



# INIȚIERE ÎN REST API & UI TEST AUTOMATION

Durată curs: 14 cursuri x 3 ore

## Descrierea cursului

Cursul de **Inițiere în REST API & UI Test Automation** se adresează persoanelor care au cunoștințe de Software Testing și doresc să înceapă o carieră în domeniul automatizării. **REST API Testing** vă învață 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



## 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



# INIȚIERE ÎN REST API & UI TEST AUTOMATION

## 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