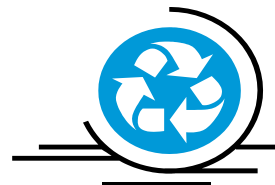


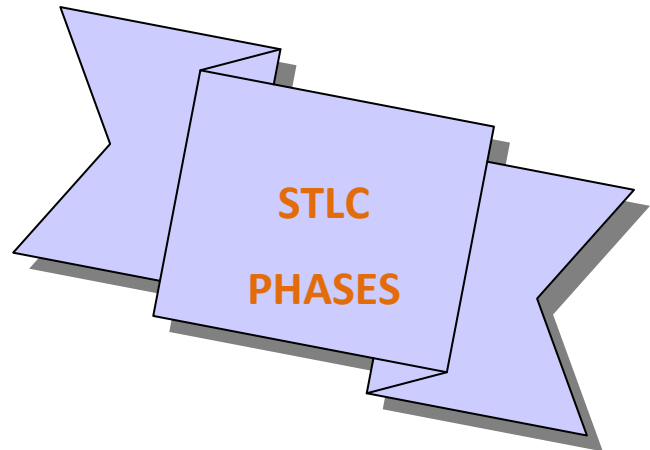
# SOFTWARE TESTING COURSE

- ❖ Introduction
- ❖ Introduction to Software Testing
  1. Software Development Process
  2. Objectives of Testing
  3. Importance of testing
  4. Manual and Automation Testing
  5. Principles of Software Testing
  
- ❖ Introduction of Quality
  1. Quality Assurance / Quality Control
  2. Project Vs Product
  3. Testing Principals
  
- ❖ What is SDLC?
  1. Software Development Life Cycle (SDLC)
  2. SDLC Phase
  3. SDLC Models
  
- ❖ How to Choose Model for a Project?
- ❖ Development Architectures
- ❖ Software Testing Life Cycle  
Introduction of STLC



## ❖ STLC Phases

1. Requirement Analysis
2. Test Plan Preparation
3. Test Case Design
4. Test Scenario
5. Test Case Template
6. Test Environment Setup
7. Test Data Preparation
8. Test Execution
9. Build Verification Process(BVT)
10. Build Release Process

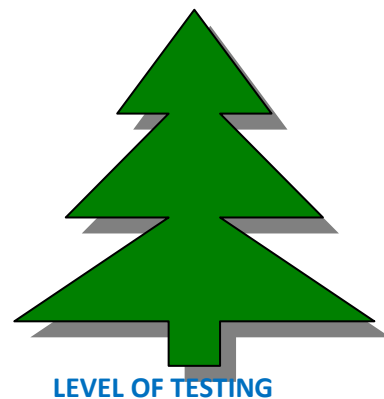


## ❖ Software Testing Methods

1. White Box Testing
2. Block Box Testing
3. Gray Box Testing
4. Levels of Testing

## ❖ Levels of Testing

1. Unit Testing
2. Integration Testing
3. System Testing
4. Functional Testing
5. Non Functional Testing
6. User Acceptance Testing



- ❖ Different Types of Testing
  1. Functional Testing
  2. End-End Testing
  3. Positive Testing
  4. Negative Testing
  5. Beta Testing
  6. Smoke Testing / Sanity Testing
  7. Ad-hoc Testing
  8. Regression Testing
  9. Exploratory Testing
  10. Usability Testing
  11. Accessibility Testing
  12. Security Testing

## AUTOMATION TESTING

- ❖ Introduction of Automation Testing
- ❖ What is Selenium?
- ❖ Advantages of Selenium
- ❖ What is the difference between Selenium and QTP/UFT ?

### 1. Different Test Process in Selenium

- ❖ Testing IDE
- ❖ Selenium Web Driver/Selenium X.0
- ❖ Selenium-Grid

### 2. Java For WebDriver

- ❖ Why we need JAVA Language for WebDriver?

### 3. Junit FrameWork:

- ❖ Running Java Programs using Junit
- ❖ Writing Selenium tests from scratch using Junit FrameWork
- ❖ JUNIT Annotations
- ❖ JUNIT Methods
- ❖ Frequently used Selenium commands
- ❖ Test Suites using JUNIT
- ❖ Parameterized test cases using Junit framework

### 4. TestNG Frame Work

- ❖ Overview of TestNG
- ❖ Environment of TestNG
- ❖ Writing WebDriver Test Cases using TestNG
- ❖ Basic Annotations of TestNG
- ❖ Executing Tests
- ❖ Executing Test Suites
- ❖ Ignore Test
- ❖ Dependency Test
- ❖ Parameterized Test
- ❖ TestNG XML
- ❖ Report Generation

### 5. Selenium WEB-DRIVER

- ❖ Why WebDriver?
- ❖ Downloading web driver Jars configuring in eclipse
- ❖ Architecture of selenium webdriver
- ❖ Drivers for Firefox, IE, Chrome, Android etc..
- ❖ What is the difference between Selenium RC and WD?

## **6. Database Testing using web driver**

- ❖ Installing MySQL Database
- ❖ SQL package
- ❖ Overview on Connection Interface, Statement Interface, Prepared Statement and Result set Interfaces.

## **7. Fundamentals of RESTful Services in Java**

- ❖ What is Jersey?
- ❖ RESTful Architecture
- ❖ Using HTTP GET Demo
- ❖ Test Created New REST Service USING HTTP GET
- ❖ JSON Output for HTTP GET
- ❖ Using HTTP POST Demo
- ❖ Test Service USING HTTP POST
- ❖ JSON Output for HTTP POST
- ❖ Using HTTP PUT Demo
- ❖ Test Service USING HTTP PUT
- ❖ PUT vs POST
- ❖ JSON Output for HTTP PUT
- ❖ Using HTTP DELETE Demo

## **Interview Questions on**

- ❖ Selenium IDE
- ❖ Selenium webdriver and Automation Testing
- ❖ Core Java
- ❖ Manual Testing Concepts.