

## Quality Assurance Automation Engineer's Path

### QA Automation Engineer 0 (QAEO)

This role is equivalent to "Intern."

#### Requirements:

- Logical and critical thinking;
- Able to solve problems;
- Hugely motivated to grow;
- Has more time to offer than anybody else;
- Liking technology, preferably geeky;
- A favorite programming language / some kind of education related to software development;
- Can convert a decimal number to its binary representation, and hexadecimal;
- Basic English reading skills for technical documentation understanding.

#### General Responsibilities:

- Work on non-mission critical parts of the public projects under strict supervision;
- Take specific educational courses based on the direction they want to take;
- By the end of the internship, identify a reasonable path they want to take;
- Showing progress on Codesignal or other similar platforms;
- Daily reports.

### QA Automation Engineer 1 (QAEE1)

#### Requirements:

- Minimum of 1 year of experience within the software quality assurance domain;
- Ability to work in an Agile environment;
- Ability to write and execute test cases to identify system bugs (UI, usability, functionality);
- Ability to conduct exploratory testing;
- Ability to examine bug reports, prioritize assigned project tests, and estimate test execution;
- Ability to clearly communicate upon the work done in the form of daily status reports;
- Can read, write and communicate in basic English on technical topics;
- (optional) Have basic programming skills, including coding, basic SQL knowledge to extract data for tests.

#### General Responsibilities:

- Work on non-mission critical parts of the private projects under supervision.
- Set professional growth goals with measurable outputs under Mentor's supervision.
- Continuously improve their English skills (written, reading).
- Showing progress on Coursera or other similar platforms.

### QA Automation Engineer 2 (QAEE2)

#### Requirements:

- Strong communication and teamwork skills;
- ISTQB Foundation level;
- Deep understanding of software testing, its main concepts, and processes, including:
  - Complete bug life cycle;
  - Different testing levels (unit, integration, acceptance, other), types (performance, functionality, other);
  - Test estimation methods.
- Ability to write, design, and execute automated tests by creating scripts that run testing functions automatically using one or more languages from below:
  - Java
  - C#
  - Python
  - JS
- Ability to thoroughly read the project requirements documentation and come up with a list of questions required to be clarified;
- Proficiency in test automation frameworks like:
  - Protractor;
  - Selenium;
  - Cypress.

#### General Responsibilities:

- Attend test planning meetings and provide valuable input upon high-level test scenarios, risks, resources, test estimates and other aspects;
- Regular cooperation with project teams and testing processes continuous refinement;
- Work on mission-critical parts of private projects with general or minimal supervision.

### QA Automation Engineer 3 (QAEE3)

#### Requirements:

- Ability to write high-quality documentation for automated processes, including test plans, test procedures, and complex test cases;
- Ability to design and maintain test architectures (test automation frameworks, code libraries, etc.) for the team to use across the platforms;
- Hands-on experience and strong understanding of CI tools (e.g., Jenkins);
- Strong SQL/DB skills;
- Hands-on experience with mobile automation testing tools for iOS, Android, as well as cross-platform ones;
- Strong skills with using API testing tools that require coding skills (REST Assured, other);
- Profound performance testing skills (e.g., JMeter).

#### General Responsibilities:

- Set up test infrastructure with necessary tools for various platforms (web, mobile, desktop);
- Set up CI/CD cycles from scratch as well as maintain the existing ones per need;
- Work with deployment teams to resolve issues in the system;
- (optional) Mentorship and guidance of younger QA engineers.

### QA Automation Engineer 4 (QAEE4)

#### Requirements:

- ISTQB Advanced level;
- Ability to communicate with the project stakeholders directly, as technical questions arise;
- Ability to perform low-level testing like unit testing and module testing;
- Understanding of the cloud infrastructure environments (AWS, Azure, other);
- Ability to troubleshoot network issues with packet analyzer tools (Wireshark and alike).

#### General Responsibilities:

- Develop and maintain various complex test data sets;
- High availability for any company member's professional questions;
- Professional mentorship, educational guidance, and custom roadmaps implementation for colleagues per need.

### Project Team Lead (PTL)

This role is an add-on role to the main specialization. It indicates that the person has advanced managerial responsibilities.

#### Requirements:

- Minimum QAEE3;
- Minimum of 1 year working at the SDC;
- Advanced soft skills. Ability to resolve team issues without the emergence of conflicts;
- Proven record of successfully deployed and released projects.

#### General Responsibilities:

- Overseeing for the technical implementation of assigned projects;
- Overseeing high-level architecture of assigned projects;
- Overseeing the essential activities of the project delivery (incl. Code freeze announcements, DEMO-related preparations, etc.);
- Technical estimates preparation per higher management's request;
- Participating in coding/QA/OPS activities per need;
- Plan and control the testing process: define the task lists for subordinates, schedule testing activities, calculate the testing budget, estimate test efforts.

### Quality Chief Engineer

#### Requirements:

- Minimum of 8 years of industry experience;
- Minimum of Bachelor's degree in Computer Science, Physics, Math or related field (STEM);
- English language - candidates should be able to freely communicate about the work in both, written and verbal form;
- Works at the SDC for at least 2 years;
- At least four years of experience in working as Teamlead on enterprise-level software projects;
- Multi-domain technical background. The following is the list of tech stacks the company operates with; an ideal candidate will have to have hands-on experience with all of the technologies below:
  - Java (JUnit, TestNG), JavaScript (Cypress, Playwright, Puppeteer), C#, Bash, Makefile, Python(Pytest)
  - ElasticSearch, Cassandra, Kafka, Redis, Neo4j, MariaDB, MSSQL, Oracle
  - Jenkins, CircleCI
  - Docker, Kubernetes, AWS
  - CentOS, Ubuntu, Windows Server

#### General Responsibilities:

- Define strategic direction for testing by providing guidance, feedback, and suggestions to improve quality practices across an entire engineering team;
- Continuous research and identification of new tools and technologies that might enhance the process of the in-house development processes;
- Company Career Path maintenance, and mentorship of the QA team;
- Existing SDLCs effectiveness analysis, and set up new KPIs with measurable results;
- Systematic setup of the QA Team efficiency metrics as well as the measurement of the project delivery quality;
- QA Team members' performance tracking, and assignment of improvement tasks for the colleagues' growth;
- Represent the QA team at cross-department meetings and update the customer on the progress of testing activities per need;
- Multiple projects' deployment simultaneous coordination, and OPS team supervision and maintenance.