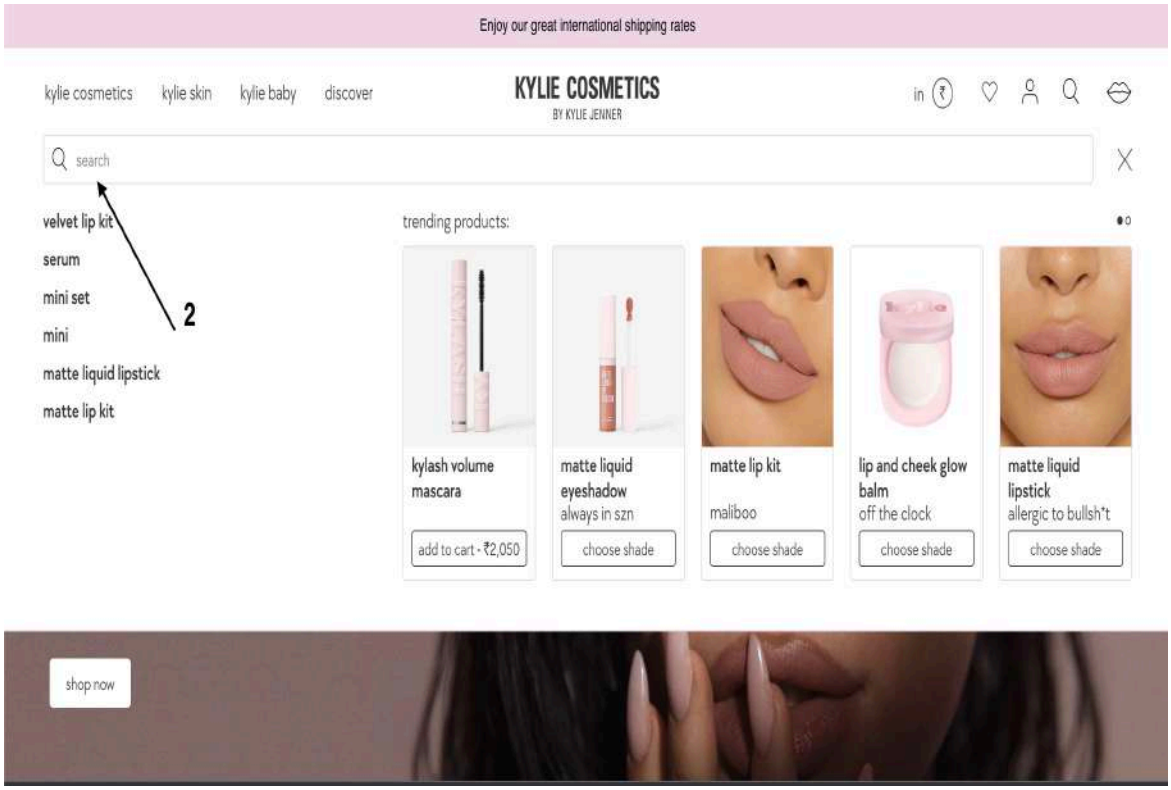


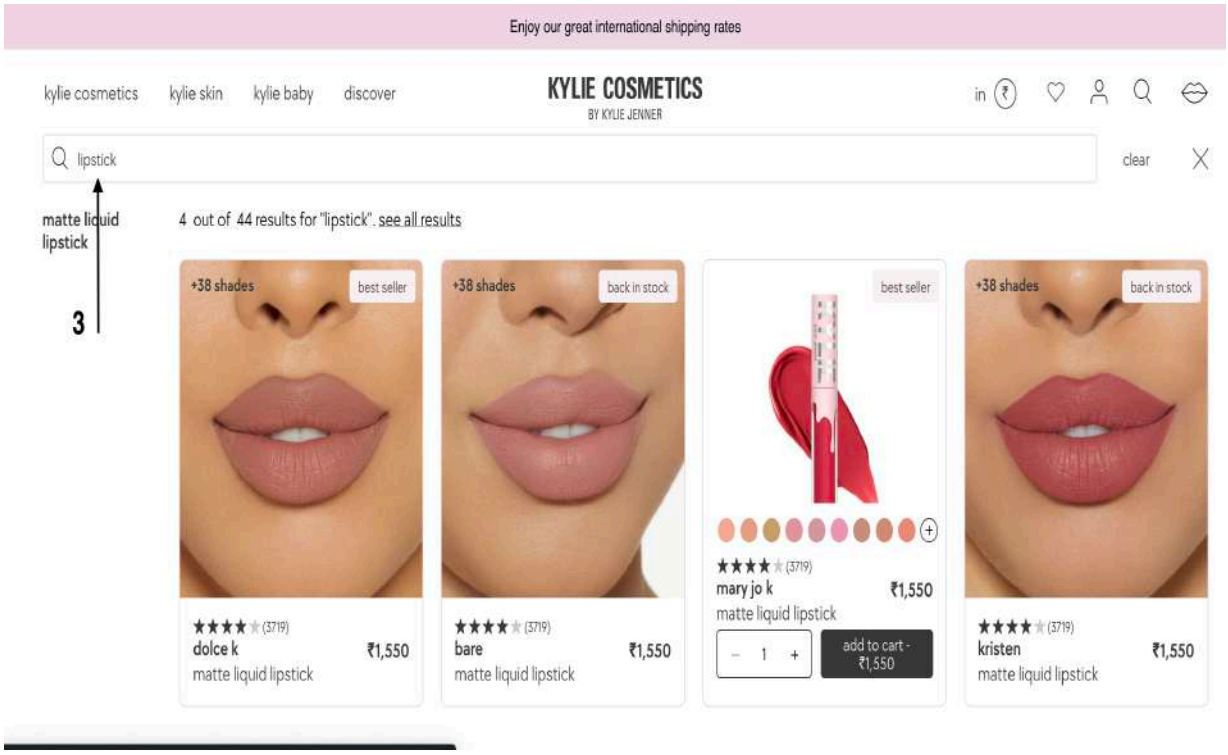
6.Verify Navigation Bar Test: Verify that all the navigation menus, submenus, links, and buttons are functioning correctly and navigating to the right pages.

7.Search Functionality Test: Test the search functionality to ensure that it is working as expected, and search results are accurate and relevant.

- Verifying Actual URL to the Expected URL.




Enjoy our great international shipping rates
kylie cosmetics
kylie skin
kylie baby
discover
KYLIE COSMETICS
BY KYLIE JENNER
search
velvet lip kit
serum
mini set
mini
matte liquid lipstick
matte lip kit
2
trending products:
kylash volume mascara
add to cart - ₹2,050
matte liquid eyeshadow
always in szn
choose shade
matte lip kit
maliboo
choose shade
lip and cheek glow balm
off the clock
choose shade
matte liquid lipstick
allergic to bullsh*t
choose shade
shop now


Enjoy our great international shipping rates
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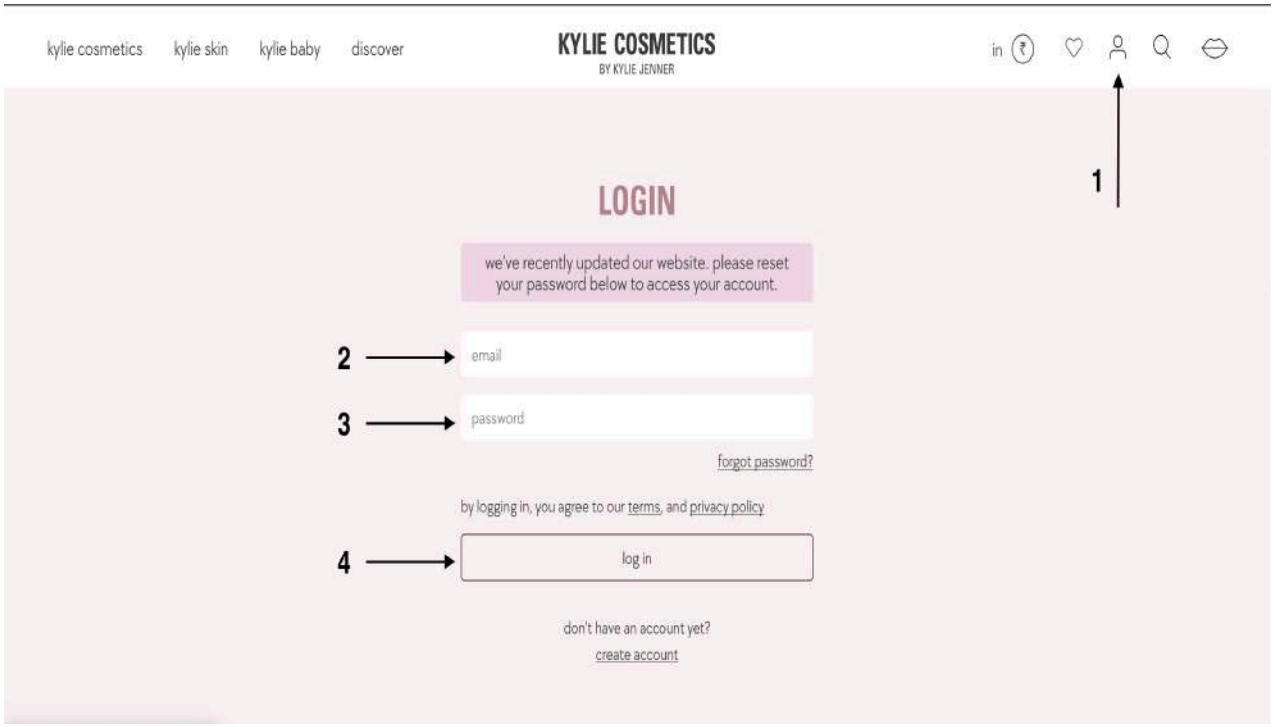
KYLIE COSMETICS
BY KYLIE JENNER
lipstick
clear
matte liquid lipstick
3
4 out of 44 results for "lipstick". see all results
+38 shades
best seller
(3719)
dolce k
₹1,550
matte liquid lipstick
+38 shades
back in stock
(3719)
bare
₹1,550
matte liquid lipstick
best seller
(3719)
mary jo k
₹1,550
matte liquid lipstick
1
add to cart - ₹1,550
+38 shades
back in stock
(3719)
kristen
₹1,550
matte liquid lipstick

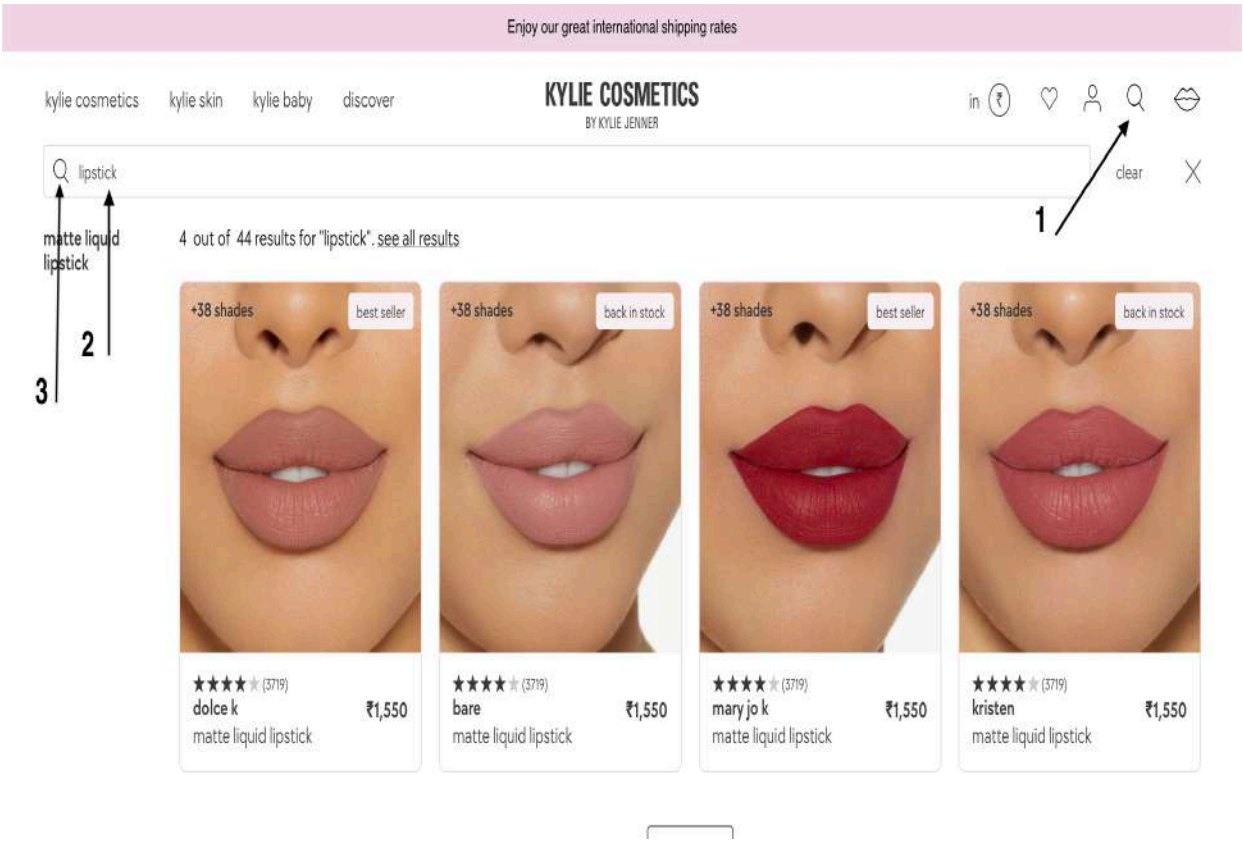
8.Functionality Test: This module would involve testing the various functions of the Kylie Cosmetic website, such as searching for products, adding items to the cart, and checking product details, wish listing and checking out the product.

1. Test Login with correct credentials

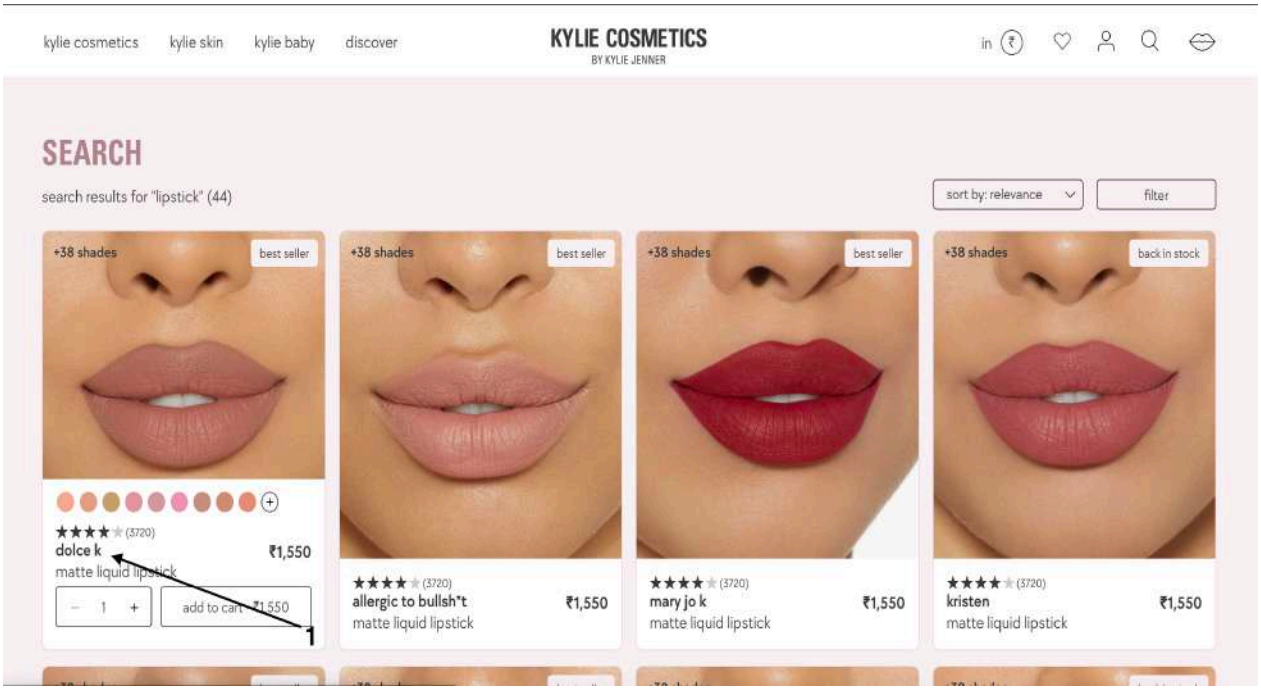
- Click on the Account
- Enter the correct credentials[email, password]
- Click the Login button



2. Test Search Product
    - Select the search icon
    - Enter “Lipstick” in the search
    - Click the search button

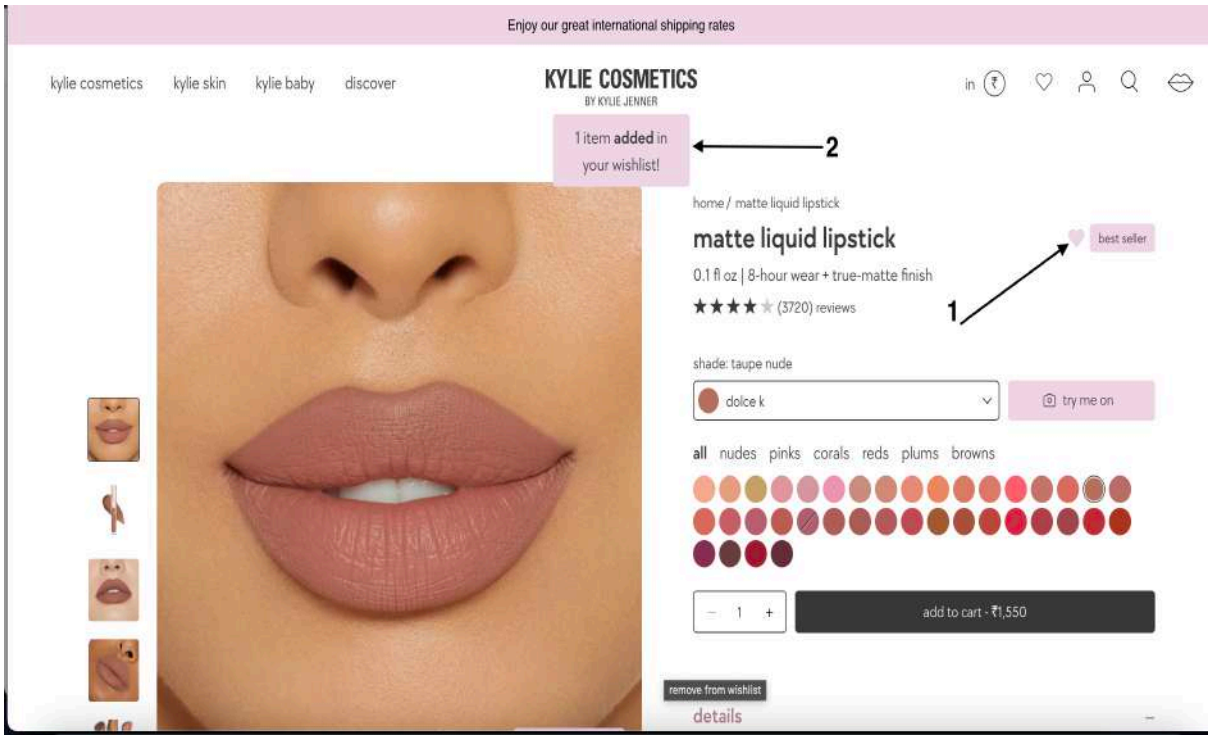


3. Test Product Detail
    - Click the First option.
    - Details of the Product is displayed



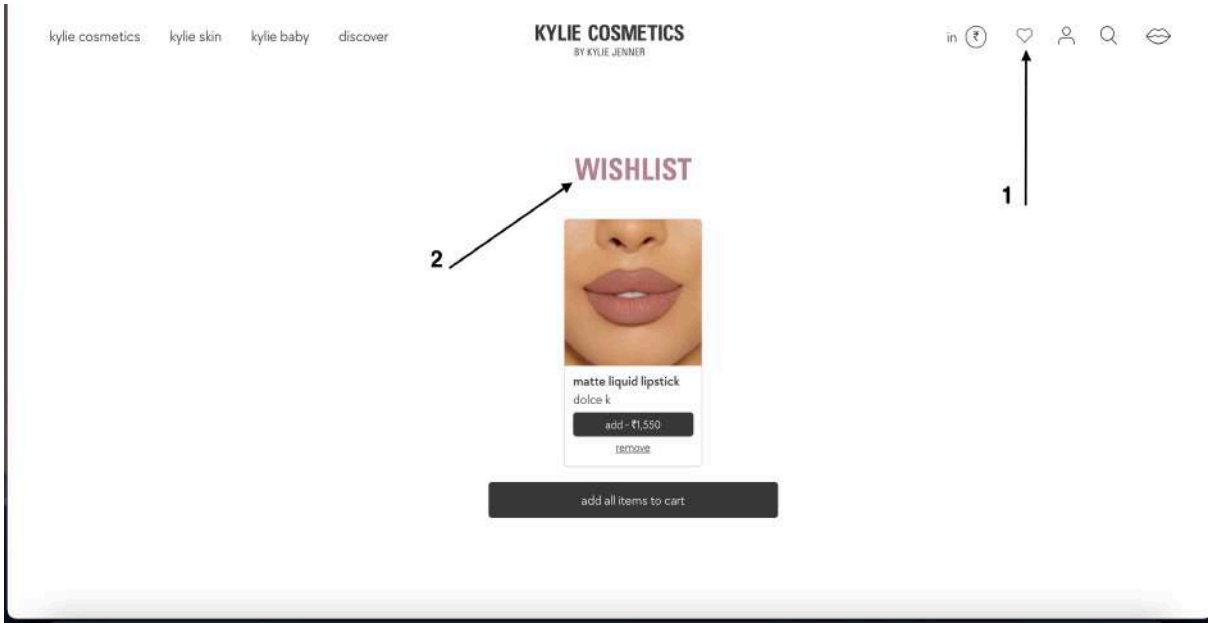
4. Test Add to Wishlist

- Click on the Heart-shaped icon button
- Pop up display message saying”1 item added in your Wishlist!”
- Successfully the product wish listed



5. Test Check Wishlist

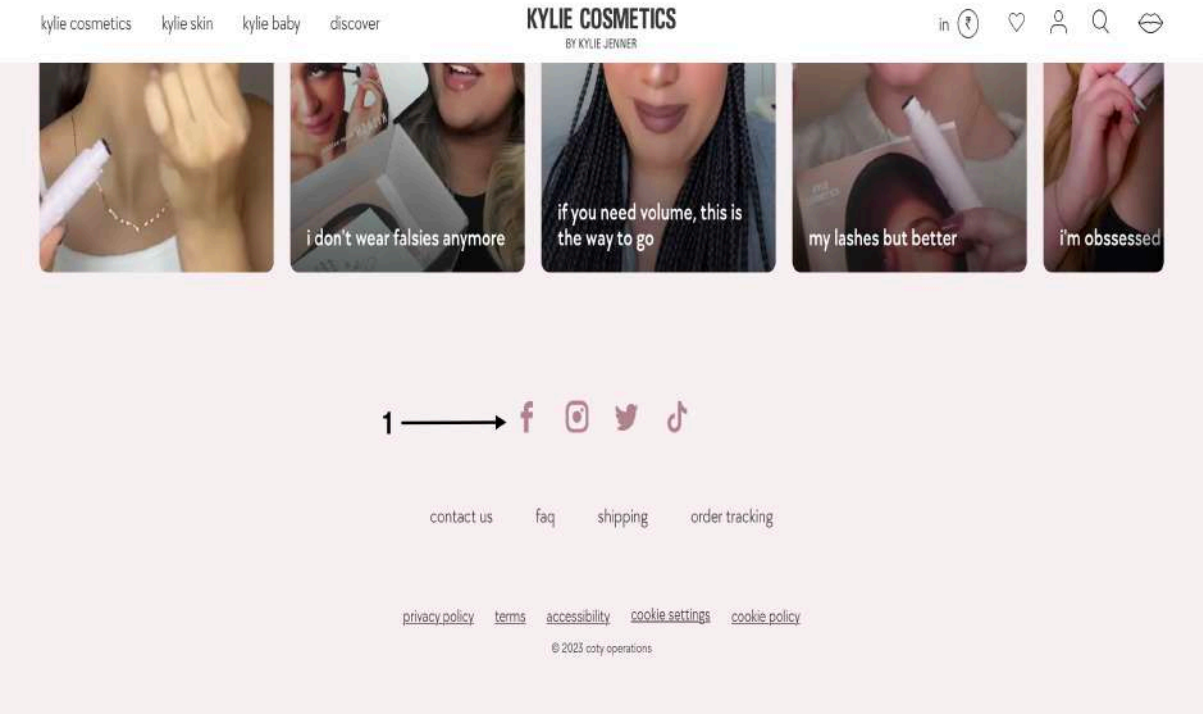
- Click the Top Right Corner Heart-Shaped icon
- Details of the Wish Listed product is displayed



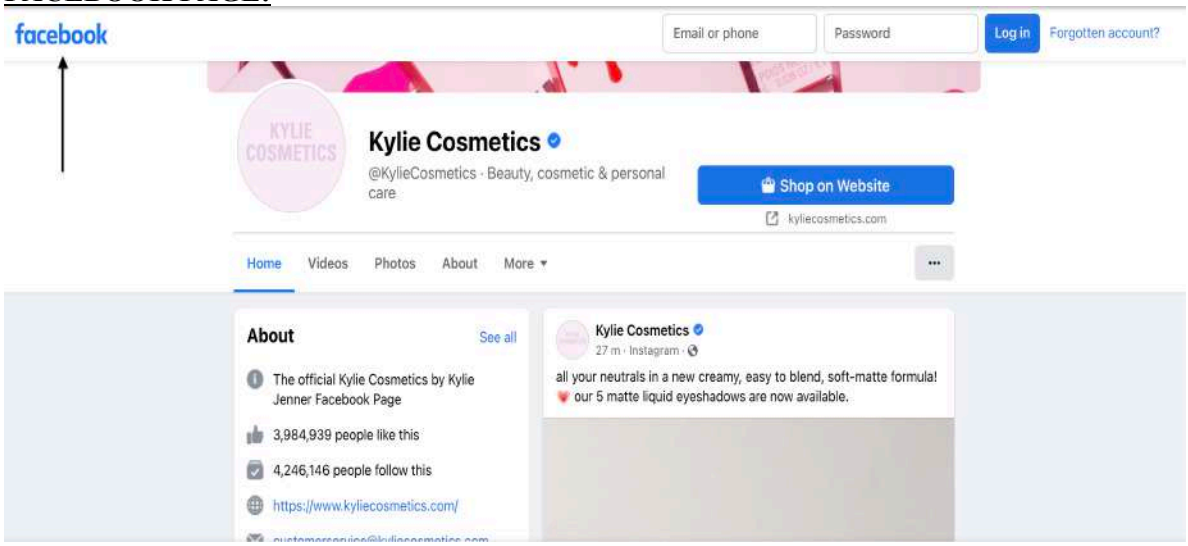
6. Test Product Add to cart
7. Test Checkout

9.Social Media Link Test: This module would involve testing the Kylie Cosmetic website's compatibility with different social media link to ensure that it works seamlessly on all platforms.

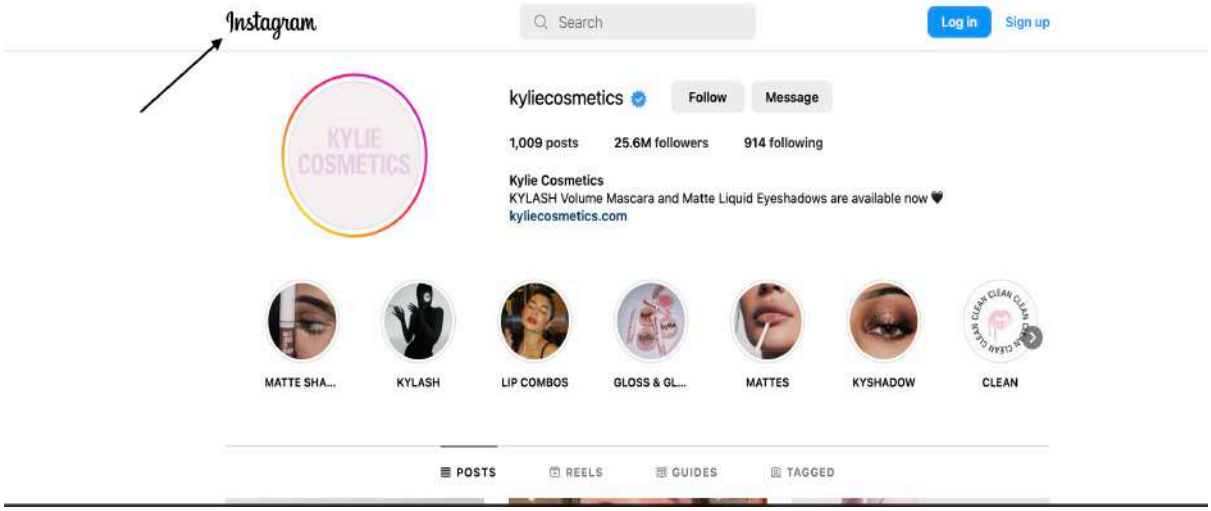
- Scroll till the end of the webpage
- Select the icons of the Social Media displayed
- Click the Facebook icon, navigate the Kylie Cosmetic Facebook page
- Click the Instagram icon, navigate the Kylie Cosmetic Instagram page
- Click the Twitter icon, navigate the Kylie Cosmetic Twitter page
- Click the TikTok icon, navigate the Kylie Cosmetic TikTok page



FACEBOOK PAGE:



INSTAGRAM PAGE:



TWITTER PAGE:

5. Roles and Responsibilities:

- We are responsible for identifying defects, bugs, and other issues in software and reporting them to the development team.
- We work closely with developers to ensure that issues are resolved, and that the software meets the requirements and specifications.
- Managing the changes and executing regression tests.
- Testers are also responsible for creating and executing test plans, test cases, and test scripts to ensure that the software is thoroughly tested.
- Interacting with customers/clients to solve the various issues they face and updating on the situation.
- Automating the design of a framework.
- Implementing it as per the structure of the project.
- Creating an automation test plan and getting approval.
- Identifying and selecting the automation test cases.
- Applying various designs and documenting the automation test strategy.
- Configuring Selenium Test Environment (STE) to set it up.
- Participating in Selenium Environment Setup with an Integrated Development Environment (IDE).

6.Testing Tools:

Software Requirements:

- Selenium Testing tool.
- Jenkins
- Operation system- Windows, Mac

7.Reporting Tool:

JENKINS is the reporting tool for the Project.

8. Industry Standards Used:

- **IEEE 1008-1987 - IEEE Standard for Software Unit Testing**

An integrated approach to systematic and documented unit testing is defined. It uses unit design and unit implementation information, in addition to unit requirements, to determine the completeness of the testing. The testing process described composed of a hierarchy of phases, activities, and tasks and defines a minimum set of tasks for each activity. The standard can be applied to the unit testing of any digital computer software or firmware and to the testing of both newly developed and modified units.

- **IEEE/ISO/IEC 29119-2-2013 - ISO/IEC/IEEE International Standard - Software and systems engineering —Software testing —Test processes**

The purpose of the ISO/IEC/IEEE 29119 series of software testing standards is to define an internationally agreed set of standards for software testing that can be used by any organization when performing any form of software testing. ISO/IEC/IEEE 29119-2 comprises test process descriptions that define the software testing processes at the organizational level, test management level and dynamic test levels. It supports dynamic testing, functional and non-functional testing, manual and automated testing, and scripted and unscripted testing. The processes defined in ISO/IEC/IEEE 29119-2 can be used in conjunction with any software development lifecycle model. Since testing is a key approach to risk-mitigation in software development, ISO/IEC/IEEE 29119-2 follows a risk-based approach to testing. Risk-based testing is a common industry approach to strategizing and managing testing. Risk-based testing allows testing to be prioritized and focused on the most important features and functions.

- **IEEE/ISO/IEC 29119-3-2013 - ISO/IEC/IEEE International Standard - Software and systems engineering — Software testing —Test documentation**

The purpose of the ISO/IEC/IEEE 29119 series of software testing standards is to define an internationally agreed set of standards for software testing that can be used by any organization when performing any form of software testing. ISO/IEC/IEEE 29119-3 includes templates and examples of test documentation. The templates are arranged within clauses reflecting the overall test process description structure in ISO/IEC/IEEE 29119-2, i.e., by the test process in which they are being produced. Annex A contains outlines of the contents of

each document. Annex B contains mappings ISO/IEC/IEEE 29119-2. Annex C contains an overview of the examples. Annexes D to S contain examples of the application of the templates. Annex T provides mappings to existing standards. The Bibliography for this part of ISO/IEC/IEEE 29119 is at the end of the document. ISO/IEC/IEEE 29119-3 supports dynamic testing, functional and non-functional testing, manual and automated testing, and scripted and unscripted testing.

9. Risk and Mitigation

- Broken Access control
- Payment security
- Use secure passwords.

10. Test Summary

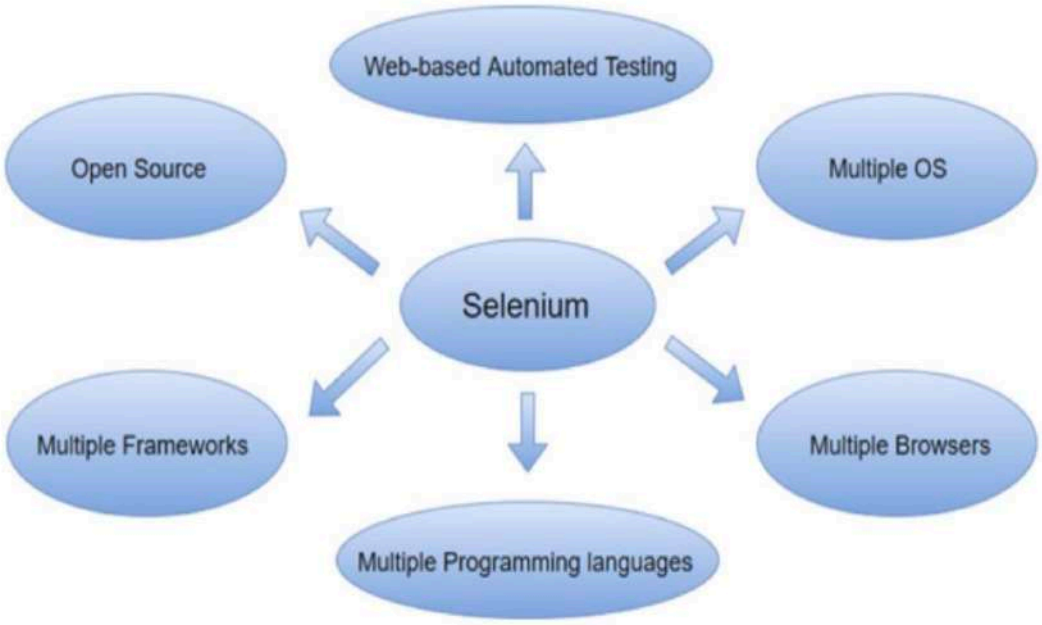
A Test Strategy document is created for shopping web application as per the content. It needs to be reviewing for sign-off by all entities involved in project management, business team, development team, and system administration Team.

Background and Related Work:

The details of technology and tools used for this project for developing the test automation framework are given below: • Selenium - Browser Automation testing tool • Java - Programming Language • Page Object pattern • TestNG - Testing/Reporting framework for Java programming language

1 Selenium Selenium is one of the most widely used open source Web UI (User Interface) automation testing suite. Selenium is a portable framework for testing web applications. It provides a test language to write tests in a number of popular programming languages, including C#, Groovy, Java, Perl, PHP, Python, Ruby and Scala. The tests can then run against web browsers. Selenium deployed on Windows, Linux and mac OS platforms. It is opensource software, Selenium WebDriver accepts commands and sends them

to a browser. This is implemented through a browser-specific browser driver, which sends commands to a browser and retrieves results.



Key features of our Selenium testing services are:

- Supporting programming language as chosen by the business (PHP, Java, Perl, Ruby, C#, Python)
- Extendibility via Appium to test mobile apps
- Integration with popular Java build tools (Maven, Ant) [10]
- Integrating with numerous supplementary tools and plug-ins to cover Selenium's limitations (e.g. JUnit, TestNG, RSpec, Junit etc.)
- Customized reporting services with CSS/HTML
- Automation with hybrid and keyword/data-driven approaches
- Cross-browser testing on IE, Firefox, Chrome and Safari
- In-built support for scalability and parallel execution using Selenium Grid, SauceLabs and BrowserStack
- Cloud execution with SauceLabs and other services
- Continuous integration with tools like Jenkins, Team City
- Tool integrations with TFS, Jira, JMeter, JBehave etc.
- ATDD/BDD frameworks: SpecFlow, Robot Framework and Cucumber

2 The Page Object

The Page Object Pattern gives a common sense way to model content in a reusable and maintainable way. Within your web app's UI there are areas that the tests interact with. A Page Object simply models these as objects within the test code. This reduces the amount of duplicated code and means that if the UI changes, the fix need only be applied in one place. The Page Object Pattern is an important technique, and provides first class support via its page and module constructs [20]. Page Object Model (POM) is a design pattern, popularly used in test automation that creates Object Repository for web UI elements. The advantage of the model is that it reduces code duplication and improves test maintenance. Under this model, for each web page in the application, there should be a corresponding Page Class. This Page class will identify the WebElements of that web page and also contains Page methods which perform operations on those WebElements [20]. Name of these methods should be given as per the task they are performing.

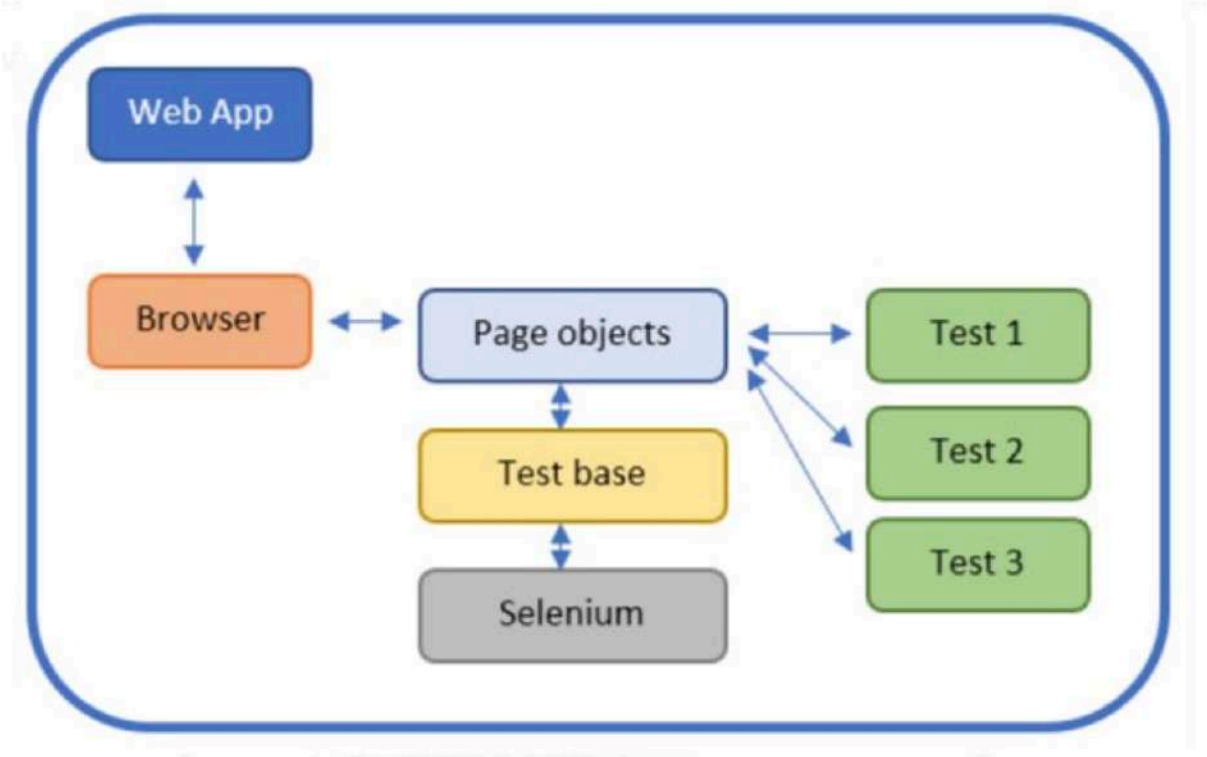


Figure 2.2.1: Page Object Model [20]

3 TestNG

TestNG is a testing framework inspired from JUnit and NUnit with more functionality added to make execution more efficient and powerful. It is an open source automated testing framework. It is similar to JUnit but it is more powerful than JUnit. TestNG eliminates most of the limitations of the older framework and gives the developer the ability to write more flexible and powerful tests with help of easy annotations, grouping, sequencing & parameterising. TestNG is a testing framework for the Java programming language and inspired by JUnit and NUnit. The design goal of TestNG is to cover a wider range of test categories: unit, functional, end-to-end, integration, etc., with more powerful and useful functionalities

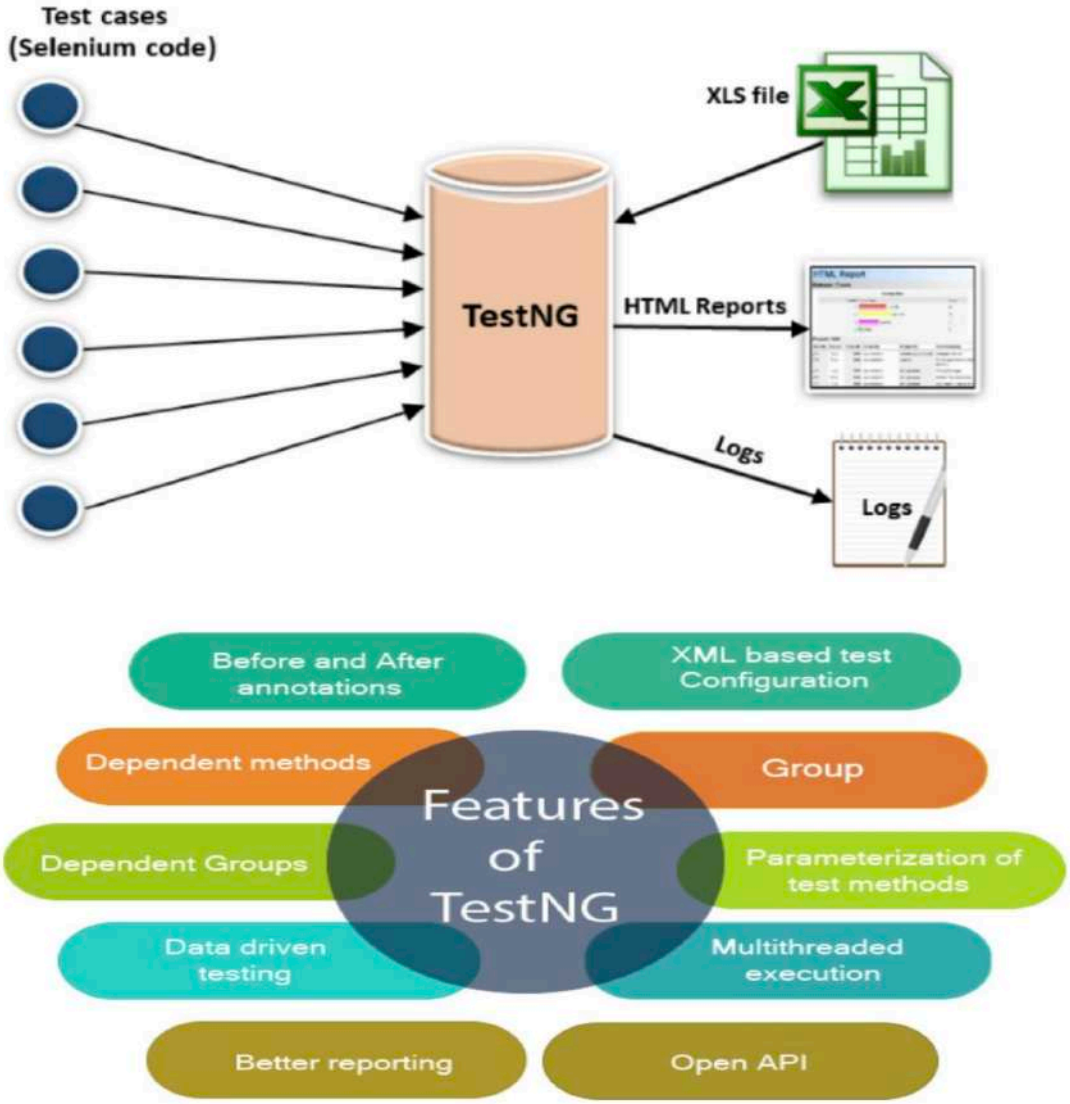


Figure 2.3.2: Features of TestNG [2]

INDIVIDUAL TASK (Testing Automation):

1 Module Maven:

```
Last login: Thu May  4 22:55:53 on console
/Users/smitabose/.zshrc:export:20: not valid in this context: /Users/smitabose/Desktop/apache-maven-3.9.1
(base) smitabose@Smitas-MacBook-Air ~ % pwd
/Users/smitabose
(base) smitabose@Smitas-MacBook-Air ~ % ls
AndroidStudioProjects
Applications
Applications (Parallels)
Creative Cloud Files
Creative Cloud Files smitabose7826@gmail.com 851fdeff270bad8d40712bd2c7c387aa5737b9abb85d901a3bc724b9012d3afb
Desktop
DesktophomePageTest_Mon_May_01_17_43_48_IST_2023.png
DesktophomePageTest_Mon_May_01_17_43_53_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_06_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_11_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_15_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_19_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_22_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_24_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_28_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_32_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_37_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_41_IST_2023.png
DesktophomePageTest_Mon_May_01_17_44_43_IST_2023.png
Desktopscreenshot2023-05-01_17-49-32.png
Desktopscreenshot2023-05-01_17-49-36.png
Desktopscreenshot2023-05-01_17-49-39.png
Desktopscreenshot2023-05-01_17-49-48.png
Desktopscreenshot2023-05-01_17-51-59.png
Desktopscreenshot2023-05-01_17-52-05.png
Desktopscreenshot2023-05-01_17-52-06.png
Desktopscreenshot2023-05-01_17-52-07.png
Documents
Downloads
GroupProject.zip
IdeaProjects
Library
Movies
Music
PacketTracer7
Pictures
Postman
Public
Untitled.ipynb
Users
__pycache__
apache-maven-3.9.1
apache-maven-3.9.1-bin.zip
directory-try
error.txt
git_repo
git_try
github0
github1
helloci
java_error_in_idea.hprof
newfile.log
opt
work
(base) smitabose@Smitas-MacBook-Air ~ % cat .m2
cat: .m2: Is a directory
(base) smitabose@Smitas-MacBook-Air ~ % ls -a
.
```

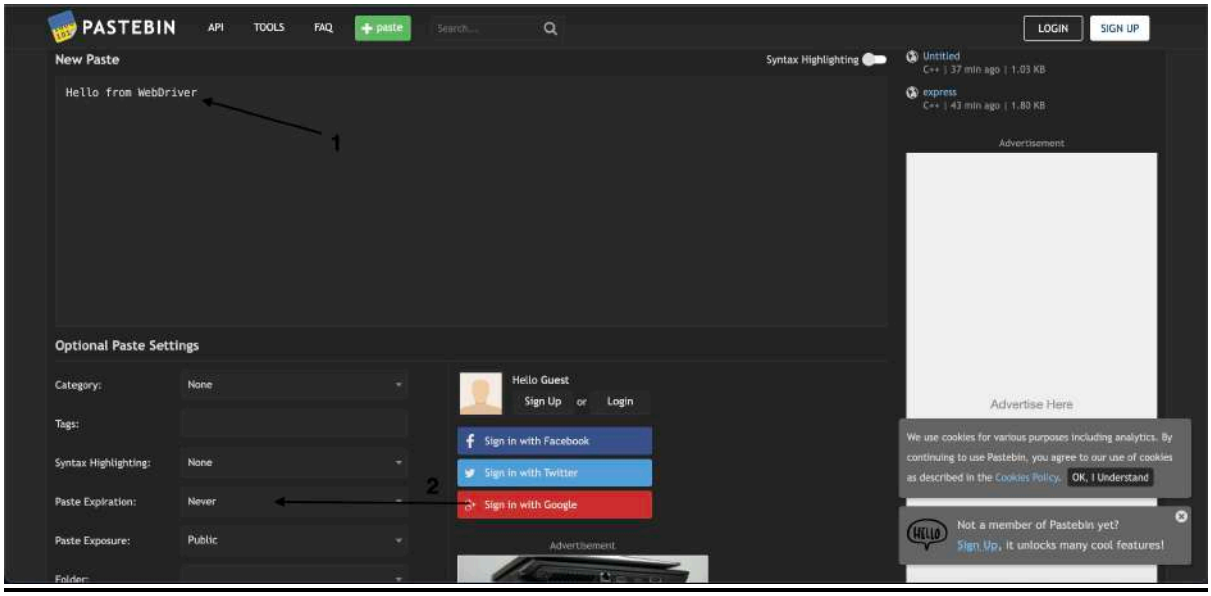
```
fr
(base) smitabose@Smitas-MacBook-Air repository % cd junit
(base) smitabose@Smitas-MacBook-Air junit % ls
junit
(base) smitabose@Smitas-MacBook-Air junit % cd junit
(base) smitabose@Smitas-MacBook-Air junit % ls
3.8.1   3.8.2   4.10    4.11    4.12    4.13.2  4.8.2
(base) smitabose@Smitas-MacBook-Air junit % rm 4.11
rm: 4.11: is a directory
(base) smitabose@Smitas-MacBook-Air junit % rmdir 4.11
rmdir: 4.11: Directory not empty
(base) smitabose@Smitas-MacBook-Air junit % rm -d 4.11
rm: 4.11: Directory not empty
(base) smitabose@Smitas-MacBook-Air junit % cat 4.11
cat: 4.11: Is a directory
(base) smitabose@Smitas-MacBook-Air junit % cd 4.11
(base) smitabose@Smitas-MacBook-Air 4.11 % rm -d 4.11
rm: 4.11: No such file or directory
(base) smitabose@Smitas-MacBook-Air 4.11 % rmdir 4.11
rmdir: 4.11: No such file or directory
(base) smitabose@Smitas-MacBook-Air 4.11 % cd ..
(base) smitabose@Smitas-MacBook-Air junit % ls
3.8.1   3.8.2   4.10    4.11    4.12    4.13.2  4.8.2
(base) smitabose@Smitas-MacBook-Air junit % cd 4.11
(base) smitabose@Smitas-MacBook-Air 4.11 % ls
_remote.repositories    junit-4.11.jar.sha1     junit-4.11.pom.sha1
junit-4.11.jar          junit-4.11.pom
(base) smitabose@Smitas-MacBook-Air 4.11 % cd
(base) smitabose@Smitas-MacBook-Air ~ % pwd
/Users/smitabose
(base) smitabose@Smitas-MacBook-Air ~ % cd .m2/repository/repository/junit/juni
cd: no such file or directory: .m2/repository/repository/junit/juni
(base) smitabose@Smitas-MacBook-Air ~ % cd .m2/repository/repository/junit/junit
cd: no such file or directory: .m2/repository/repository/junit/junit
(base) smitabose@Smitas-MacBook-Air ~ % cd .m2/repository/junit/junit
(base) smitabose@Smitas-MacBook-Air junit % ls
3.8.1   3.8.2   4.10    4.11    4.12    4.13.2  4.8.2
(base) smitabose@Smitas-MacBook-Air junit % rmdir 4.11
rmdir: 4.11: Directory not empty
(base) smitabose@Smitas-MacBook-Air junit % rmdir -v  4.11
rmdir: 4.11: Directory not empty
(base) smitabose@Smitas-MacBook-Air junit % rmdir -v 4.11
rmdir: 4.11: Directory not empty
(base) smitabose@Smitas-MacBook-Air junit % rmdir --v 4.11
rmdir: illegal option -- -
usage: rmdir [-pv] directory ...
(base) smitabose@Smitas-MacBook-Air junit % rmdir -v 4.11*
rmdir: 4.11: Directory not empty
(base) smitabose@Smitas-MacBook-Air junit % rmdir -rf 4.11
rmdir: illegal option -- r
usage: rmdir [-pv] directory ...
(base) smitabose@Smitas-MacBook-Air junit % rm -r 4.11
(base) smitabose@Smitas-MacBook-Air junit % ls -a
.               .DS_Store       3.8.2           4.12            4.8.2
..              3.8.1           4.10            4.13.2
(base) smitabose@Smitas-MacBook-Air junit % ls
3.8.1   3.8.2   4.10    4.12    4.13.2  4.8.2
(base) smitabose@Smitas-MacBook-Air junit % ls -a
.               .DS_Store       3.8.2           4.12            4.8.2
..              3.8.1           4.10            4.13.2
(base) smitabose@Smitas-MacBook-Air junit % ls
3.8.1   3.8.2   4.10    4.12    4.13.2  4.8.2
(base) smitabose@Smitas-MacBook-Air junit % stat 4.11
```

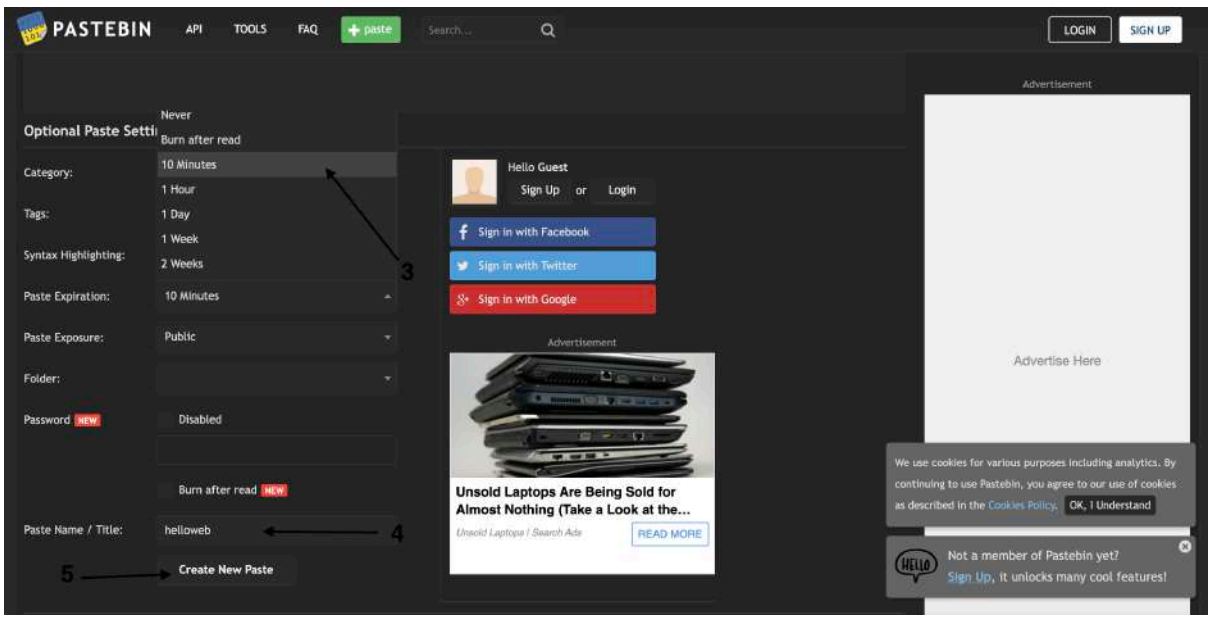
> c: \ Users \ User_Name \ .m2 \ repository \ ----------→the dates are changed

> when the files are created

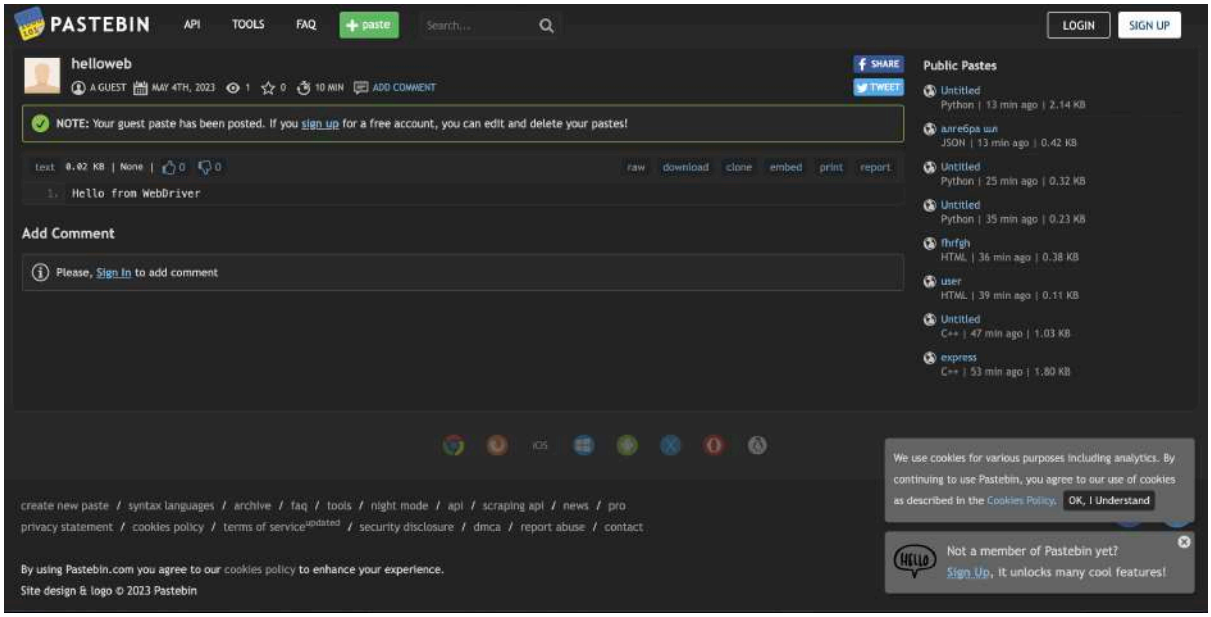
2 (a) Module Webdriver:

1. Code: "Hello from WebDriver"
2. Paste Expiration: "10 Minutes"
3. Paste Name / Title: "helloweb"



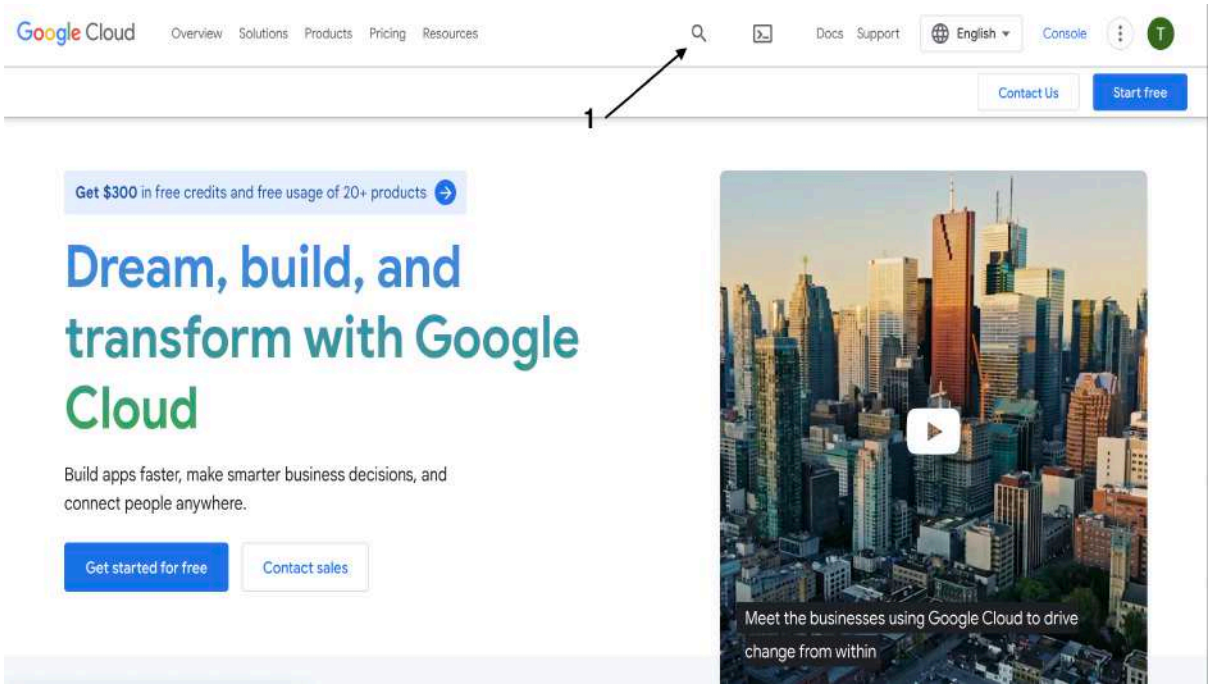


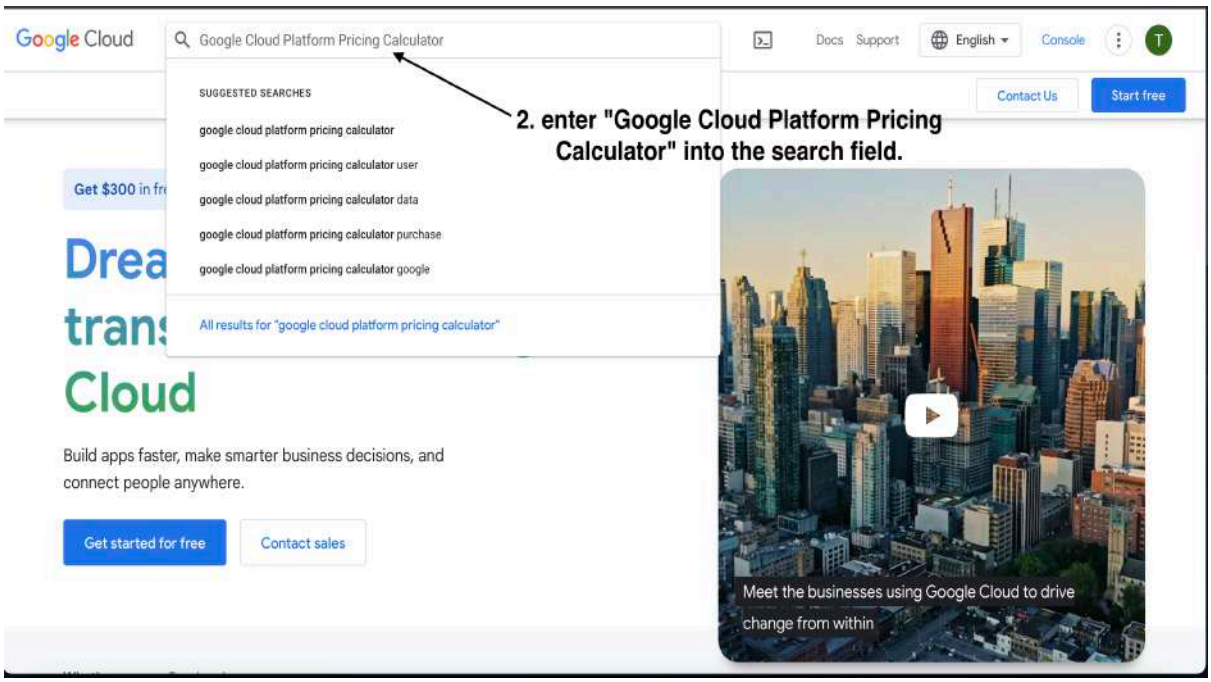
- Successfully New Paste Created

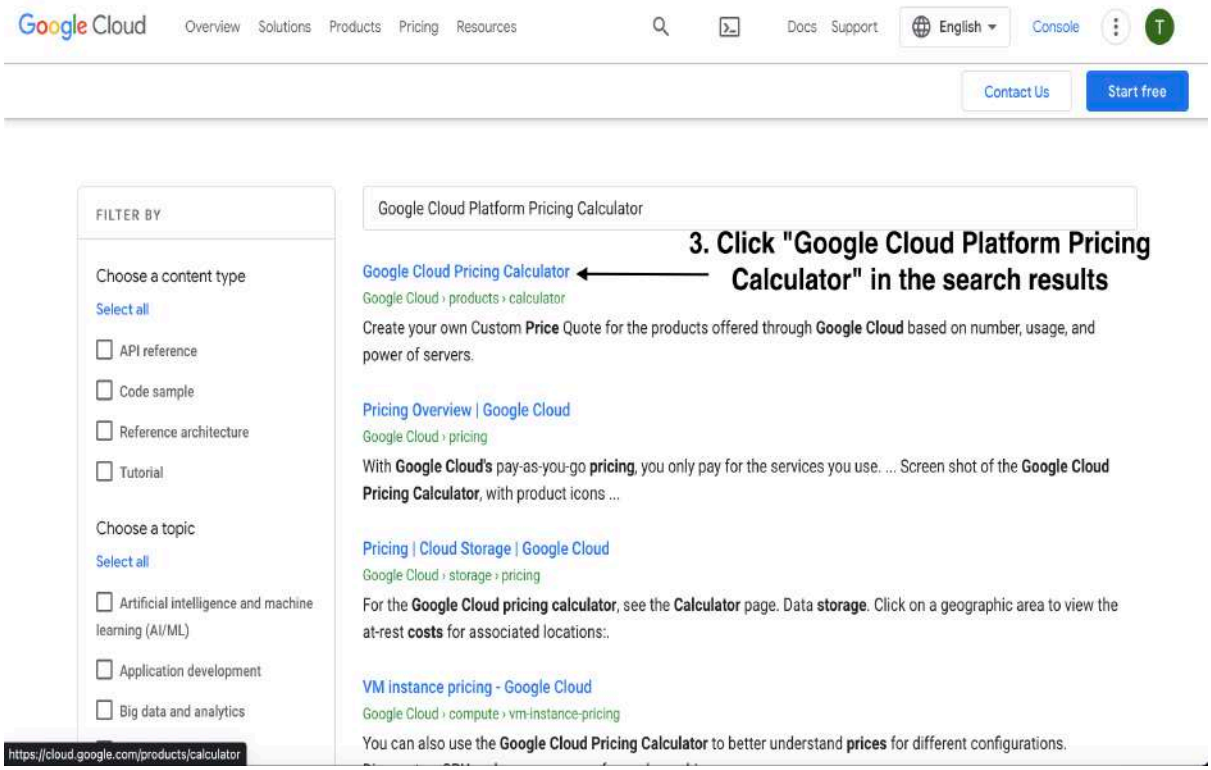


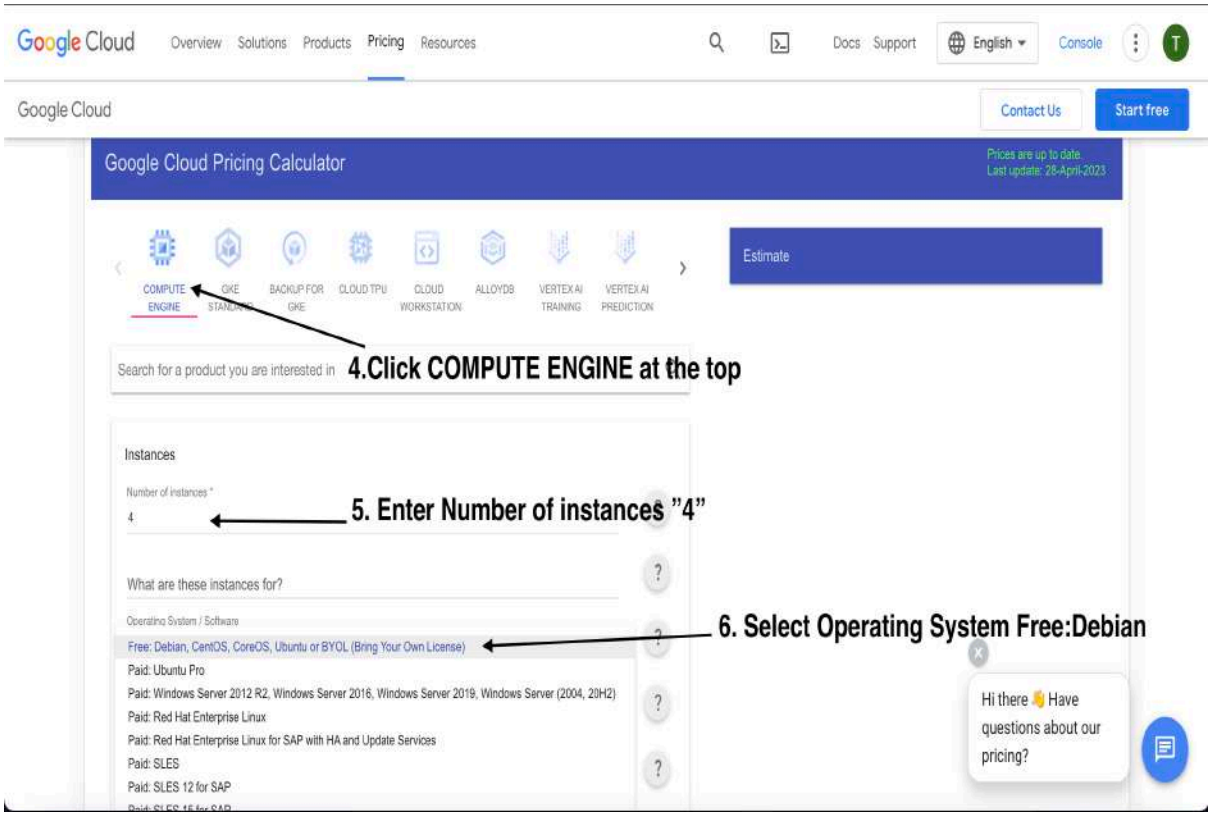
2 (b) Module Webdriver:

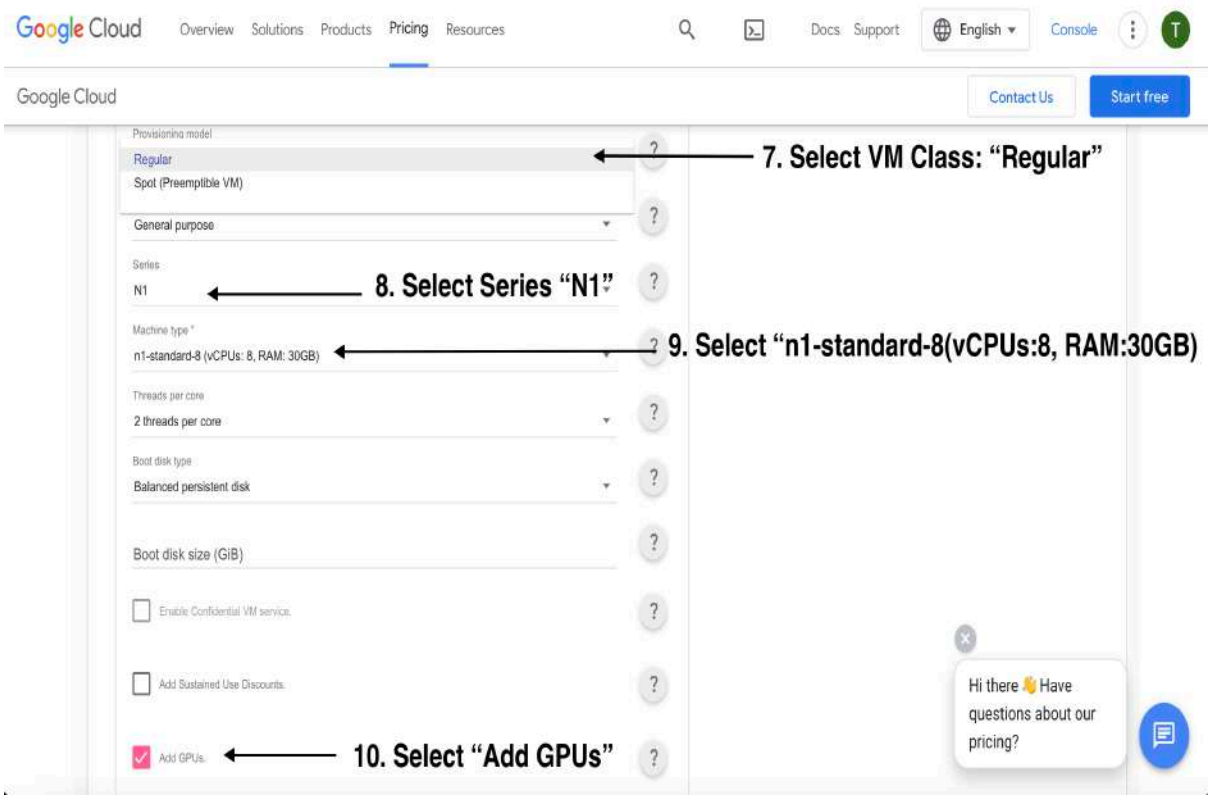
Website ---------→ https://cloud.google.com/

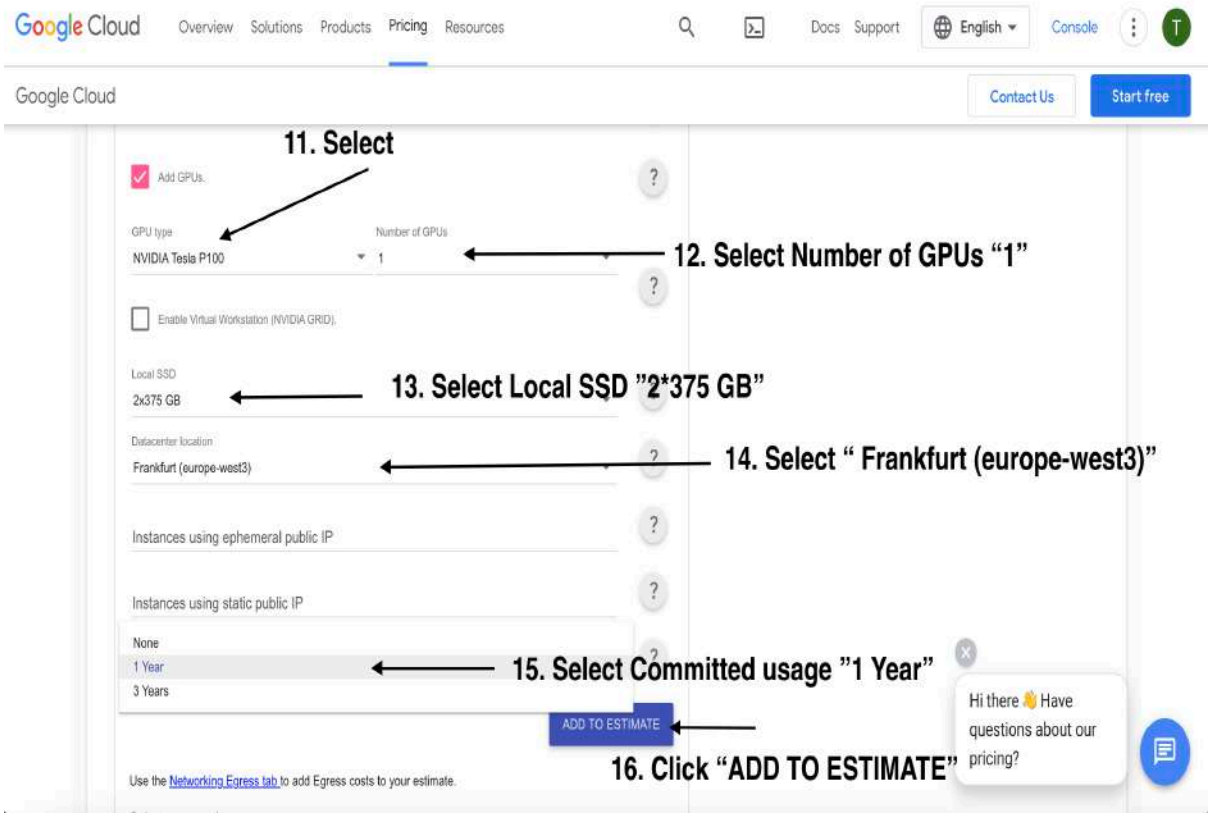

Google Cloud
Overview
Solutions
Products
Pricing
Resources
Docs
Support
English
Console
Contact Us
Start free
1
Get $300 in free credits and free usage of 20+ products
Dream, build, and transform with Google Cloud
Build apps faster, make smarter business decisions, and connect people anywhere.
Get started for free
Contact sales
Meet the businesses using Google Cloud to drive change from within


Google Cloud
Google Cloud Platform Pricing Calculator
SUGGESTED SEARCHES
google cloud platform pricing calculator
google cloud platform pricing calculator user
google cloud platform pricing calculator data
google cloud platform pricing calculator purchase
google cloud platform pricing calculator google
All results for "google cloud platform pricing calculator"
2. enter "Google Cloud Platform Pricing Calculator" into the search field.
Docs
Support
English
Console
Contact Us
Start free
Cloud
Build apps faster, make smarter business decisions, and connect people anywhere.
Get started for free
Contact sales
Meet the businesses using Google Cloud to drive change from within

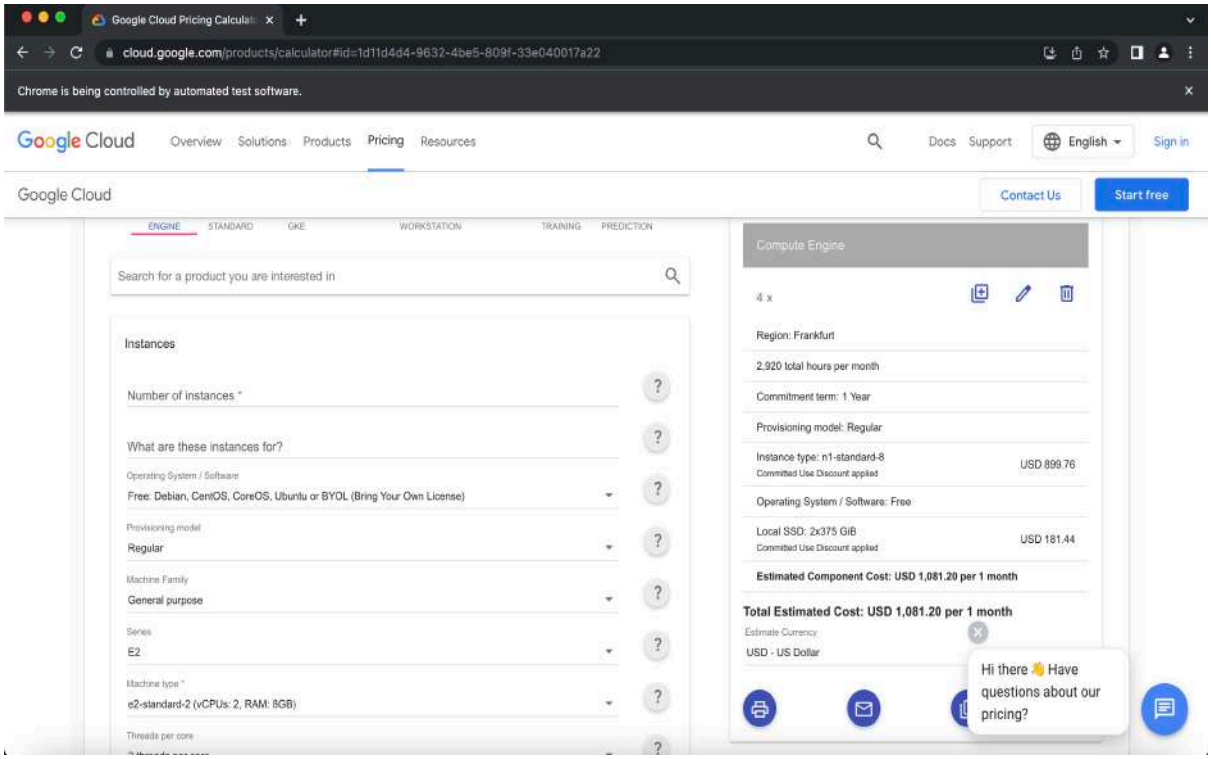

Google Cloud
Overview
Solutions
Products
Pricing
Resources
Docs
Support
English
Console
Contact Us
Start free
FILTER BY
Choose a content type
Select all
API reference
Code sample
Reference architecture
Tutorial
Choose a topic
Select all
Artificial intelligence and machine learning (AI/ML)
Application development
Big data and analytics
Google Cloud Platform Pricing Calculator
3. Click "Google Cloud Platform Pricing Calculator" in the search results
Google Cloud Pricing Calculator
Google Cloud › products › calculator
Create your own Custom Price Quote for the products offered through Google Cloud based on number, usage, and power of servers.
Pricing Overview | Google Cloud
Google Cloud › pricing
With Google Cloud's pay-as-you-go pricing, you only pay for the services you use. ... Screen shot of the Google Cloud Pricing Calculator, with product icons ...
Pricing | Cloud Storage | Google Cloud
Google Cloud › storage › pricing
For the Google Cloud pricing calculator, see the Calculator page. Data storage. Click on a geographic area to view the at-rest costs for associated locations:.
VM instance pricing - Google Cloud
Google Cloud › compute › vm-instance-pricing
You can also use the Google Cloud Pricing Calculator to better understand prices for different configurations.
https://cloud.google.com/products/calculator


Google Cloud
Overview
Solutions
Products
Pricing
Resources
Docs
Support
English
Console
Google Cloud
Contact Us
Start free
Google Cloud Pricing Calculator
Prices are up to date
Last update: 28-April-2023
COMPUTE ENGINE
GKE STANDARD
BACKUP FOR GKE
CLOUD TPU
CLOUD WORKSTATION
ALLOYDB
VERTEX AI TRAINING
VERTEX AI PREDICTION
Estimate
Search for a product you are interested in
4.Click COMPUTE ENGINE at the top
Instances
Number of instances *
4
5. Enter Number of instances "4"
What are these instances for?
Operating System / Software
Free: Debian, CentOS, CoreOS, Ubuntu or BYOL (Bring Your Own License)
Paid: Ubuntu Pro
Paid: Windows Server 2012 R2, Windows Server 2016, Windows Server 2019, Windows Server (2004, 20H2)
Paid: Red Hat Enterprise Linux
Paid: Red Hat Enterprise Linux for SAP with HA and Update Services
Paid: SLES
Paid: SLES 12 for SAP
6. Select Operating System Free:Debian
Hi there 👋 Have questions about our pricing?


Google Cloud
Overview
Solutions
Products
Pricing
Resources
Docs
Support
English
Console
Contact Us
Start free
Provisioning model
Regular
Spot (Preemptible VM)
7. Select VM Class: "Regular"
General purpose
Series
N1
8. Select Series "N1"
Machine type
n1-standard-8 (vCPUs: 8, RAM: 30GB)
9. Select "n1-standard-8(vCPUs:8, RAM:30GB)
Threads per core
2 threads per core
Boot disk type
Balanced persistent disk
Boot disk size (GiB)
Enable Confidential VM service.
Add Sustained Use Discounts.
Add GPUs.
10. Select "Add GPUs"
Hi there Have questions about our pricing?

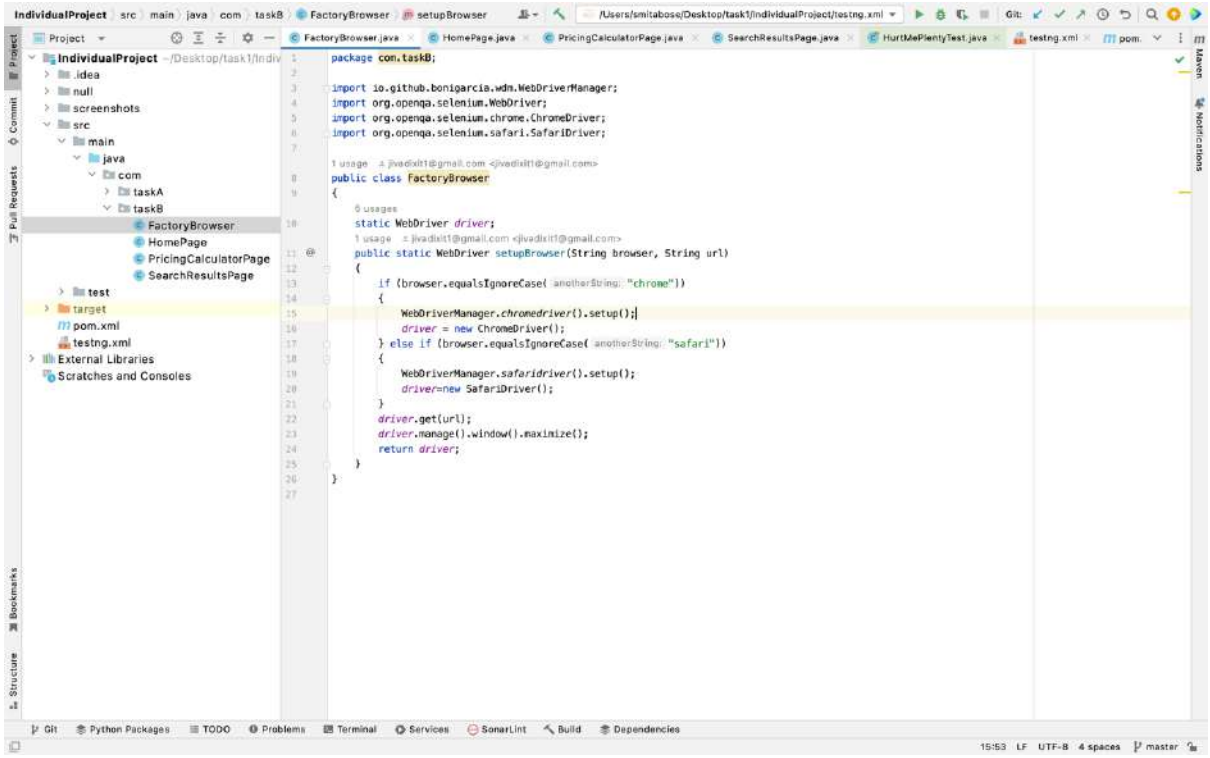

Google Cloud
Overview
Solutions
Products
Pricing
Resources
Docs
Support
English
Console
Contact Us
Start free
11. Select
Add GPUs.
GPU type
NVIDIA Tesla P100
Number of GPUs
1
12. Select Number of GPUs "1"
Enable Virtual Workstation (NVIDIA GRID).
Local SSD
2x375 GB
13. Select Local SSD "2*375 GB"
Datacenter location
Frankfurt (europe-west3)
14. Select " Frankfurt (europe-west3)"
Instances using ephemeral public IP
Instances using static public IP
None
1 Year
3 Years
15. Select Committed usage "1 Year"
ADD TO ESTIMATE
16. Click "ADD TO ESTIMATE"
Use the Networking Egress tab to add Egress costs to your estimate.
Hi there Have questions about our pricing?

> **Monthly Rent**



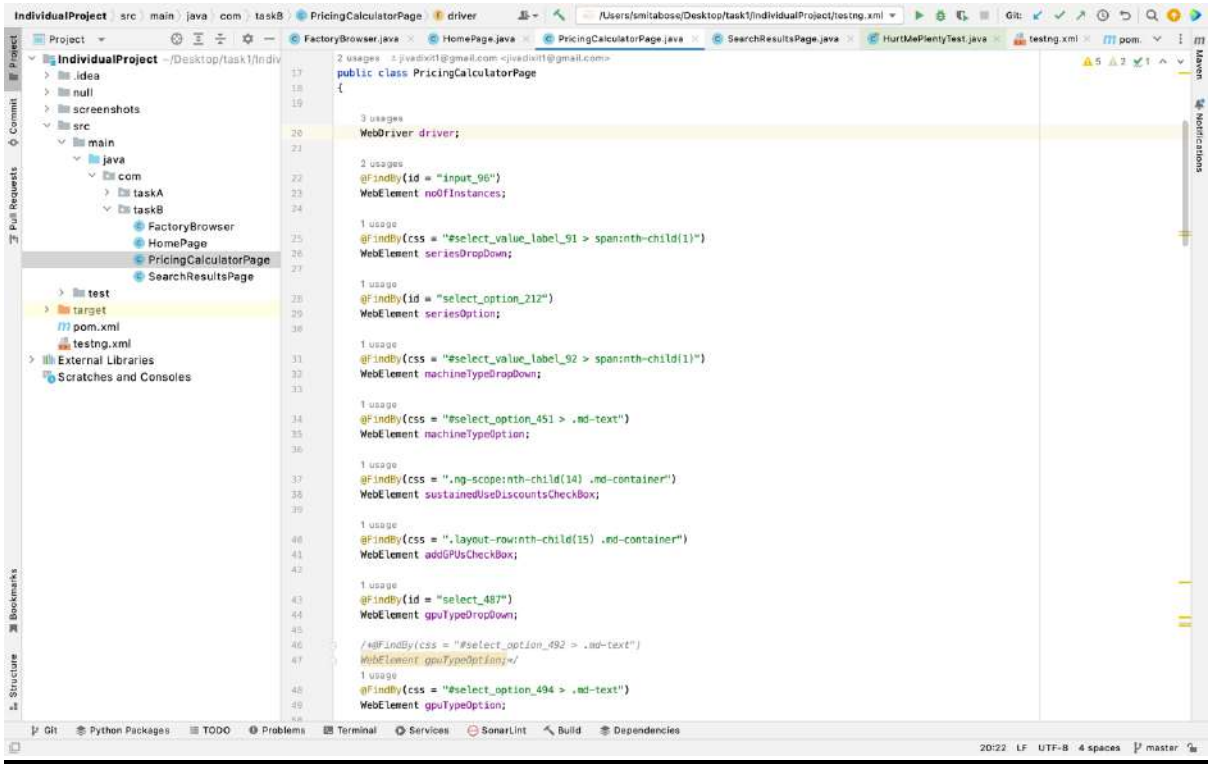
3 Module Framework:

> Two different Environment

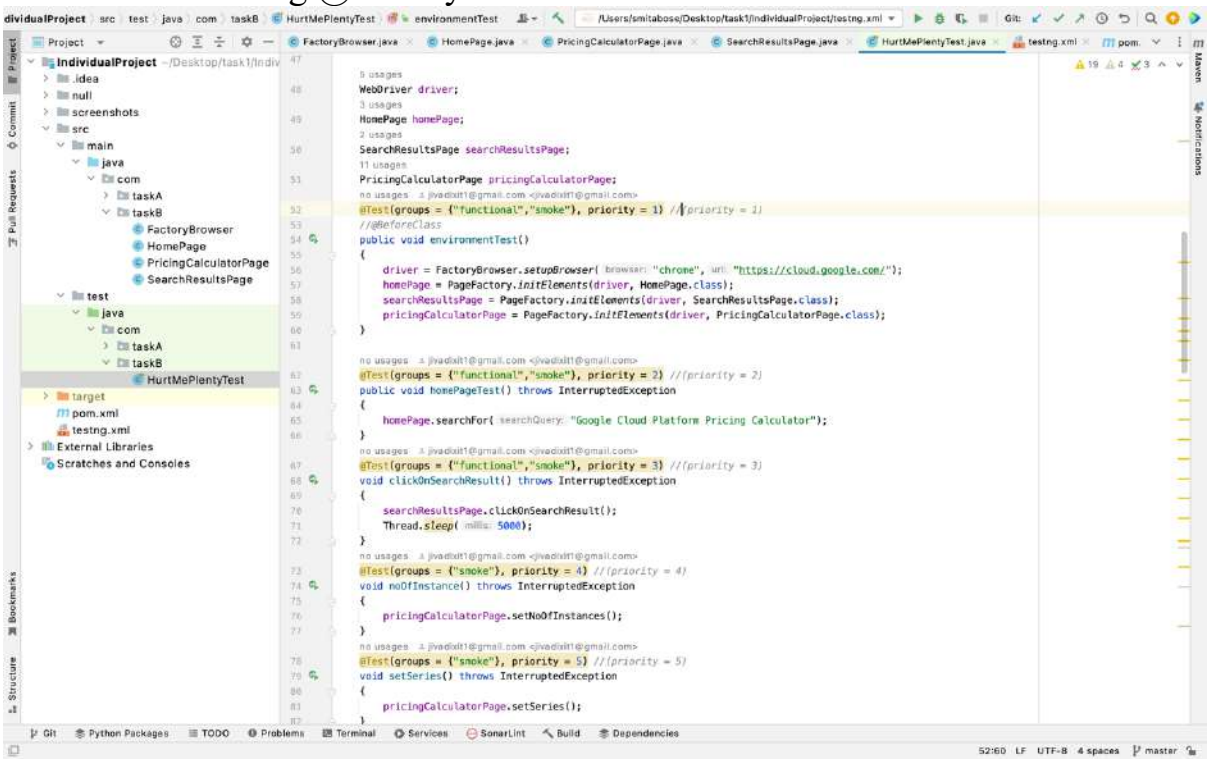


Page Factory for page abstraction

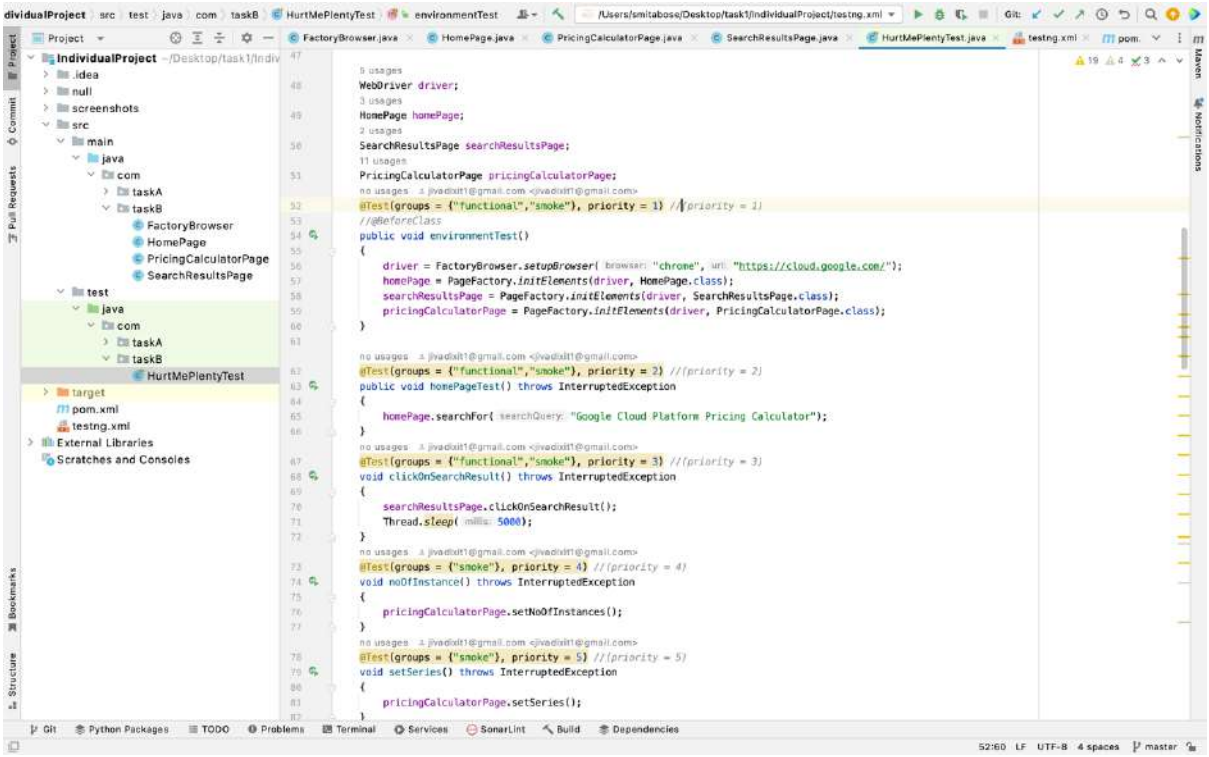
Page Factory is a class provided by Selenium WebDriver support Page Object Design patterns.
In Page Factory, testers use **@FindBy** annotation. The **initElements** method is used to initialize web elements.



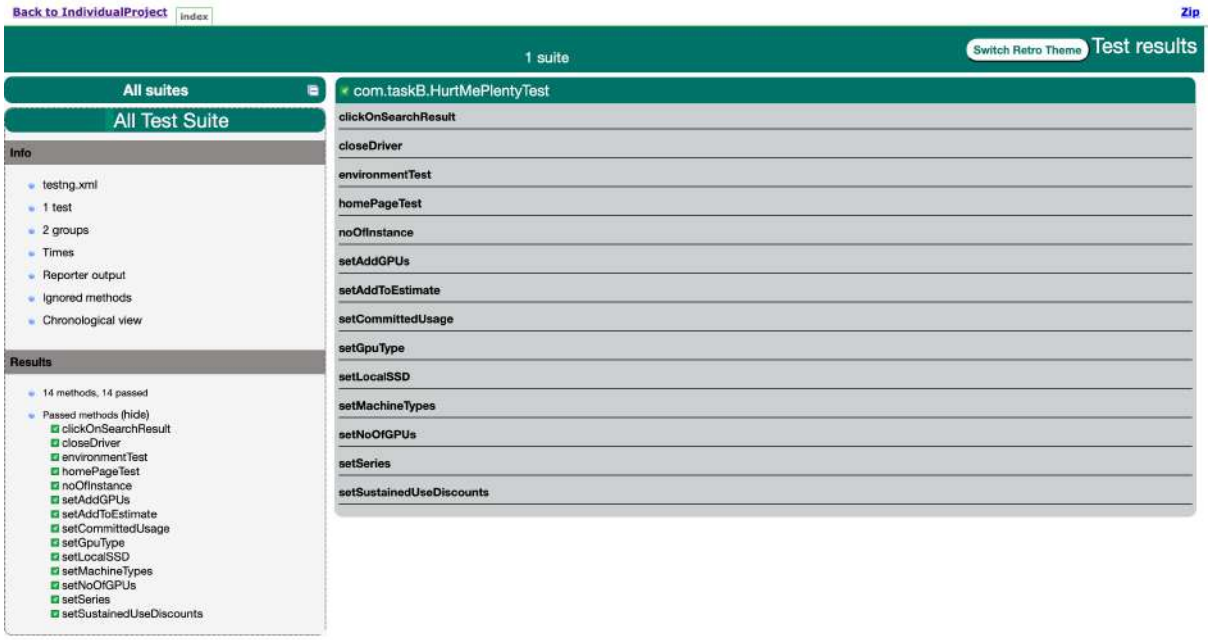
> **@FindBy**: An annotation used in Page Factory to locate and declare web elements using different locators. Below is an example of declaring an element using @FindBy



> **initElements()**: **initElements** is a static method in Page Factory class. Using the **initElements** method, one can initialize all the web elements located by **@FindBy** annotation.

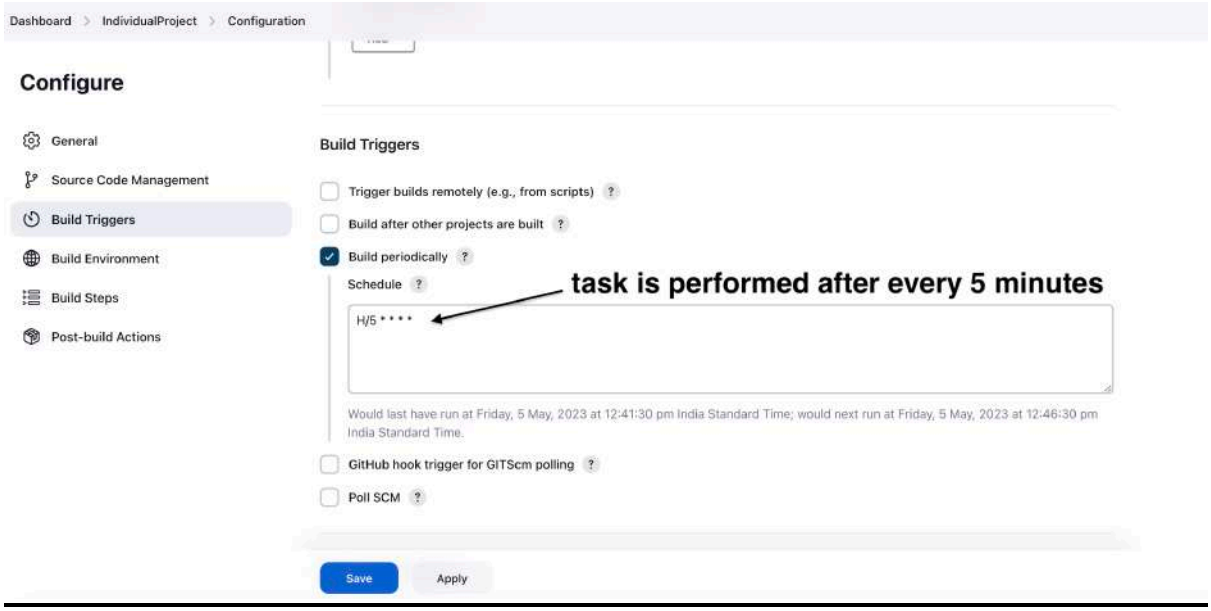


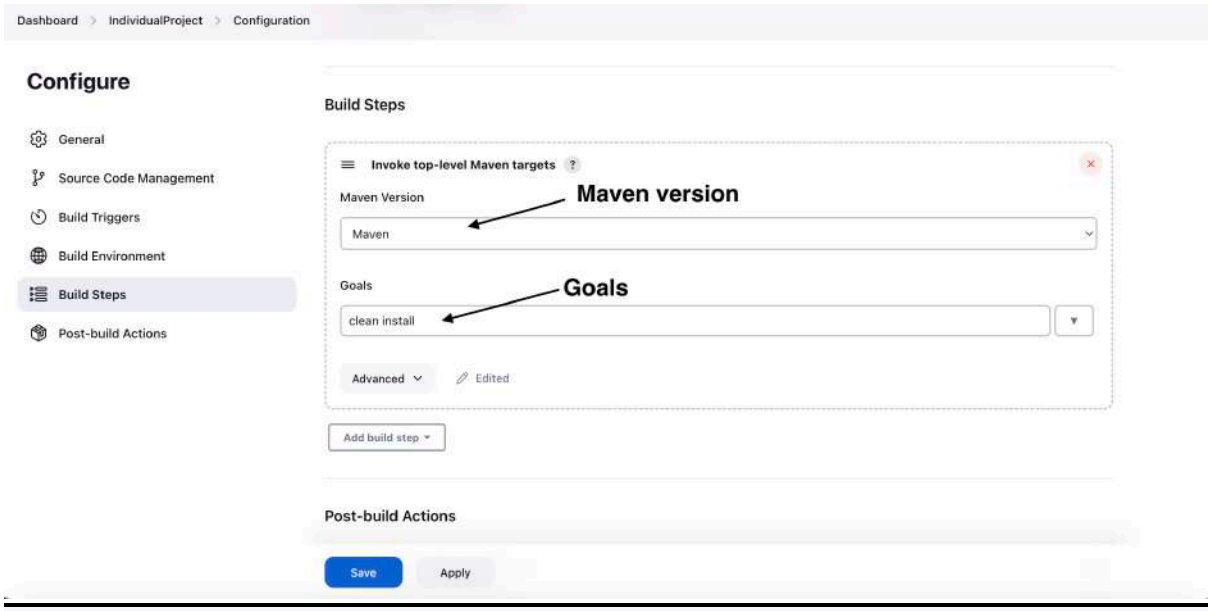
> XML suites for functional and smoke testing
> Index.html

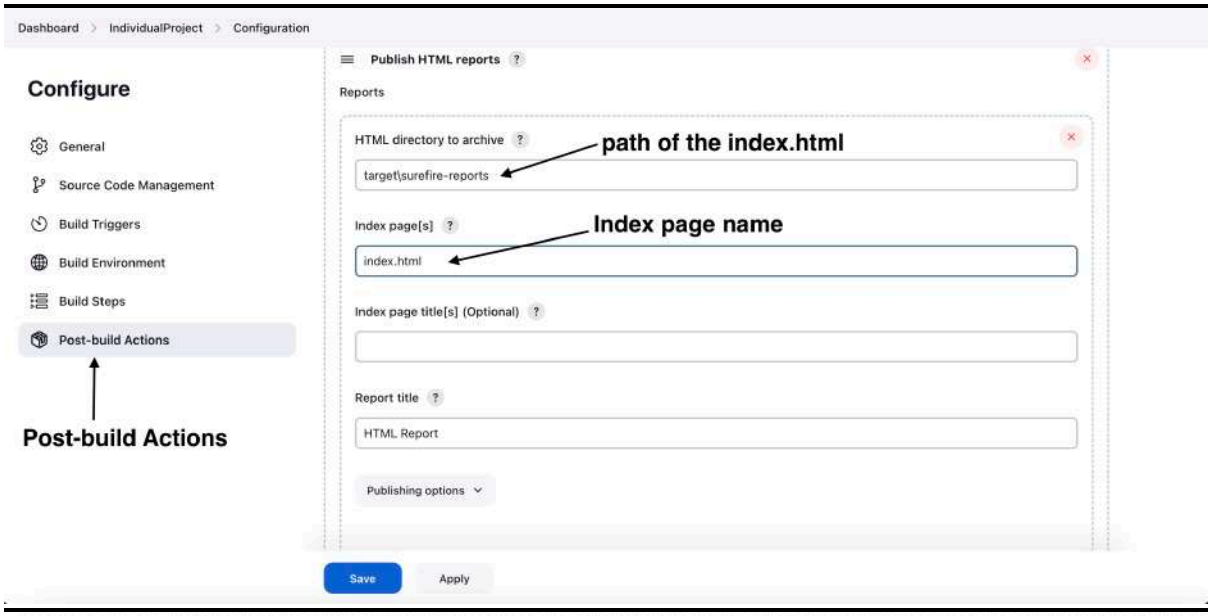


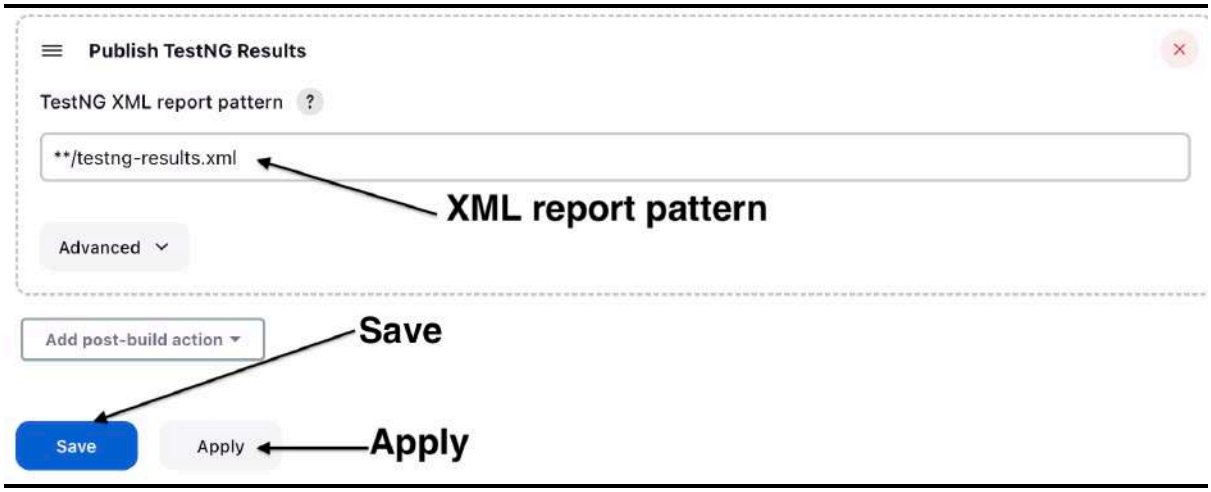
4 Module Continuous Integration with Jenkins:

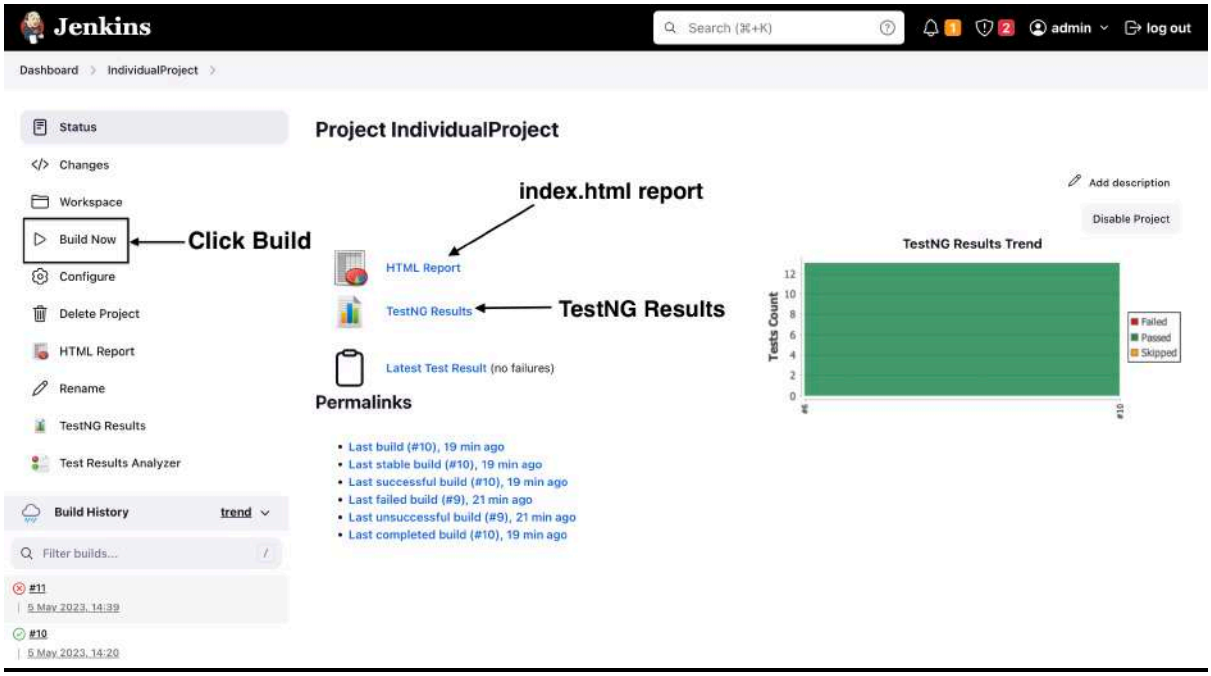
> Build Trigger




Dashboard > IndividualProject > Configuration
Configure
General
Source Code Management
Build Triggers
Build Environment
Build Steps
Post-build Actions
Build Steps
Invoke top-level Maven targets
Maven Version
Maven version
Maven
Goals
Goals
clean install
Advanced
Edited
Add build step
Post-build Actions
Save
Apply


Dashboard > IndividualProject > Configuration
Configure
General
Source Code Management
Build Triggers
Build Environment
Build Steps
Post-build Actions
Post-build Actions
Publish HTML reports
Reports
HTML directory to archive
path of the index.html
target\surefire-reports
Index page[s]
Index page name
index.html
Index page title[s] (Optional)
Report title
HTML Report
Publishing options
Save
Apply


Publish TestNG Results
TestNG XML report pattern
**/testng-results.xml
XML report pattern
Advanced
Add post-build action
Save
Save
Apply
Apply



CONCLUSION:

In conclusion, the use of automated testing tools such as Selenium, Maven, and Jenkins have proven to be highly effective in testing the **Kylie Cosmetics website**. These tools have enabled us to automate the testing process, significantly reduce manual effort, and ensure high quality software development.

Selenium, as a widely used open-source web automation tool, has enabled us to execute a range of automated tests. The Selenium web driver allows us to interact with the website's user interface and simulate various user interactions. The ability to automate these tests has significantly reduced the overall testing time and the likelihood of manual errors. This has enabled us to improve the efficiency of the testing process and to ensure comprehensive testing coverage of the Kylie Cosmetics website.

Maven, as a powerful project management tool, has allowed us to manage the testing process effectively. It has enabled us to define dependencies, run tests automatically, and configure the build process with ease. Maven also provided us with a clean way of setting up and maintaining the testing environment. This has allowed us to have greater control over the testing process and to achieve a high level of consistency in the testing environment.

Jenkins, as a continuous integration and delivery tool, has been an essential component of the testing process. It has provided us with a platform to automate the testing process, manage test executions, and generate valuable reports on test results. The ability to integrate Jenkins with Selenium and Maven has allowed us to create a powerful and scalable testing pipeline. We were able to trigger tests automatically whenever changes were made to the codebase, ensuring that all changes were thoroughly tested before being deployed to production.

The combination of Selenium, Maven, and Jenkins has allowed us to improve the quality of the Kylie Cosmetic website significantly. Automated testing has enabled us to identify issues

early in the development cycle, reducing the overall cost of fixing bugs and improving the overall quality of the website. The integration of these tools has also allowed us to achieve a high degree of testing coverage, ensuring that all components of the website are thoroughly tested.

In addition to the benefits of the automated testing process, there are other advantages of using Selenium, Maven, and Jenkins in the development cycle. These tools are open source, meaning that they are accessible and cost-effective. The community support for these tools is also extensive, which allows for easy troubleshooting and customization.

Additionally, the ability to integrate these tools with other software development tools such as ***version control systems*** and issue tracking software further enhances their value in the development cycle.

In conclusion, the use of Selenium, Maven, and Jenkins has proven to be a highly effective testing solution for the Kylie Cosmetics website. The use of these tools has enabled us to automate the testing process, increase efficiency, and improve the overall quality of the website. The integration of these tools has also allowed us to create a powerful and scalable testing pipeline. As the software development industry continues to evolve, it is essential to adopt these testing tools to ensure high quality software development. The use of Selenium, Maven, and Jenkins has allowed us to achieve these goals and will undoubtedly continue to play a crucial role in the future of software development.