**Introduction**

Thank you for giving me the opportunity to introduce myself! My Name is Swapnil Bansi Gaikwad. I am basically From Sangamner, I have completed my graduation from Pune university, I have almost 3 year of experience as a tester. Where I have work on both manual & Automation Testing.

In my experience, I get an opportunity to work on 2 project. In which one was insurance domain & other one was in e-commerce domain In their project we have used **Agile methodology** for testing and Development purpose and **cypress, playwrigh**t as an automation tool and **java Script**. While working on those project, I have get hands on experience tool like **jira, git, gitHub , postman.** Talking about framework initially by default we have used **Mocha Framework** but as per client requirement we have implemented **page object model( ром) and BDD cucumber.**

currently I am working for XYZ as a automation Test engineer. While working as a automation T.E, I have some role's and responsibility like I have to understand the customer requirements, user stories and according to that test script as per test document and also execute the same.

* **Agile Methodology -:** ( started in the early 2000s — officially in 2001.)

What is Agile Methodology -

In simple way we can say that Working in small steps and improving continuously instead of doing everything at once.

In short

Work is divided into small parts (iterations/sprints)

Team and client talk regularly

Quick feedback and fast changes

Goal: deliver a working product step by step

**Example:**

Imagine you are making an app -

In Agile, you don’t build the whole app and then test at the end.

You build a small part (like login) → test it → fix it → then move to the next part (like signup).

After every small cycle (called a Sprint), you get feedback and improve.

* **What is Cypress** ( Available for public in 2017 )

Cypress is a tool used for testing websites and web apps automatically.

It helps developers and testers check if everything on a webpage is working correctly - like buttons, forms, links, and pages - without testing manually every time.

In simple way Cypress is like a robot tester that opens your website, clicks buttons, types text, and checks if results are correct.

Where we use/Uses of Cypress

1. Front-End (UI) Testing
2. End-to-End (E2E) Testing
3. Integration Testing
4. API Testing
5. Regression Testing

* **What is Playwright .** ( Founded by Microsoft and available for public in 2020 )

Playwright is a tool used for automated testing of websites and web apps, just like Cypress.

It helps you check if your website works correctly — automatically — without having to click and type manually.

In simple way

Playwright is like a robot user that opens a browser, clicks buttons, fills forms, and checks if the website behaves correctly.

It can test your site on Chrome, Firefox, Edge, and Safari - all browsers!

Where we use/Uses of Playwright

1. End-to-End (E2E) Testing
2. UI (Front-End) Testing
3. Cross-Browser Testing
4. Mobile & Device Testing
5. API Testing
6. Visual & Screenshot Testing

* **What is Javascript** (Created by Brendan Eich in 1995 )

JavaScript (JS) is a programming language used to make websites interactive.

It adds life to web pages — things that move, change, or respond when you click or type.

In simple way

HTML - makes the structure (skeleton) of a webpage

CSS - makes it look beautiful (design)

**JavaScript - makes it work (actions & logic)**

Where we can use Javascript

1.Websites (Front-End)

2. Backend Development

3. Mobile App Development

4. Desktop Apps

5. Game Development

* **What is Jira** (**Created by:** Atlassian in 2002)

Jira is a software tool used to manage work and track tasks - especially in software development and testing.

It helps teams plan, assign, and monitor their work in one place.

In simple way

Jira is like a digital to-do board for teams.

Each task (like “fix login bug” or “add new button”) becomes a ticket or issue in Jira.

You can track its progress — from “To Do” → “In Progress” → “Done.”

Where we use/Uses of Jira

1. Software Development Projects
2. Bug Tracking (Testing teams)
3. Project Management
4. Service / Support Teams
5. Any Team Work Tracking

* **What is Git** (Created by Linus Torvalds in 2005 )

Git is a version control system.

It helps developers track changes in code, save versions, and work together without overwriting each other’s work.

In simple word

Think of Git like a save button for your code, but much smarter.

You can go back to any previous version, see what changed, and collaborate with teammates easily.

Where we use/Uses of Git

1. Version Control (Track Changes)
2. Collaboration
3. Branching and Merging
4. Backup and Safety
5. Continuous Integration / Deployment (CI/CD)

* **What is GitHub** (Created by Tom Preston-Werner, Chris Wanstrath, PJ Hyett, and Scott Chacon in 2008)

GitHub is a website where people store, share, and manage their code or projects.

Uses of GitHub

1. Teamwork on coding projects
2. Sharing open-source projects
3. Storing your portfolio code
4. Managing updates and bugs

* **What is Postman.** ( Created by Abhinav Asthana in 2012)

Postman is a tool used to test APIs (Application Programming Interfaces).

In simple word

When two software or apps talk to each other - they do it through APIs.

Postman helps you send requests to those APIs and see their responses - just like chatting with a server.

Where we use/Uses of Postman.

1. To test if an API works correctly
2. To check what data an API sends back
3. To debug issues in your backend or frontend
4. To automate API testing

* **What is Mocha Framework.** ( Created by TJ Holowaychuk in 2011 )

Mocha is a testing framework for JavaScript — it helps you test your code to make sure everything works correctly.

In simple word

When you write code (like a function or app), you want to check automatically if it gives the correct output.

Mocha helps you run those checks easily.

Where we use/Uses of Mocha Framework

1. Testing backend (Node.js) or frontend JavaScript code
2. Making sure updates don’t break old features
3. Running tests automatically during development

* **What is Page Object Model** ( people started using in early 2000s)

It is a design pattern used in test automation (like with Selenium, Cypress, or Playwright) to make your test scripts clean, easy to maintain, and reusable.

Where we use/Uses of Page Object Model

1. Keeps code organized
2. Makes test scripts shorter
3. Easier to update if something changes on a page
4. Improves reusability of code

* **What is BDD Cucumber** (**BDD started conceptually in mid-2000s**, and **Cucumber was created in 2008** to implement BDD in a readable, automated way.)

BDD (Behavior Driven Development) means writing tests in a human-readable format that even non-technical people (like business analysts or clients) can understand.

It focuses on the behavior of the application — what it should do, not how it’s done.

Where we use/Uses of BDD Cucumber

1. Feature file - Written in Gherkin (as above).
2. Step Definitions - Code behind each line that performs the real actions.