Playwright With JavaScript + TypeScript Course Content

SECTION 1: INTRODUCTION

- ➢ What is automation testing?
- ➢ When Automation Testing is needed?
- ➢ What is the use of automation testing?
- ➢ Different Automation Tools available in the Market.
- ➢ What is the difference between Playwright and Selenium?

SECTION 2: BASICS OF JAVASCRIPT

- ➢ Setup Node JS and JavaScript.
- ➢ JavaScript History Introduction.
- ➢ JavaScript Engines.
- ➢ Data Types in JavaScript.
- ➢ Types of variables.
- ➢ Operators.
- ➢ Conditional Statements.
- ➢ Looping Statements.

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1. Implementing Calculator Functionality

SECTION 3: HEART OF JAVASCRIPT

- ➢ Introduction of Functions.
- ➢ Method vs Functions.
- ➢ Function Declaration or Anonymous function.
- ➢ Arrow Function

- Call Back Function
- Call Back Hell
- Declaring Promise and Status of Promise
- Invoking Promise
- Async and Await
- RegExp

SECTION 3: Data Structures

- Array Methods
- Object
- Set
- Map
- String Methods

SECTION 4: OBJECT ORIENTED PROGRAMMING CONCEPTS

- Introduction to OOPS
- Class
- Object
- Constructors
- Methods
- Static
- Abstraction
- Encapsulation
- Polymorphism
- Exception Handling

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1. Javascript logical programs from interview point of view
2. Interview questions discussion

SECTION 5: BASICS OF TYPESCRIPT

- ➢ Setup TypeScript
- ➢ Type Annotation
- ➢ Functions
- ➢ Classes
- ➢ Constructor
- ➢ Access modifiers
- ➢ Interface
- ➢ Generic

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1. Implementing calculator Functionality

SECTION 6: INTRODUCTION TO PLAYWRIGHT

- ➢ What is Playwright?
- ➢ Playwright Vs Selenium
- ➢ Advantages of Playwright
- ➢ Architecture of Playwright

SECTION 7: GETTING START WITH PLAYWRIGHT

- ➢ NPM Setup
- ➢ Adding Playwright Dependencies

SECTION 8: INTERACTING WITH BROWSER

- ➢ Launching Chrome, Edge, Firefox and Webkit.
- ➢ Performing Browser Actions like Maximize and Handling Cookies.
- ➢ Interacting with CDP.

SECTION 9 : LOCATORS IN PLAYWRIGHT

- ➤ CSS
- ➤ XPath

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1. Interview Questions Discussion

SECTION 10: EXPLORING WEB ELEMENTS

- ➤ Edit box
- ➤ Link
- ➤ Button
- ➤ Checkbox
- ➤ Radio Button
- ➤ Drop Down Box
- ➤ Select value
- ➤ Display all values
- ➤ Select values step by step
- ➤ Capture screenshots
- ➤ Synchronization Commands in Playwright
- ➤ HandlingWebTables

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1. Performing end to end scenarios in ecommerce application
2. Performing end to end scenarios in user registration application
3. Handling web tables in the live score card
4. Performing functionality test in the banking application

SECTION 11: Handling Frames, Alerts and Pop Up Window

- ➢ Handling iFrames
- ➢ Handling multiple tabs
- ➢ Handling popups
- ➢ File uploads and File downloads
- ➢ Handling alerts
- ➢ Handling confirmation messages

SECTION 12: Handling complex User Gestures

- ➢ Handling Mouseover Menu
- ➢ Handling Slider
- ➢ Handling Drag and Drop
- ➢ Handling Shadow DOM
- ➢ Handling Keyboard Event

SECTION 13: Capturing Screenshot, Videos and Trace viewer

- ➢ Capturing Screenshot
- ➢ Capturing Videos
- ➢ Capturing Trace Viewer

SECTION 14: DATA DRIVEN FRAMEWORK

- ➢ Interacting with .env file
- ➢ Interacting with json File
- ➢ Interacting with csv file

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1. Retrieving values from the property file and perform end to end scenarios in live projects

2. Reading and writing values from the excel file and perform end to end scenarios in live projects.

SECTION 15: FRAMEWORK

- ➢ What is Page Object Model
- ➢ Adding Test and Pages
- ➢ Locators in Page Object Model
- ➢ Implement Exception Handling
- ➢ Implement Wrapper methods.
- ➢ Page Object Manager
- ➢ Parametrized Methods

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1. Implementing the live project using TestNG

SECTION 16: Test Runner

- ➢ Introduction of Test Runner
- ➢ Grouping
- ➢ Filtering
- ➢ Skipping
- ➢ Only Keyword
- ➢ Test Level configuration
- ➢ Test Retry.
- ➢ Overriding config at Test and Project Level
- ➢ Test Suite
- ➢ Test Step
- ➢ Compatibility Testing
- ➢ Custom Report
- ➢ Framework Best Practice

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1. Implementing the live project using TestNG

SECTION 17: Working with API

 ➢ What is API?
 ➢ API Fundamental
 ➢ Restful API Payload and Verbs
 ➢ CRUD Operation
 ➢ API Authentication
 ➢ API Request
 ➢ API Response
 ➢ Validating API Response
 ➢ Network interception.

SECTION 18: CI TOOLS

 ➢ GIT and GIT Hub
 ➢ Install Jenkins
 ➢ Schedule the build
 ➢ Best Practices