

|| Jai Shankar ||

PerfectLearn Software Testing Institute

-----Get UR Dream Job with our small support-----

UI - Software Testing

----- By Projects only-----

- **Manual software testing**
- **Automation software testing**

WHO CAN LEARN?

- Aspirants looking for permanent jobs in big IT corporations
- Students/scholars willing to start their professional career as a “Test Engineer” with any of the IT giants
- Proficient IT professionals who are willing to switch their field of work towards Testing field
- Aspirants with additional IT skills and educational background who are willing to gain practical freelancing experience in the related field.

PRE-REQUISITES?

- Any Graduate can enter in IT field like:
Any engineering degree, B.Com, M.com, B.A., BCA, MCA, BCS, MCS, MBA, BBA etc.
- No need of any programming language knowledge, only basic computer knowledge is essential.

TRAINING OUTCOME?

- Confidence on Automation software testing tool and manual software testing to crack interview and to work efficiently in company as QA.
- No need to view other videos or topics to take extra knowledge we take care of all.
- Programming language i.e. Core Java for selenium, student also perfect in that.
- Any student can work in automation testing at any level in company.
- In manual software Testing tool –You are perfect in to analyzing documents, to prepare test scenario, to prepare test cases and to execute test cases on given build. Also bug logging and bug tracking process.
- In Automation software testing tool- You are perfect in Selenium, maven, Jenkins, GIT, TestNG, core java etc. Also you are work effectively in automation framework as like experienced QA.

MANUAL SOFTWARE TESTING SYLLABUS

NOTE: Practically we teach all topics as project proceeds, you will apply that knowledge on Project.

Total process is as like IT Company.

1. Software Testing Overview

- Introduction to Software Testing
- Objectives of Testing
- Software Development Process
- Error / Fault / Failure
- Why Software has defects?
- Role of a Tester

2. Principles of Testing

- Early Testing
- Exhaustive Testing Impossible
- Defect Clustering
- Pesticide Paradox
- Testing is Context Dependent
- Testing Should Show Presence of Defects
- Absence of Error is a Fallacy

3. Software Development Life Cycle (SDLC)

4. Software Testing Life Cycle (STLC)

5. Software Testing Methodologies

- White Box Testing
- Black Box Testing

6. White Box Testing

- Unit Testing
- Integration Testing

7. Black Box Testing

- System Testing
- User Acceptance Testing (UAT)
- Alpha Testing
- Beta Testing

8. System Testing and Types of System Testing

- Smoke / Sanity Testing
- Formal Testing
- Priority Based/Risk Based Testing
- Ad-hoc Testing
- Re-Testing and Regression Testing
- End-to-End Testing
- Exploratory Testing
- Benchmark Testing
- Monkey Testing
- UI Testing
- Usability Testing
- Security Testing
- Performance Testing
- Load Testing
- Stress Testing

- Compatibility Testing
- Installation Testing
- Globalization Testing
- Localization Testing

9. Software Testing Life Cycle (STLC)

- Test Planning
- Test Strategy
- Test Plan
- Test Analysis
- Analyzing Functional Requirements
- Preparing Requirement Clarification
- Test Preparation
- Identifying & documenting Test Scenarios
- Test Case Design Techniques
- ECP
- BVA
- Decision Table Testing
- Preparing Test Cases
- Preparing Test Data
- Preparing Test Suite
- Test Execution
- Build Release Process
- Executing Test cases

10. Defect / Bug Life Cycle

- Defect tracking tool-Mantis/Bugzilla etc.
- Defect Management
- What is defect?
- Defect Severity & Defect Priority
- Defect Report Template
- Defect Reporting & Defect Tracking
- Test Closure
- Criteria for Test Closure
- Status Reports (Daily and Weekly)
- Test Summary Reports

11. SQL

- Installation of MySQL
- Introduction to SQL and database concept
- DBMS VS RDBMS
- Database Testing concept
- Data Definition Language [DDL]
- Data Manipulation Language[DML]
- Data Control Language[DCL]
- How to create and manipulate database
- Joins in SQL
- How to retrieve data from database
 - Select statement , Where Clause
 - Pattern matching Operators , group of data etc.

AUTOMATION TESTING SYLLABUS

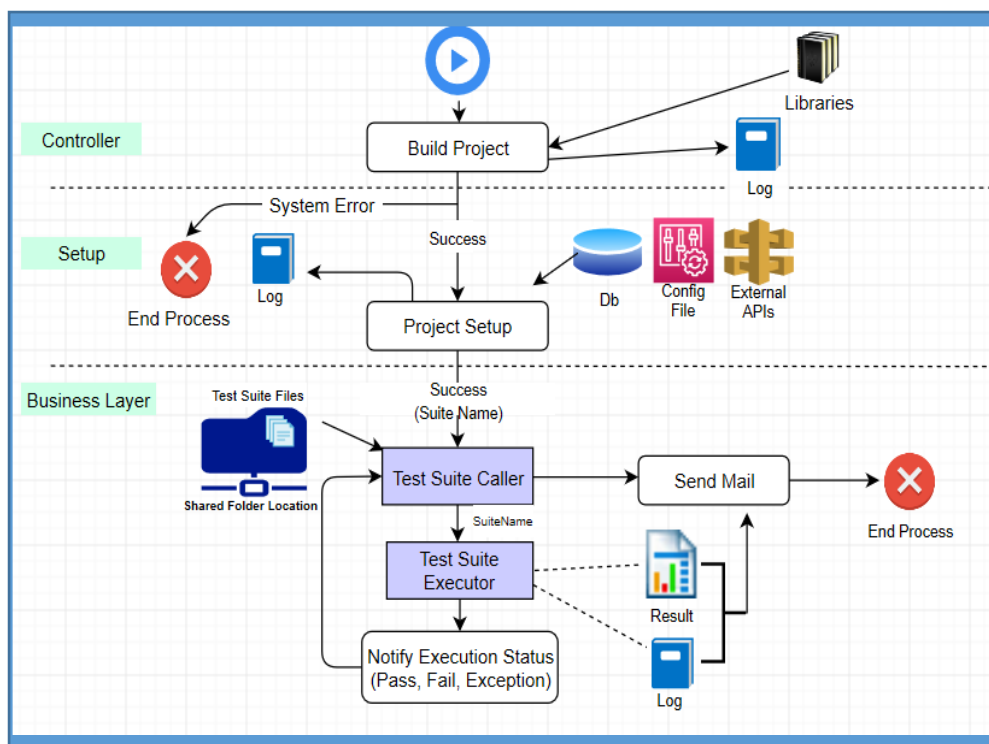
➤ Prerequisites:

1. No need of any programming Language knowledge. We also take care of core java for testing.
2. Any graduate suitable for QA field in IT.

➤ Topics we cover:

1. Core Java for selenium
2. Selenium Webdriver
3. Maven
4. Cucumber
5. Extent Report
6. Jenkins
7. GIT and GitHub
8. TestNG

-----AUTOMATION FRAMEWORK-----



➤ **Project Flow:**

-Long Practice on Java along with all selenium topics then we starts project :

1. Maven [for folder structure]
2. Cucumber [for Integration]
3. Extent Report [Generate Report]
4. Jenkins [for continuous Integration]
6. GIT [version control system]

➤ **Training Outcome:**

We fill confidence and perfect knowledge on above all tools/plugins So, Anyone can easily crack interview and confidently work in any IT company as QA.

1. Core Java: [Duration is not fix until student perfect]

- Basic session on all topics from Java
- Installation and configuration of Java and Eclipse
- Java Component
- Java variables
- Java Data types
- Class and Object
- Java methods
- Array and other than void as return type
- Statements in Java
 - a) if statement
 - b) nested if statement
 - c) if-else statement
 - d) if-else-if statement
- Loops in Java
 - a) Java for loop
 - b) Java While loop
 - c) do-while loop in Java
- Access Modifiers in Java
- Constructor
- Java OOPS concept
 - a) Java Inheritance
 - b) Java Polymorphism
 - c) Java Abstraction
 - d) Java Encapsulation
- Collection in Java :
 - a) List
 - b) Set
 - c) Map
- This, super and static keyword
- Exception Handling in Java
- Logical Programming [15 Programs]

2. Selenium:

- Selenium Webdriver
- UI elements/Objects.
- Basic of Automation Testing
- Configuration of jar file
- HTML basic
- Learn how to inspect properties of web element
- Launching AUT in FireFox
- Launching AUT in Internet Explore
- Launching AUT in Chrome
- Learn how to identify web element
- Locators
- Xpath/CSS selector

➤ Automating Operations on various Elements

- Browser
- TextBox
- ListBox
- Links
- Check Box
- Radio Button

➤ Automating Keyboard and Mouse Events

- Action Class
- KeyBoard Events
- Mouse Hover Action
- RightClick, Double Click

➤ Handling multiple Windows

- getWindowHandle()
- getWindowHandles()
- Switching between windows
- Handling elements present in different windows

➤ Handling Alerts

- accept()
- dismiss()
- getText()
- sendKeys()

➤ Handling Frames

- What is iFrame?
- Locating Frames
- Switching between Frames

- Handling Frames
- Handling Ajax Components
- Handling Ajax Components
- Synchronization
- ImplicitWait
- WebDriverWait

3. GIT:

- Downloading and Installing GIT
- Need of GIT
- Installing GIT and creating Repo in GITHUB
- GIT Daily work and commands
- Uploading project to GITHUB

4. MAVEN:

- What is Maven and Why Maven?
- Installing/Configuring Maven
- Creating Maven Project
- Importing Maven Project into Eclipse
- What is POM.xml?
- Adding Dependencies to POM.xml

5. JENKINS:

- Installing/Configuring Jenkins
- Scheduling Test Execution in Jenkins
- Auto mail configuration in Jenkins
- What is continues integration?
- Continues integration with JENKINS

6. CUCUMBER

- Gherkin
- Feature file
- StepDefination file
- Mapping
- Extend Report

6. TestNG

- Creating Testng.xml file
- Annotations and tags in TestNG
- Annotation Helper in TestNG
- Listeners in TestNG

7. Agile Methodology

- Agile and scrum basic
- Epic , User story and task
- Scrum Role
- Daily Routine as per Agile
- Diff scrum meeting as per Agile process

Note:

- 1. Above commands are practiced on E-Commerce, Bank, Insurance, BFSI etc Domain websites.**
- 2. Project is carried out in BDD framework.**