Topics covered in the Course

1) **Core Java programming**
2) **Selenium Java + TestNG Framework + GIT + Jenkins + Docker**
3) **Rest API Testing with Postman**
4) **Rest API Automation with RestAssured Java**
5) **Performance Testing with JMeter**

Duration of the course: 6 to 7 months, Recordings would be available in the course section

Weekend Batch – Live Classes

Saturday and Sunday – 5PM IST (2 hours each day)

SYLLABUS of the course in detailed

1) **Core Java Programming – 20 hours (1.5 months)**
    a. **Introduction to Java,**
        i. **JDK vs JRE vs JVM**
        ii. **JDK Installation**
        iii. **Eclipse IDE Installation**
    b. **Variables and Data Types in Java**
    c. **Operators in Java**
        i. **Arithmetic   + - * / %**
        ii. **Relational   > >= < <= != ==**
        iii. **Logical   && || !**
        iv. **Increment and Decrement   ++   --**
        v. **Assignment   = += -= *= /= %=**
        vi. **Ternary   ?:**
    d. **Conditional Statements   if elseif else, switch case**
    e. **Loops while do-while for**
    f. **Arrays (Single and Two Dimensional)**
    g. **Strings in Java**
    h. **OOPS Concepts**
        i. **Classes**
        ii. **Objects**
        iii. **Abstraction**
        iv. **Encapsulation**
        v. **Inheritance**
        vi. **Polymorphism**
    i. **Java Keywords – this, static, super and final**
    j. **Access Modifiers**
    k. **Exception Handling – try, catch, finally**
    l. **Type Casting – Up Casting and Down Casting**
    m. **Java Collections – ArrayList, HashSet, HashMap**

2) **Selenium – 25 hours (2 months)**
   a. **Launching Browsers**
   b. **WebDriver methods – get, navigate, getTitle, getCurrentURL, findElement, findElements.**
   c. **Working with Locators**
      i. **Id, Xpath, Css, Name, LinkText, Partial LinkText, Class, TagName**
   d. **WebElement methods – getText, sendKeys, click etc.**
   e. **WebDriver Waiting Strategies**
   f. **Selenium Exception Handling**
      i. **NoSuchElementException**
      ii. **StaleElementReferenceException**
      iii. **Element Intercepted Exception**
   g. **Handling frames**
   h. **Handling windows**
   i. **Handling alerts**
   j. **Handling checkboxes**
   k. **Handling dropdown**
   l. **Handling Dynamic WebTables**
   m. **Handling Calendar**
   n. **Mouse Actions – Mouse Hover, Right Click, Double click, Drag and Drop**
   o. **Keyboard Actions**
   p. **JavaScriptExecutor scenarios**
   q. **Capture Screenshots**
   r. **Headless Browser testing**
   s. **Handle SSL Certificate**
   t. **Handling Broken Links**
   u. **Handling SVG Elements**
   v. **Handling Shadow DOM**
   w. **Working with Excel files – Apache POI**
3) **TestNG framework – 8 hours (2 weeks)**
   a. **Annotations**
   b. **Assertions**
   c. **Data Provider**
   d. **Parameters**
   e. **Parallel Execution**
   f. **Listeners – rerun failed tests**
4) **Selenium with TestNG framework using Page Object Model pattern (3 weeks)**
5) **CI CD tools : GIT + Jenkins + Docker – 3 weeks**
   a. **GIT – Commands, Feature Branching, Release process, Merge request (code review process)**
   b. **Jenkins – Schedule jobs**
   c. **Docker – Selenium Grid Docker Execution**

Syllabus to be updated for below topics – 2 months

6) **Rest API Testing with Postman – 3 weeks**
7) **Rest API automation using RestAssured with framework – 1 month**
8) **Performance Testing with JMeter – 2 weeks**

Additional Sessions on below topics

1) **Interview Preparation – Coding and Automation**
2) **Job search strategies**
3) **LinkedIn Premium Jobs**
4) **Salary Negotiations**
5) **Prompt Engineering for QAs**
6) **Resume Preparation, Templates**
7) **LinkedIn Profile Optimization**