

# Full Stack QA

Manual Testing, Jira,  
Java, Selenium, TestNG, Cucumber,  
Maven, Git, Github, Jenkins  
Frameworks with Live Project

# Manual Testing

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- Software Testing Introduction
- SDLC & STLC
- Project Vs Product
- V-Model
- QA & QC & QE
- Different Levels of Software Testing
- White Box & Black Box Testing
- Static Testing & Dynamic Testing
- Verification & Validation
- System Testing Types
- GUI Testing
- Functional & Non-Functional Testing
- Test Design Techniques
- Re-Testing & Regression testing
- Exploratory Testing
- Adhoc Testing
- Sanity & Smoke Testing
- End-To-End Testing
- STLC -Software Testing Life Cycle
- Use case, Test scenario & Test case
- Test Environment and Execution
- Defect Reporting
- Test Closure
- Test Metrics
- Project introduction
- Understanding Functional Requirements from FRS
- Creating Test Scenarios
- Creating Test Cases
- Test Execution
- Bug Reporting & Tracking
- Test Sign off
- Interview Questions & Answers
- SQL (Recorded Videos)

# Jira

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- What is Agile, Scrum and Scrum Team
- What is Sprint
- What is User Story
- How to give story points & How to estimate user story
- What is Definition of Done and Definition of Ready
- Different Sprint Activities:
- Sprint Planning, Backlog Refinement, Sprint Review & Sprint Retrospective
- Jira Tool
- How to install and configure JIRA tool
- How to create an EPIC, User Stories in JIRA
- Creating sprints in Jira
- Sprint life cycle in JIRA
- Backlogs in JIRA
- Creating bugs in Jira
- How to write test cases in JIRA with Zephyr plugin
- Creating Test Cycles and Execute Test cases in Jira
- Interview Questions & Answers

# Java

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- Introduction to Java
- Setup Java Environment
- Download and install Eclipse
- Basic Java Program
- Java Variables and Data Types
- Java Operators
- Conditional statements
- Loops
- Break and continue
- Arrays
- Working with Strings
- Object Oriented Programming (OOP)
- Classes and Objects
- Java Methods
- Java Constructor
- Method Overloading
- Constructor Overloading
- this keyword
- Static variables and methods
- Java Inheritance
- Method Overriding
- super keyword
- final keyword
- Java Abstract classes
- Java Interfaces
- Java Packages
- Access Modifiers
- Exception Handling
- Java Collections
- JDBC
- Interview Questions & Answers

# Selenium

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- Introduction to Automation testing
- Overview on Selenium
- Setup WebDriver in Eclipse
- First Test Case
- Locators
  - Id, name, linktext, partial linktext, tagname
  - XPath
  - CSSSelector
  - Usage of SelectosHub
- get commands
  - get
  - gettitle
  - getcurrenturl
  - getpagesource
- Conditional commands
  - isDisplayed
  - isEnabled
  - isSelected
- Handling Web Elements
- Drop Downs
- Links
- Browser Commands
  - close
  - quit
- Navigational commands
- Waits
  - Implicit wait
  - Explicit wait
  - Fluent wait
- Alerts/Popups
- Frames
- Handle Windows
  - getWindowHandle
  - getWindowHandles
- Web Tables
- Date Picker
- Files Download
- Files Upload
- Mouse Actions - Actions Class
  - Right click

- Double click
  - Drag and drop
  - Resize
- Keyboard Actions
- Scrolling Page
- Working with Tabs
- Headless Testing
- Data Driven Testing - Excel
- Data Driven Testing - Database
- Reading Properties File
- Logging with Log4j2
- Capture Screenshots
- JavaScript Executor

# TestNG

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- Introduction to TestNG
- TestNG Installation
- First Test Case
- Prioritization
- Annotations
- Dependency methods
- Skipping Tests
- Grouping
- Assertion Types
- Parallel Testing
- Data Provider
- Invocation Count
- Listeners
- Batch Testing
- Extent Reports
- Page Object Model
- Selenium Grid

# Cucumber

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- Cucumber Basics
- Cucumber Selenium Java Test
- Feature File
- JUnit Test Runner Class
- Gherkin Keywords
- Step Definition
- Cucumber Options
- Data Driven Testing
- Parameterization in Cucumber
- Data Driven Testing Using Examples Keyword
- Data Tables in Cucumber
- Maps in Data Tables
- Cucumber Annotations
- Tags
- Hooks
- Tagged Hooks
- Execution Order of Hooks
- Background Keyword
- Interview Questions & Answers



# CI Tools

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- Maven
- Git
- Git Hub
- Jenkins

# E-Commerce Project

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- Overview on E-Commerce Application
- Selecting Test cases for Automation
- Hybrid Framework implementation from Scratch
- Integration with CI Tools