

	Topics	Topic Details/Contents
1	Introduction to Automation Testing	<ul style="list-style-type: none"> • What is automation testing? • When Automation Testing is needed? • When Automation Testing is not needed? • What is the use of automation testing? • Why automation is important for you career? • Different Automation Tools available in the Market.
2	Introduction to Selenium	<ul style="list-style-type: none"> • What is Selenium • Advantage of Selenium • Introduction to IDE, RC, WebDriver & Grid • Selenium Architecture • Architecture of selenium web driver
3	Eclipse IDE	<ul style="list-style-type: none"> • How to use Eclipse • How to run, stop, pause • How to debug in Eclipse • Understanding console output • How to put a break point • How to add Watch variables • How to find errors from Problem window • Usage of step into and Step over debug functionality
4	Set up Eclipse-SeleniumWebdriver Setup the Environment- Setup Java, Eclipse, Selenium, TestNG	<ul style="list-style-type: none"> • Download and install java • Download and start Eclipse • Download and configure WebDriver java client • Set up a project • Create packages • Create a First Java test case

5	Launching different browsers	<ul style="list-style-type: none"> • Downloading Drivers for Firefox, IE, Chrome, iPhone, Android etc • WebDriver Interface • WebElement Interface • Launching Firefox browser • Launching chrome browser • Launching IE browser • Challenges with IE browser in Selenium Webdriver • Launching Edge browser
6	Element Identification & Locators	<p>FireBug&FirePath Add-Ons in Mozilla</p> <ul style="list-style-type: none"> • What are locators--8 Locators (ID, Name, Xpath, CSS etc) • HTML Basics • HTML language tags and attributes • Difference between Absolute & Relative Xpath • Xpath Functions (text(),contains()...etc) • Selection of Effective Xpath • Handling Dynamic objects/ids on the page • Finding your first element
7	Browser Commands , Navigation Commands & WebElement Commands	<ul style="list-style-type: none"> • How to Open a URL • Verify Page title • Strategy to get the CurrentUrl • Strategy to get the Page Source • Difference between Close & Quit • Ways to Navigate Back & Forward • How to Refresh Page • Another way of Navigating to specific Page • Different WebElement Commands: [• sendKeys(CharSequence... keysToSend) , • Clear(), • Click(), • Submit(), • isDisplayed(), • isEnabled(), • isSelected(), • getText(), • getTagName(), • getCssvalue(), • getAttribute(String Name), • getSize()--Dimension, • getLocation()--Point]

8	Selenium Waits	<ul style="list-style-type: none"> • 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 • Difference between selenium waits and its uses
9	Performing operations on WebElements	<ul style="list-style-type: none"> • Enter & Clear text from Input field • How Click action works differently on different elements • Managing Input fields, Buttons & Links • Extracting Objects from a specific area of a web page • Check if element is Present, Displayed, Enabled or Selected (or) Difference b/w isDisplayed, isEnabled and isSelected Methods - Selenium
10	About Findelements&Drop Down Handle	<p>Findelements:</p> <ul style="list-style-type: none"> • Difference between FindElement&FindElements • Concepts of List Interface in Java • Extracting More than one object from a page (i.e.,Autocomplete/AutoSuggest edit box) • Finding all links on the Page <p>Drop Down Handle:</p> <ul style="list-style-type: none"> • Difference between List Drop (Bootstrap Dropdown) down and Select Dropdown • Select class in Selenium <ul style="list-style-type: none"> • Select multiple values from the list • Select & Deselect operations by Index, Value & Visible Text
11	TestNG Framework: Part-1	<ul style="list-style-type: none"> • What is TestNG • Benefits and Features of TestNG • How to download TestNG • Annotations in TestNg • Test Case sequencing in TestNG • Ignoring test cases • Executing same @Test multiple times

12	TestNG Framework: Part-2	<ul style="list-style-type: none"> • TestNG Reporters • How to run Test Suite in TestNG • Test NG -Assertions : <ul style="list-style-type: none"> • Hard Assert • Soft Assert • How to Verify Error messages in Selenium Webdriver
13	Capture screenshots	Normally and By customizing function
14	Frame Handling	Different ways : <code>driver.switchTo().frame ("")</code> <ul style="list-style-type: none"> • By Id • By index • By WebElement
15	Alert & Switch Windows	<ul style="list-style-type: none"> • 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

16	Action Class	<ul style="list-style-type: none"> • What is Action Class & What can we do with Action Class • Mouse Hover & Mouse Movement with Action • Drag and Drop Action • DoubleClick,RightClick • ToolTip • Keyboard operations <ul style="list-style-type: none"> Tab Operations Copy And Paste
17	File Upload & Auto it	<p>Case 1:If textbox is enabled (I.e,type='file' & html tag='input']</p> <p>Case 2: AutoIT</p> <ul style="list-style-type: none"> • What is AutoIT and its usage • Downloading of AutoIT • Usage of AutoIT in Selenium • Upload files using Autolt
18	File download& Browser Profile	<p>File download : Case 1</p> <ul style="list-style-type: none"> • Downloading files using firefox profile class • List of MIME types / Internet Media Types (Multipurpose Internet Mail Extensions) --- https://www.freeformatter.com/mime-types-list.html <p>File download : Case 2</p> <ul style="list-style-type: none"> •Using RobotClass <p>Browser Profile :</p> <ul style="list-style-type: none"> • What is Browser Profile • How to set up FireFox profile • HTTP user authentication in Mozilla • Certificate handle in Mozilla

19	TestNG Framework: Part-3	<p>1. Test NG</p> <ul style="list-style-type: none"> • Serial and parallel execution in TestNG • Grouping • Dependent methods • Data provider • TestNG Parameters • Multi Browser testing in TestNG using @Parameter
20	Automation Framework	<ul style="list-style-type: none"> • What is Automation Framework • Features of Automation Framework • Benefits of using Automation Framework • Different types of Automation Framework • What is Data Driven Framework • What is Hybrid Framework • What is Page Object Model Design Pattern
21	Real Time Live PROJECT – Part 1 Selenium Hybrid Framework (POM)	<ul style="list-style-type: none"> • Introduction Cucumber BDD framework and Component of Frameworks • Designing Feature file & step definition file • Designing Run Data Provider (Text/Property file) • Setting up Maven Build Tool • 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 • Emailing test reports
22	Real Time Live PROJECT – Part 2 Selenium Hybrid Framework (POM)	<ul style="list-style-type: none"> • Learn on GIT (Version Control) • Learn on Jenkins for Auto Scheduling of Jobs for test script execution.

23	Real Time Live PROJECT – Part 3 Cucumber	<ul style="list-style-type: none">• Learn on Cucumber in real time way.
----	---	---