

# INIȚIERE ÎN TEST AUTOMATION: REST API & UI

Durată curs: 14 cursuri x 3 ore

## Programă:

Curs 1: Introduction to Java Programming. Your first “Hello world!”

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

Curs 2: Control Flow Statements

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

Curs 3: What is an Object, What is a Class, Access Modifiers

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

Curs 4: What is an interface? OOP Concepts

- What is an interface?
- OOP Concepts – Encapsulation
- OOP Concepts – Polymorphism
- OOP Concepts – Abstraction

- 🔄 Lists
- 🔄 Maps
- 🔄 The Try-Catch-Finale Blocks

## Curs 5: What is Maven? TestNG framework

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

## Curs 6: What is REST? HTTP and REST

- 🔄 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 7: Using our dedicated API

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

## Curs 8: Test automation with Java and Rest-Assured

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

## Curs 9: Test automation with Java and Rest-Assured deep-dive

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

## Curs 10: Why Automate the GUI?

- 🔄 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 11: What is Selenium? What are the advantages of Selenium?

- 🔄 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 12: Object Mapping – advanced elements

- 🔄 Putting them all together – Automate test scenarios

## Curs 13-14: Final Exa

- 🔄 Practical application of end to end automation flows