



Inițiere în Test Automation: REST API & UI

Descrierea cursului

Inițiere în Test Automation: REST API & UI abordează noțiuni practice necesare pentru a susține și a supraviețui unei sarcini de testare automată. Cursul este alcătuit din trei părți:

- **Fundamentals of Java:** dobândirea cunoștințelor de programare în limbajul Java
- **Automation Website Testing with Selenium WebDriver:** automatizarea acțiunilor manuale ale unui end-user
- **REST API Testing with Rest-Assured:** înțelegerea serviciilor REST și automatizarea testelor de API

Programa

Curs 1 - Java Fundamentals

- What is Java?
- My First 'Hello, World!' Application
- How Java Works?
- Java Comments
- Basic Data Types
- String
- Operators
- Types of Errors

Curs 2 - Java Control Flow Statements and Arrays

- Decision-Making Statements
- Looping Statements
- Branching Statements
- Arrays

Curs 3 - Java OOP Concepts

- What is an Object?
- What is a Class?
- Access Modifiers
- OOP Concepts
- Inheritance



Encapsulation
Polymorphism
Abstraction

Curs 4 - Java Collections and Exceptions

What is an Interface?
List Interface and ArrayList Class
Map Interface and HashMaps Class
Handling Exceptions

Curs 5 - Getting Started with Selenium for Automated Website testing

What is Automated Testing?
Why and When to Automate?
What to Automate?
Automated Testing Process
Benefits of Automated
Backend vs Frontend Testing
Challenges of Automated UI Testing
Key Features of Automated UI Testing Tool
Intro Selenium (IDE, RC, WebDriver)
Setting Up a Selenium-WebDriver Project
Intro Maven
Intro TestNG
Locate and Use Web Elements - Authentication Form
Run Tests

Curs 6 - Getting Started with Selenium for Automated Website testing (continue)

Selenium Xpath Locator
Use properties file
Locate and Use Web Elements

- Checkbox
- Dropdown
- Alerts
- Multiple Windows
- Frames
- Get Screenshot on Fail

Curs 7 - Getting Started with Selenium for Automated Website testing (continue)

TestNG groups
TestNG parallel execution from testng.xml
TestNG @Parameters from testng.xml
TestNG @DataProvider
slf4j logger
Locate and Use Web Elements

- File Upload
- File Download
- Validation Method - Assert File is Downloaded



- Validation Method - Assert File Content
- Dynamic Content with Implicit Wait
- Dynamic Controls with Explicit Wait

Curs 8 - Selenium Practice Session

Curs 9 - Selenium Exam

Curs 10 - Fundamentals of REST Services and REST API Testing

What is REST?
REST and HTTP: Client-Server
Understanding URL
Components of HTTP Request-Response
HTTP Methods
HTTP Status Codes
HTTP Headers
Resource in REST – JSON Format
What is REST API Testing?
API Testing – Automation Process
Swagger
Postman

Curs 11 - REST API Testing with Rest-Assured

Setting Up a Rest-Assured Project
Handling Request Specifications and HTTP Headers
Generate Basic Authentication Token
Read JSON files
Automate first REST calls
TestNG @DataProvider

Curs 12 - REST API Testing with Rest-Assured (continue)

Use dynamic ids
Automate Positive Test Scenarios
Automate Negative Test Scenarios
How to identify bugs
Debugging

Curs 13 - Rest API Testing with Rest-Assured Practice Session

Curs 14 - Rest API Testing with Rest-Assured Exam