

Full Stack QA Course Outline by TalentTEK

Manual Testing

- ❖ Introduction / Slack / Meeting join
- ❖ SDLC / BLC
- ❖ Types of Testing
- ❖ Test Plan
- ❖ Methodology (Waterfall, agile, Scrum)
- ❖ Test Case (BDD vs Conventional)
- ❖ JIRA with TC Management tool such as Zephyr
- ❖ Build process (lower env vs prod)
- ❖ Linux Commands

SQL (Database / backend testing)

- ❖ SQL Comments
- ❖ SQL Functions and Operators
- ❖ SQL key constraint
- ❖ SQL sub query
- ❖ SQL Joins / Inner joins / outer joins
- ❖ DB Languages and Unions

Java (Core programming)

- ❖ JDK/JRE and Eclipse IDE setup
- ❖ Data type / operators / Variables
- ❖ If/else and Switch
- ❖ Build functions (trim, substring, eat)
- ❖ Method/function/java class
- ❖ OOPS concept
 - Arrays
 - Polymorphism / Constructor
 - Function overload/over writing
 - Control flow statements
- ❖ Code challenge practice

UI Automation (UAT Test)

- ❖ Selenium WebDriver
 - Types of WebElement (x-path, css, id, name Ect)
 - Drag-n-drop / Dropdown
 - GetText / GetAttribute
 - WebTable / RadioButton
 - Alert/pop up modal/ new window / tab
 - iFrame / Edit box / Check Box/ Click
 - Read/write from external files such as xl, txt and OR.properties files
- ❖ TestNG Concept (learn only for interview purpose)
 - Config TestNG with Eclipse IDE
 - Annotation (@dataProvider is optional)
 - Try catch block

- *Assertion (soft assert vs hard assert)*
- *Grouping, priority, enable/disable test*
- *Skip test*
- *Run test suite via TestNG.xml*
- ❖ **Cucumber IO (Cucumber BDD Framework - Java based)**
 - *IntelliJ IDE (download the community edition)*
 - *Maven Config*
 - *Maven (POM.xml)*
 - *Dependencies*
 - *Plugins / cucumber JVM Report*
 - *Feature File*
 - *All BDD test cases in Gherkin syntax (GIVEN, THEN, AND, WHEN)*
 - *Feature/ Scenario / Scenario Outline*
 - *StepDef*
 - *Hooks.java (set up test env)*
 - *All steps java classes*
 - *PageObject*
 - *Page Model concept*
 - *TestRunner.java*
 - *Points where is all stepDef at*
 - *Glue (all feature file)*
 - *Plugins (for report)*
 - *Base*
 - *Config.java (setup cross browser test)*
 - *Utils.java (reusable web driver functions)*
 - *README.MD (about the project)*
- ❖ **Run UI Automation suite locally and CD/CI using Jenkins**

REST API (Manual and Automation)

- ❖ **Git hub (must create an account with github.com)**
- ❖ **Node.js/npm/newman (tools required)**
- ❖ **HTML Request / JSON**
- ❖ **Basic JavaScript knowledge required**
- ❖ **CRUD (POST, GET, PUT and Delete)**
- ❖ **PostmanBDD Framework (Automation)**
 - *Collection - contains entire test suite (.json)*
 - *Environment files (.json) - run test in different env*
 - *How to read data dynamically*
 - *Generate HTML Report*
- ❖ **Run API Automation suite locally and CD/CI Pipeline using Jenkins**

Interview Prep

- ❖ **Resumes prepare / Reference check**
- ❖ **Interview sessions / Mock Interview (s)**
- ❖ **Final Projects due (API, Cucumber BDD and TestNG)**
- ❖ **Live Projects and**
- ❖ **Job Supports (to get job and after job)**