J­­S TESTING ACADEMY

Courses:

1.Manual Testing

Introduction:

* Definition of Software Testing
* Verification and Validation
* Quality Analysis and Quality Control
* Ways of Testing
* Levels of Testing
* Difference between Error, Defect and Bug
* Formal and Informal review

Types of Testing

* Functional and Non Functional testing
* API Testing
* DB Testing
* Security Testing
* Performance Testing
* Smoke Testing
* Regression Testing
* Retesting
* Usability Testing

Software Development Life Cycle(SDLC)

* Phases of SDLC
* Waterfall Model
* V and V Model
* Prototype Model
* Spiral Model
* Incremental model
* Iterative Model
* RAD Model
* Agile Model

Software Testing Life Cycle(STLC)

* Testing Estimation
* Test Strategy + Test Planning
* Test Design
* Test Execution
* Test Closure

Agile Methodology

* Sprint Planning Meeting
* Daily Stand Up/Scrum Meeting
* PBR Meeting
* Retrospective Meeting

Defect Life Cycle(DLC)

* Severity and Priority
* Defect Reporting
* Defect Tracking

Test Scenario and Test Cases

* Identification and Writing
* Sample case studies

Testing Design Techniques

* Boundary Value Analysis
* Equivalence Class Partitioning
* Error Guessing
* State Transition Diagrams

Azure Board

* Introduction
* Writing Test Cases
* Raising Defects
* Adding user story and bug story
* Tracking tasks
* Estimating hours for stories
* Adding comments in the Retrospective board

Jira Board

* Introduction
* Writing Test Cases
* Raising Defects
* Adding user story and bug story
* Tracking tasks
* Estimating hours for stories
* Adding comments in the Retrospective board

Test Artifacts

* Test Approach Document
* Test Log Report
* Test Completion Report
* Requirement Traceability Matrix

2.Core JAVA

Introduction to Java

Class and Object

Variable

* Static variable
* Local variable
* Instance variable/Global Variable

Data types

* Primitive Datatype
* Byte
* Short
* Int
* Long
* Float
* Double
* Char
* Boolen
* Non Primitive Datatype
* String

Method

Inheritance

* Overview of Inheritance
* Types of Inheritance

Polymorphism

* Overview of Polymorphism
* Method Overloading
* Method Overriding

Encapsulation

* Overview of Encapsulation

Abstraction

* Overview of Abstraction
* Abstract class
* Interface

Constructors

* Overview of Constructors
* Parameterized Constructors
* Non Parameterized Constructors

Collections

* Overview of Collections
* List
* Set
* Map

String

* Methods in string
* length()
* charAt(index)
* concat()
* toLowerCase()
* toUpperCase()
* contains()
* indexOf()
* lastIndexOf()
* replace()
* replaceAll()
* replaceFirst()
* startsWith()
* split()
* trim()
* valueOf()
* contentEquals()
* lastIndexOf()
* Mutable String
* Immutable String
* Literal String
* Non Literal String­­­­

File Handling

* Overview of File Handling
* Methods in File Handling
* canRead()
* canWrite()
* createNewFile()
* delete()
* exists()
* getName()
* getAbsolutePath()
* length()
* list()
* mkdir()
* Create/Write Files
* Read Files
* Delete Files

Exceptions in Java

* Unchecked/Run Time Exception
* Checked/Compile Time Exception

Exception handling

* Try cache
* Throw
* Throws

Control Statements

* Conditional statement
* If
* If Else
* Nested If
* Ladder If
* Looping statement
* For
* Nested For loop
* While loop
* Do while loop
* Jump statement
* Break
* Continue
* System.exit

Wrapper class

Scanner

3.Browser Automation- Selenium JAVA

Introduction

Locators

POM.xml

Screenshots

Alerts

Window Handling

Implicit wait

Explict wait

Dropdown

Calendar

Scroll down

Action class

I Frame

Webdriver

Webelement

TestNG

Report Generation

BDD

Data Driven

Keyword Driven

4.API Testing- Postman

Introduction

Creating collection and request

CRUD operations

Creating Environment variables

Writing Test Cases

Authentication and Authorization

Different types of Validation

Running in Command prompt

Report generation

5.API Automation- Rest Assured

Introduction

CRUD operations

Different types of validations

Method chaining

Rest Assured with BDD Framework

6.Mobile Testing- Appium

7.DevOps Tools:

* Docker
* AWS
* GitHub
* Jenkins
* Kubernetes
* Ansible

8.Frameworks:

* Hybrid BDD Cucumber Framework
* Serenity Framework
* Karate Framework
* Integrated Framework
* Robot Framework
* Springboot Framework







