



Case Study - QA full stack automation tester - SDET

We're excited to explore how you approach real-world challenges as a Fullstack Quality Engineer (SDET) at Rohlik Group. This case study will help us assess your **test automation skills, analytical thinking, and ability to drive quality in a fast-paced development environment.**

Context

Rohlik is launching a new **Order Management System (OMS)** that will handle all customer orders, payments, and fulfillment processes across multiple platforms. The system consists of **a web-based UI, and REST API backend, and database interactions.** Your role as an SDET is to **ensure the robustness, reliability, and scalability** of the OMS before the full-scale launch.

Your Tasks

Test Strategy & Planning

- Analyze the **Order Management System (OMS)** and propose a **high-level test strategy.**
- Define at least **three key testing areas** (e.g., API stability, UI regression, database consistency).
- Prioritize these areas based on risk and business impact.

Test Case Design

- Write **at least two detailed test cases**, including all test steps and expected results, for the most critical areas of OMS.
- One test case should focus on **API testing**, and the other should be **UI-driven.**



Test Automation

- Automate basic flow through the web (login-adding product into basket-check basket) using a programming language/framework of your choice (**Java + Selenium, TestNG, REST Assured, Cypress, etc.**).
- Ensure your test is **scalable, reusable, and follows best coding practices**.
- Integrate the test into a **CI/CD pipeline** (you don't need to set up a real pipeline, just describe how it would be implemented).

Test Automation using AI

- Generate automated tests of registration to Rohlicek baby club using AI LLM model. Describe what had to be changed and adjusted and why.
- Present some example how AI could do autonomous testing based only on prompts without scripting.

Performance & Security Considerations

- How would you **approach performance testing** for OMS? What tools and metrics would you use?
- How would you **ensure API security** in an environment with sensitive customer data?

Exploratory Testing

- Identify potential **edge cases and failure scenarios** that could impact OMS functionality.
- Suggest a testing approach for **uncovering hidden defects** that automation might not catch.

Additional Information

Present your case study in a structured format (**slides, a structured document, or a shared repository with code**).

For missing information, make and document **assumptions**.

Submit your materials **at least one day before the meeting** for review.