

Python Training Module

followed by

A4Q Selenium Tester Foundation

Durată curs: 14 cursuri x 3 ore

Module 1: PYTHON

Chapter 1 - Intro:

- 1. What is Python?
- 2. Why Python?
- 3. Install and Setup
- 4. Write your first program

Chapter 2 - Logical Structures

- 1. Problem Solving?
- 2. Algorithms
- 3. Pseudo-code
- 4. Flowcharts

Chapter 3 - Variables:

- 1. What is a variable and why we need them?
- 2. Variable types
- 3. Operators
- 4. Comment lines in Python

Chapter 4 - Control Flows:

- 1. if/elif/else statements
- 2. while loop
- 3. for loop

Chapter 5 - Functions:

- 1. What is a function and how we define it?
- 2. Function comments - docstring
- 3. Arguments

Chapter 6 - Variables scope:

- 1. Why we need a scope?
- 2. Variable scope types

Chapter 7- Functions - Default / Variable arguments:

- 1. Why we need a default argument for a function?
- 2. When to use an arbitrary number of arguments?

Chapter 8 - Object Oriented Programming (OOP) - General Information

- 1. OOP concept
- 2. What is an Object

Chapter 9- OOP - Methods and Constructors:

- 1. Methods
- 2. The difference between Methods and Functions
- 3. Constructor types and usage

Chapter 10 - OOP Principles

- 1. Inheritance
- 2. Polymorphism
- 3. Abstraction
- 4. Encapsulation Access modifiers

Chapter 11 - Debugging:

- 1. Types of errors
- 2. How to detect errors in code

Module 2: SELENIUM

Chapter 1 - Test Automation Basics

- 📖 Test Automation Overview
- 📖 Manual vs. Automated Tests
- 📖 Success Factors
- 📖 Risks and Benefits of Selenium WebDriver
- 📖 Selenium WebDriver in Test Automation Architecture
- 📖 Purpose for Metrics Collection in Automation
- 📖 The Selenium





Toolset Chapter 2 - Internet Technologies for Test Automation of Web Applications

- 📖 Understanding HTML and XML
 - 1. Understanding HTML
 - 2. Understanding XML
- 📖 XPath and Searching HTML Documents
- 📖 CSS Locators

Chapter 3 - Using Selenium WebDriver

- 📖 Logging and Reporting Mechanisms
- 📖 Navigate to Different URLs
 - 1. Starting a test automation session
 - 2. Navigating and refreshing pages
 - 3. Closing the browser
- 📖 Change the Window Context
- 📖 Capture Screenshots of Web Pages
- 📖 Locate GUI Elements
 - 1. Introduction
 - 2. HTML Methods
 - 3. XPath Methods
 - 4. CSS Selector Methods
 - 5. Locating Via Expected Conditions
- 📖 Get the state of GUI elements
- 📖 Interact with UI elements using WebDriver commands
 - 1. Introduction
 - 2. Manipulating Text Fields
 - 3. Clicking on WebElements
 - 4. Manipulating Checkboxes
 - 5. Manipulating Dropdown Controls
 - 6. Working with Modal Dialogs
- 📖 3.8 Interact with user prompts in web browsers using WebDriver commands

Chapter 4 - Preparing Maintainable Test Scripts

-  Maintainability of Test Scripts
-  Wait Mechanisms
-  Page Objects
-  Keyword Driven Testing