

<b>Modules</b>	<b>Detailed Topics</b>
<b>Core Java</b>	
<b>Eclipse IDE: What is it and how to Set up in your machine</b>	
	How to download and install Java in your machine
	How to download and start Eclipse in your machine
	How to download and configure WebDriver java client
	Set up a new Java project in Eclipse
	Create packages in Eclipse
	Create my First Java Program: Hello World !!!
	How to use Eclipse as a tool.
	How to run, stop, pause in Eclipse
	How to debug in Eclipse
	Understanding console output
	How to put a break point
<b>Core Java Programming</b>	Data Types and Variables
	String Class and String Operations
	Arithmetic Operators & Concatenation operators
	Conditional & Decision Making (If-Else, Switch Case)
	Single Dimensional Array and Two Dimensional Array
	Loops (For, While, Do While)
	Classes and Objects
	Class Constructors
	Constructor Overloading
	Functions in Java
	Function Input Parameters
	Function Return Types
	Exception Handling in Java (Try Catch, Throw and Throws)
<b>Become a genius in Java: OOPs Concepts</b>	
	Inheritance
	Polymorphism
	Encapsulation (Getter & Setter Methods)
	Method Overloading
	Method Overriding
	Abstract class

	Interface
	Super/This Keywords
	Final/Finally/Finalize Keywords
	Wrapper Classes
	Java Collections Basics (Array List, HashMap, Set)
<b>Selenium WebDriver</b>	
<b>Selenium Introduction</b>	History and Evolution of Selenium as the preferred Automation Tool
	WebDriver Interface Architecture
	Launching different browsers through Selenium
<b>Commands for Browser &amp; Navigation</b>	How to Open a URL
	Verify Page title and page URL
	Strategy to get the Page Source
	Difference between Close & Quit
	Ways to Navigate Back & Forward
	How to Refresh Page through Selenium
	Ways of Navigating to specific Page
<b>Commands for Web Elements</b>	Difference between FindElement & FindElements
	Enter & Clear text from Input field
	How Click action works differently on different elements
	Managing Input fields, Buttons & Links
	Finding all links on the Page
	Extracting More than one object from a page
	Extracting Objects from a specific area of a web page
	Check if element is Present, Displayed, Enabled or Selected
<b>Locators in Selenium</b>	What are locators in Selenium
	HTML language tags and attributes
	ID, Name, Xpath, CSS etc
	Difference between Absolute & Complete Xpath
	Finding your first element
	WebElement Commands
<b>Become a Pro in Element Identification</b>	
	Various HTML locator strategies

	XPath Helper Plug-in for Chrome
	Selection of Effective XPath
	Handling Dynamic objects/ids on the page
	Become a Pro in Xpath
<b>Handling Radio Buttons, Checkboxes and Tables on a Web Page</b>	Identify table rows and columns
	Extracting values from a cell
	Dynamically Identify Tables Data
	Select class in Selenium
	Drop Down Handle
	Select multiple values from the list
	Select & Deselect operations by Index, Value & Visible Text
<b>Waits in Selenium</b>	Implicit and Explicit waits
	How to use Expected Conditions with Waits
	PageLoadTimeout & SetScriptTimeout property
	Simple use of Thread Sleep
	Concept of Fluent Wait in Selenium
	Strategy to poll for an object
	WebDriverWait and its uses
	Different WaitUntil Conditions
<b>Handling Alerts and Pop Ups on a Web Page</b>	Ways to handle Simple, Confirmation & Prompt Alert
	Concepts of Set Interface in Java
	Difference between Window Handle & Handles
	Switching & Closing Windows, Tabs & PopUps
	Concept of window ID
	Extracting window IDs with Selenium Object reference
<b>Action class in Selenium</b>	What is Action Class & What can we do with Action Class
	Mouse Hover & Mouse Movement with Action
	Drag and Drop Action
<b>Automation Frameworks</b>	What is Automation Framework
	Features and Benefits of Automation Framework
	Different types of Automation Framework
	What is Data Driven Framework

	What is Keyword Drivern Framework
	What is Hybrid Framework
<b>Design Pattern</b>	What is a Design Pattern
	What is Page Object Model (POM) Design Pattern
	How to use POM with Page Factory
	How to use POM with By Locators
<b>TestNG Framework</b>	
	What is TestNG
	Benefits and Features of TestNG
	How to download TestNG
	Annotations in TestNg
	How to run Test Suite in TestNG
	Groups in TestNG
	Test Case sequencing in TestNG
	TestNG Reporters
	TestNG Assets
	TestNG Parameters
	TestNG Listeners
	Data Driven testing using TestNG
<b>Real Time Selenium PROJECT</b>	
<b>Real Time Live PROJECT – Selenium Hybrid Framework using Page Object Model</b>	
	Introduction and Component of Frameworks
	Designing Test Data Provider (Excel)
	Designing Run Data Provider (Text/Property file)
	What is Maven and how to set up a Maven Project
	Data Provider Factory Design
	Creating Page Objects & Object repository
	Writing Test Script and Fetching Test Data
	Designing Test Runner for Framework
	Asserts, Test Fails & Error logging
	Reporters, TestNG Listeners and Log file Generation
	Running test with different Test Data
	Generating the HTML reports and Extent Reports
	Capture Screenshots with every failed test case in the Extent Report.

<b>Dev Ops &amp; Continuous Integration</b>	
<b>Git and GitHub</b>	What is Continuous Integration and Continuous Deployment (CI/CD)
	Introduction to GIT
	Frequently Used GIT commands
	How to push code into GitHub and take a pull from GitHub
	GIT Repo/GIT HUB
	My First Code Check-in to GIT
<b>Jenkins</b>	Introduction to Jenkins
	Installing Jenkins and creating build from Jenkins
	Running Script via Jenkins