

The certificate certifies that

knowledge has been acquired in the following topics:

7 principles of testing. Software development and testing life cycles. Waterfall methodology and Agile methodologies Scrum and Kanban.

Learning to read technical documentation. User requirements and business processes. UML and BPMN standards. draw.io editor.

Approaches to testing: equivalence classes, boundary values, pairwise method, coverage analysis. Basics of working with the Windows command line (cmd).

Overview of all types of testing. 4 main types: Smoke, Sanity, Regression, UAT. Key non-functional tests. UI testing and pixel-perfect method in Figma editor.

Testing requirements, business processes, and business rules. How to write test cases. Installation and familiarization with the test case management system TestRail.

TestRail. Test case creation and categorization. Test planning and execution. Testing different configurations. Report generation. Defects and integration with Jira.

Understanding the internet and computer networks. TCP/IP protocol. How websites are structured. Client-server architecture. How to find your IP and check server connectivity. Preparing the browser for testing.

Frontend testing. DevTools: Elements. VS Code editor. Introduction to HTML and CSS programming.

Frontend testing. DevTools: Console. Understanding logs. Introduction to JavaScript programming. Document Object Model concept.

DevTools: Network. HTTP protocol: methods, resources, headers, body, request parameters, response status codes, cookies and caching, authorization, CORS. DevTools: Network.

API testing. REST standards. JSON markup language. CRUD operations. Interactive Swagger documentation. Postman, Charles, and cURL tools.

Relational databases. SQL language: queries to a single table, queries to multiple tables. MySQL database. Visualizing the database structure in dbdiagram.io.

NoSQL databases. Document-oriented model. MongoDB database. Cloud databases Firestore and Cosmos. Embedded databases. SQLite database.

Mobile application testing: UI, Installation, Configuration, Compatibility, Failover and recovery. Mobile application life cycle. API testing in Charles. Downloading test applications.

Mobile application testing: Android Studio and Android emulator. Uploading applications under test to Git and GitHub. Windows and Linux terminals. ADB. Connecting real devices.

Introduction to SEO testing: indexing websites by search engines. Google Analytics, Facebook Pixel, and GTM. Advanced techniques with Charles, deploying test environments in Docker.

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