

## INIȚIERE ÎN TEST AUTOMATION: REST API & UI

Durată curs: 14 cursuri x 3 ore

#### Descrierea cursului

Cursul de **Iniţiere în Test Automation: Rest API & UI** se adresează persoanelor care au cunoştinţe de Software Testing și doresc să înceapă o carieră în domeniul automatizării. **REST API Testing** vă învaţă partea teoretică și practică necesare pentru crearea sarcinilor de testare ale serviciilor web de tip REST. Partea de UI acoperă modul în care se realizează testarea dinamică și analitică a unui produs software prin utilizarea unui program pentru executarea procedurilor.

### Programă

#### Curs I

- Introduction in Java Programming
- ❖ What is Java?
- ❖ My first program: "Hello world!"
- Add comments
- Basic data types
- Strings
- Operators
- Types of errors

#### **Curs II**

- Control Flow Statements
- The if-then and if-then-else Statements
- ❖ The switch Statement
- The while and do-while Statements
- The for Statement
- Arrays

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## INIȚIERE ÎN TEST AUTOMATION: REST API & UI

#### **Curs III**

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

#### **Curs IV**

- ❖ What is an interface?
- OOP Concepts Encapsulation
- OOP Concepts Polymorphism
- OOP Concepts Abstraction
- Lists
- Maps
- The Try-Catch-Finale Blocks

#### **Curs V**

- ❖ What is Maven?
- TestNG framework
- Maven plugins
- Automating our first tests scenarios
- Using Log4J

#### Curs VI

- ❖ What is REST?
- HTTP and REST
- Components of HTTP Request and Response
- HTTP methods supported by REST
- HTTP Status Codes
- Understanding a URL Structure and Query Parameters
- HTTP Headers
- ❖ Resources in REST JSON Format
- What is REST API Testing?
- Why to Automate the API Testing?

#### **Curs VII**

- Using our dedicated API
- Basic Access Authentication
- Using Postman for REST API Testing
- Sending first requests
- Collections
- Test Scripts
- Validations
- Environment Variables

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### INIȚIERE ÎN TEST AUTOMATION: REST API & UI

#### **Curs VIII**

- Test automation with Java and Rest-Assured
- Setting up your project
- Automating out first test scenarios with Rest-Assured
- Testing status code
- Testing media type
- Testing error messages
- Debugging

#### **Curs IX**

- \* Test automation with Java and Rest-Assured Continue
- Create POJO
- JSON Payload validation
- Finding bugs
- Learn how to manage defects
- Practice

#### Curs X

- ❖ Why to Automate the GUI?
- ❖ What is Selenium? What are the advantages of Selenium?
- Introduction to IDE, RC WebDriver & Grid
- Configuring Selenium and Running on all supported browsers
- Object Mapping basic elements
- ❖ Basic Methods of Web Driver WebElement Commands
- Automating out first test scenarios with Selenium

#### **Curs XI**

- Object Mapping advanced elements
- Screenshot on failed tests
- How to use Expected Conditions with Waits
- Concept of Explicit/Implicit Wait in Selenium
- WebDriverWait and its uses
- Different WaitUntil Conditions
- ❖ Ways to handle Simple, Confirmation & Prompt Alert
- Switching & Closing Windows, Tabs & PopUps
- Concept of window ID

#### **Curs XII**

Putting them all together – Automate test scenarios

#### **Curs XIII - XIV**

Practical application of end to end automation flows



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- I. Introduction to Java Programming. Your first "Hello world!"
- II. Control Flow Statements
- III. What is an Object, What is a Class, Access Modifiers
- IV. What is an interface? OOP Concepts
- V. What is Maven? TestNG framework
- VI. What is REST? HTTP and REST
- VII. Using our dedicated API
- VIII. Test automation with Java and Rest-Assured
- IX. Test automation with Java and Rest-Assured deep-dive
- X. Why Automate the GUI?
- XI. What is Selenium? What are the advantages of Selenium?
- XII. Object Mapping advanced elements
- XIII. Practical application of end to end automation flows
- XIV. Final Exam