Course Description: "Automation Testing Engineer: Playwright with TypeScript"

Course Duration: 4 months. Class intensity: 2 times a week in live mode (Zoom). Total course volume: 96 academic hours, including 24 online lessons of 2 academic hours each = 48 academic hours, plus 48 academic hours of independent work.

Module 1. Introduction to Test Automation. Basics of JavaScript, TypeScript, and Playwright

1. Introduction to Test Automation. The concept of the testing pyramid
2. Introduction to JavaScript, TypeScript. Setting up the environment and development tools
3. Data types, variables, and constants
4. Classes and methods. Class constructors
5. Overview of Playwright, creating and reviewing the first project

Module 2. Unit Tests. Backend API Testing

6. Developing unit tests for a simple console application. Annotations
7. Test lifecycle annotations in Playwright. Test parameterization. Tags
8. Principles of API test automation. Developing simple tests
9. Continuing API test development: HTTP requests
10. Continuing API test development: HTTP responses
11. Developing API autotests for a real application with authorization
12. Developing API autotests for a real application: creating an API client
13. Developing API autotests for a real application: increasing coverage
14. Creating backend stubs (mock API)
15. Intermediate testing

Module 3. Web Application Testing

16. Introduction to web application testing. Locator strategies

17. Developing UI tests: basic working methods

18. Developing UI tests: page object pattern, singleton pattern

19. Continuing UI test development: increasing coverage

20. Practice of covering the to-do application with UI tests

21. Developing component tests and backend mocks

22. Developing end-to-end tests: combining UI and API autotests into one project

23. Test reporting: Allure. Analyzing Trace Viewer

24. Final test. Course overview