



Get Certified

# NetTech India



## **Certified Professional Diploma in SOFTWARE TESTING**

**Address :-** 203, Ratnamani Building, Dada Patil  
Wadi, Opp ICICI ATM, Near Platform No.1,  
**Thane West**, Maharashtra 400601

☎ 098708 03004 / 5 ✉ [info@nettechindia.com](mailto:info@nettechindia.com)

**Address :-** 187/A , 1st Floor, Sukhmani Building,  
S V Road, Opp Nadko Shopping Centre, Above  
Top 10 Mobile Shop, **Andheri West** - 400058

☎ 7304639164 / 5 ✉ [info@nettechindia.com](mailto:info@nettechindia.com)

# CERTIFICATIONS OPTIONS AVAILABLE



**NetTech India**



# ABOUT US

**NetTech India Training Institute** offers a high-quality learning experience in the field of IT training to train students on brand new technologies and train them to deliver the desired results with commercially relevant and re-organized technical skills.

The probability of achieving your dream job will keep on increasing day by day once you complete a course in NetTech India. We also focus on improving soft skills in terms of communication, leadership, teamwork, external appearance, and attitude which helps everyone to be professional in all the aspects of their career.



**25%**

**Theory**



**75%**

**Practicals**

# **ABOUT**

# **SOFTWARE TESTING**

Testing is the procedure of assessing a system or its component(s) with the aim to discover whether it fulfils the predefined prerequisites or not. Testing is executing a framework with a specific end goal to recognize any gaps, errors, or missing prerequisites as opposed to the real necessities. Software testing is a procedure of executing a project or application with the aim of finding software bugs.





# **BENEFITS OF** **SOFTWARE TESTING**

- Career Growth - Higher Pay & Position
- Encourages professional Development
- Enriches self-image and Reputation
- Enhances professional Credibility.
- Abundant Job Opportunities
- Used In Many Industries
- Global Recognition
- Secure and Flexible
- 150+ Case Studies
- 50+ Projects



# **COURSE CONTENT**

---

- **MANUAL TESTING**
- **AUTOMATION TESTING**
- **CORE JAVA**
- **SQL**
- **SELENIUM**
- **JIRA**
- **TESTNG**
- **JMETER**
- **SOFTWARE SECURITY TESTING**

# MANUAL TESTING

---

## Manual Testing.

Introduction to testing. Verification vs validation. Types of Applications. Probabilities of getting an error in an application. SDLC – Software Development Life Cycle. Models- Waterfall, Prototype, Spiral, Incremental Agile methodology and Scrum Framework V-Model. Advantages and Disadvantages of each SDLC models. Principles of Testing. STLC –Software Testing Life Cycle. Difference between Test case, Use case and test scenarios.

How to prepare test case template? Difference between Error, bug, defect and failure. Test Case Design technique. Boundary value Analysis. Equivalence Partitioning. Decision Table. State Transition Diagram. Use Case Testing. Bug Life cycle. How to Prepare Bug template? Creating defects report. Bug Tracking tool. Types of Testing. Difference between static and Dynamic testing. Difference between Functional and Non- functional testing. Black box testing. Integration testing. Big Bang Integration. Incremental Approach – Top Down, Bottom up and Hybrid System Integration Testings. User Acceptance Testing. Entry Criteria and Exit Criteria. Test Environment and Test data preparation. White box testing. Flow graph notations. Statement coverage. Branch Coverage. path coverage. Cyclometric complexity. RTM(requirement traceability matrices)

## **Quality**

Concept of quality, quality definition, quality views, Quality attributes for a software, role or tester in achieving the software quality, Quality management system, quality assurance, quality control Introduction to software testing metrics

**Skill needed for software tester:** Technical skills, behavioral skills, career path.

## **Manual Projects**

Read SRS and understand application functionalities, Identify scenarios and develop test cases based on the same, Execution of test cases and defects reporting, Post mortem reviews



# AUTOMATION TESTING

---

## Foundation (Core java)

### **Objectives:**

Core Java training is a foundational course that imparts the fundamental knowledge of developing code using Java programming language. Core Java has wide range of open source libraries and frameworks. Develop codes in Java implementing object-oriented concepts. Utilize the advance class features including inheritance, polymorphism, overloading, overriding, interfacing, abstract classes and more to develop efficient and reusable codes. Create programs using generic collections.

### **Course Outline**

Introduction of core java, What is java, Data Types, JAVA variables , JVM ,JRE,JDK, Java for loop, While loop do while, break, continue, OOP's concepts, Objects and Class ,method overloading and overriding, Execution of JAVA programs.

## **Databases (sql)**

This course provides the essential SQL skills that allow developers to write queries against single and multiple tables, manipulate data in tables, and create database objects. Students learn to control privileges at the object and system level. This course covers creating indexes and constraints, and altering existing schema objects. Students also learn how to create and query external tables. Students learn to use the advanced features of SQL in order to query and manipulate data within the database, use the dictionary views to retrieve metadata and create reports about their schema objects. Students also learn some of the date-time functions available in the Oracle Database.

### **Course Outline**

Retrieving Data Using the SELECT Statement, Restricting and Sorting Data, Using Single-Row Functions to Customize Output, Using Conversion Functions and Conditional Expressions, Reporting Aggregated Data Using the Group Functions. Displaying Data from Multiple Tables, Using Sub queries to Solve Queries, Using the Set Operators, Manipulating Data, Using DDL Statements to Create and Manage Tables, Creating Other Schema Objects.

## Selenium with Core java

Introduction: Introduction of selenium. Selenium components. How differs from other automation tools. Advantages of selenium. Overview of Eclipse.

Selenium Architecture: Selenium RC Architecture. Webdriver Architecture. Webdriver Vs Selenium RC. Brief explanation about advantages of webdriver.

Selenium IDE: Download and Installation of Mozilla FireFox Add-ons. Record and playback techniques. Modifying the script using IDE. Validate the locator value using IDE.

**Selenium IDE Concepts & Commands:** Building Test cases using Selenium IDE, Creating test suites, Adding Selenium IDE commands, Selenium IDE Menus, Selenium IDE commands (assert, verify, wait, and store the elements).

Selenium setup: Step by step explanation for Setting up Eclipse, Integration of Eclipse and WebDriver. WebDriver & Comparison with Selenium RC. Details related to RC server and Configurations of RC Hubs and Nodes.

**WebDriver:** Download and Setup Selenium WebDriver and Java - JDK. WebDriver Introduction, Methods in WebDriver, Detailed discussion about webdriver commands. Handling different browsers. Synchronization.

Create our own methods in webdriver. More programming techniques in webdriver.

**Locator Techniques:** Introduction about locator concept. Brief explanation of different locator techniques. Xpath techniques explanation with different kind of real time scenarios. Identify elements and objects using Firebug, Locating elements by ID, Name, Link Text, PartialLinkText, CssSelector, ClassName, XPath.

WebDriver Concepts: WebElements, CheckBox, RadioButton, DropDown, Alert-Popup, Read and Write data from excelsheet, .Image, NavigationCommonds, DataBaseTesting.

Concepts of Framework: Introduction to framework, about Framework, Use of framework, Different types of frameworks. DataDriven Framework, KeywordDriven Framework, Hybrid Framework.

Selenium Grid: Introduction of selenium Grid. Installation and setup of Hub and node. Simple script execution using grid. Parallel execution using grid.

# **Jira**

JIRA is a tool developed by Australian Company Atlassian. This software is used for bug tracking, issue tracking, and project management. The JIRA full form is inherited from the Japanese word “Gojira” which means “Godzilla”. The basic use of this tool is to track issue and bugs related to your software and Mobile apps.

## **Course Outline**

What is JIRA, How to Use JIRA, Plug-ins in JIRA, JIRA Dashboard, JIRA Issues and Issue types, Use of Clone and Link in JIRA, create a Subtask, Convert Issue To Subtask, Create Issue using CSV, Edit an Issue, Email an Issue, Linking Issues, View/Change History, JIRA version, JIRA reports

# **TestNG**

TestNG is one of the most widely used open-source testing framework used in automation testing suite.

## **Course Outline**

- What is TestNG,
- Advantages of TestNG over Junit,
- TestNG installation,
- Features of TestNG,
- Running Test cases,
- TestNG.xml file,
- Include and exclude of test cases,
- TestNG groups,
- TestNG annotations,
- Annotations attribute,
- TestNG parameters,
- TestNG Listeners,
- Parallel script execution,
- TestNG interview questions and Answer



# Jmeter

- Java in JMeter
- Introduction to Automation & JMeter
- Introduction to Elements of JMeter Test Plan
- Building a Test Plan
- Adding Users
- Recording Tests Using JMeter
- Running Multiple Scripts with JMeter
- Scheduling & Sequencing Test Plan
- Introduction to Web Services Testing
- Assignment & Project

**Module: ISTQB Certification and ISTQB Agile Level Preparation**

**Module: Projects.**

# Software Security Tester

---

## Introduction to Security Testing

- Information security Background
- CIAA++

## Understanding Software Application Risk

- The Software Security Problem
- Understanding Risk
- Threat Modeling
- Architecture Risk Analysis
- Risk Assessment Exercise
- Prioritizing Security Assurance

# **Application Security Testing Approaches**

- Types of App Security Testing
- Discovery & Reconnaissance Analysis
- Vulnerability Scanning
- Security Assessments
- Red Teaming
- Security & Compliance Audit
- How They Are Similar
- How They Are Different
- Reconnaissance and Scanning Demos

## **Security Requirements**

- Functional Security Requirements
- Non-Functional Security Requirements
- Addressing Conflicts
- Identifying Security Requirements
- Security Requirements Exercise
- Use and Abuse Cases

## **Security Testing to Thwart Attacks**

## **Security Testing Authentication**

- Attacks Against Authentication
- Session IDs and Cookies
- Authentication Testing
- Race Conditions
- Session Management
- Replay Attacks
- Cross Site Request Forgery (CSRF)
- Testing Authentication Exercise

## **Security Testing Authorization / Access Control**

- Testing Access Control
- Security Testing Authorization Exercise

## **Security Testing Input Fields**

- Input Validation
- Data Validation
- Common Attacks
- Security Testing Input Fields Exercise

## **Database Testing for Security**

- Security Testing for Data Storage
- Security Testing Databases Exercise

## **Security Testing Code and Resources**

## **Integrating Security into Your Testing Process**

- Security in an Agile World
- Security in a Waterfall World
- Developing a Security Test Plan
- Tools to Support Security Testing
- Security Tools in a DevOps Process
- Exploiting Vulnerabilities Exercise

# **WHO CAN LEARN ?**

---

- Anyone who wants to build a career in IT field.
- Entrepreneurs who want to grow their business.
- Students who are currently in college or university





# **CAREER OPPORTUNITIES**

---

- Software Security Advisor
- QA Analyst
- Sr. QA Analyst
- QA Team Coordinator
- Test Manager
- Selenium Automation Engineer
- Selenium Test Analyst
- Software Development Test Engineer
- Application Security Tester
- Junior Software Security Engineer
- Security Analyst
- Security Tester



# OUR RECRUITERS

---



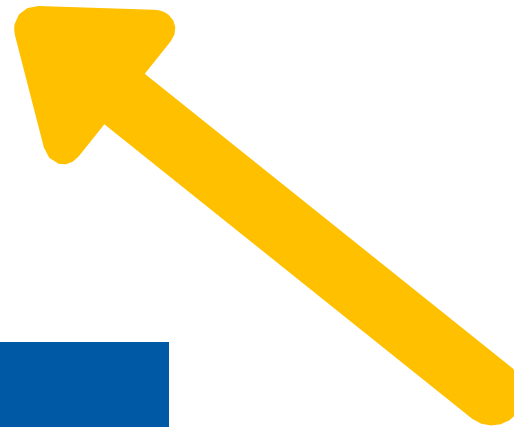
and Many More....

# **PROCESS FOR** **SUCCESS**

**GET PLACED**

**GET TRAINED**

**ENROLL**



# **FACILITIES OFFERED**

- Practical Training on Live Projects
- 100% Placement Guarantee
- Interview Preparation
- Global Certification
- Fully Functional Labs
- Online / Offline Training
- Study Materials
- Expert Level Industry Recognized Training





# NetTech India



## THANE

203, Ratnamani Building, Dada Patil Wadi, Opp ICICI ATM, Near Platform No.1, Thane, Maharashtra 400601



098708 03004 / 5



[info@nettechindia.com](mailto:info@nettechindia.com)



## ANDHERI

187/A , 1St Floor, Sukhmani Building, S V Road, Opp Nadko Shopping Centre, Above Top 10 Mobile Shop, Andheri West - 400058



7304639164 / 5



[info@nettechindia.com](mailto:info@nettechindia.com)