Module 1: Introduction to Selenium with Python
• Overview of Selenium
• Downloading Selenium Python Bindings
• Installing Browser Drivers (Chrome, Firefox, etc.)
• Setting Up Selenium for Windows
• Downloading Selenium Server
• Verifying Environment Setup

Module 2: Getting Started with Selenium
• Writing the First Selenium Script using Python
• Step-by-Step Code Walkthrough
• Running Tests on Local and Remote WebDriver
• Selenium Best Practices for Python Users

Module 3: Navigating Web Pages
• Interacting with Web Elements
• Filling Forms using send_keys()
• Drag and Drop with ActionChains
• Switching Between Windows and Frames
• Handling Pop-Up Dialogs (Alerts, Confirms)
• Browser Navigation – Forward, Back, Refresh
• Managing Cookies (Add, Delete, Get)

Module 4: Locating Elements
• Locating Elements Using:
– By ID
– By Name
– By XPath
– By Link Text / Partial Link Text
– By Tag Name
– By Class Name
– By CSS Selectors
• Practical Examples for Each Locator Strategy

Module 5: Handling Waits
• Implicit Waits
• Explicit Waits using WebDriverWait
• Understanding Expected Conditions
• Best Practices for Synchronization in Tests

Module 6: Page Object Model (POM)
• Creating Page Object Classes
• Defining Locators and Page Elements
• Writing Maintainable Test Cases
• Benefits of Using POM in Test Automation

Module 7: WebDriver API Deep Dive

• Handling Exceptions in Selenium
• Using Action Chains for Mouse/Keyboard Events
• Working with Alerts and Modal Windows
• Sending Special Keys (ENTER, ESCAPE, TAB)
• Desired Capabilities in WebDriver
• Touch Actions (for Mobile Automation)
• Using Proxies with WebDriver
• Utility Functions for Testing
• Understanding WebDriver Service Layer

Module 8: Browser-Specific WebDriver Configuration

Firefox WebDriver
• Firefox Options, Profile, Binary
• Connecting Extensions
Chrome WebDriver
 • Chrome Options, ChromeDriver Service
Safari, Opera, IE, Android, PhantomJS
• Safari WebDriver & Service
• Internet Explorer Setup
• Android & Mobile Web Testing
• PhantomJS Headless Testing
Remote WebDriver
• WebDriver Commands & Error Handling
• Remote Connection Utilities
• Mobile Testing with Remote WebDriver

Module 9: Selenium Support Utilities

• Select Class for Drop-down Menus
• Wait Support Utilities
• Color and CSS Support
• Event Firing WebDriver & Event Listeners
• Custom Expected Conditions

Module 10: Real-World Scenarios & FAQs

• How to Use ChromeDriver Effectively
• Does Selenium 2 Support XPath 2.0?
• Scrolling Techniques for Web Pages
• File Upload Handling
• Screenshot Capture of Current Window
• Auto-saving Files with Firefox Profile
• Using Firebug with Firefox

Thank you

**Thank You for Going Through Selenium with Python Automation Curriculum
We hope this guide has provided a clear and structured learning path to
strengthen your skills in Selenium with Python Automation.**

📌 **NEXT STEPS**
- Start practicing with real-world use cases and hands-on exercises
- Build personal or client-based projects for your portfolio
- Keep exploring updates and best practices in the industry
- Join discussions and stay connected with the community

📞 **Need Help or Guidance?**
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