

QA automation Java

Course duration - 3 months. Intensity of classes - 2 times a week

The volume of the course is 24 lessons of 2 academic hours = 48 academic hours, as well as 48 ac. hours of independent work

Block 1. Introduction to java and unit testing

1. Introduction to test automation. Autotest structure. What and when to automate.
2. Introduction to Java. Setting up the environment
3. Data types (primitive), variables and constants.
4. Classes and methods. Class constructor and method arguments. Practice - creating classes with methods.
5. Conditional statements (if, else, switch). Arrays and work with cycles
6. Introduction to unit tests. Junit testing framework.
7. Introduction to the concept of Object-oriented programming (OOP) using encapsulation and inheritance as an example
8. Junit - test lifecycle. Introduction to maven.
9. Junit - annotations and test parameterization. Introduction to API testing

Block 2. API testing

10. Introduction to REST Assured.
11. REST Assured: Serialization and request body careation using DTO pattern
12. REST Assured: Response body processing and deserialization.
13. REST Assured: testing API. How to use properties
14. REST Assured: practicing with GET and DELETE operations
15. REST Assured: practicing with PUT operation. Test suites

Block 3. Web application and integration testing

16. Introduction to UI testing. Web page structure: locator types
17. Introduction to Selenium
18. Page Object and PageFactory pattern
19. Selenide as framework for UI testing

20. Integration testing. Database connection and management
21. End to End testing
22. Allure reporting
23. Introduction to CI using, building a pipeline
24. Course overview and summary