



## CASE STUDY – Quality Assurance Engineer

Welcome to the QA Engineer challenge. Our team are a part of a larger domain working on the core products of trivago (the Hotelsearch Website, Mobile Apps, Backend Services and Express Booking).

Working as part of a highly agile, multidisciplinary team, you will be tasked with testing changes to our core products, which can range from smaller user-facing feature changes to entirely new backend infrastructure setups. Using a combination of both manual and automated testing methods, you will guarantee the quality of both the functionality and user experience, while ensuring that they integrate problem free into our existing products.

This case study is designed to give you an idea of what tasks you can expect as a member of our QA team. We are not simply looking for the right answers though; we're looking for someone who can think outside the box, be creative and analytical when approaching complex or unknown topics and of course have excellent attention to detail.

Even if you might not be able to answer everything, we encourage you to give it a try. We wish you good luck!

**SUBMISSION DEADLINE:** As indicated in the email.

### THE CHALLENGE

#### Task 1 – Exploratory Testing

**Within task 1, please select either the Mobile Apps or Frontend Website questions depending on which team you chose within the application form that you would preferably work for.**

Mobile Apps:

*Pre-condition: Please install our Live app (Android or iOS) from its respective App/Play store and perform exploratory tests throughout the whole app.*

- a) Please report up to 3 bugs you come across, prioritizing and briefly explaining why you consider them important. Please keep in mind all stakeholders when writing the bug reports, making sure you add any relevant attachment, i.e., screenshots, video, error logs, which would facilitate its debugging.
- b) After your exploratory session, imagine you are responsible to release a new version of our trivago app to the App/Play store. Please briefly describe how your Release Candidate test approach would look like for our specific app.

## Frontend Website:

Please go to any of our websites e.g. [trivago.co.uk](https://trivago.co.uk) (or any other locale platform) and execute an exploratory test. You can freely choose which browsers or devices to use.

- Please report up to 3 bugs or flaws in the user flow that you come across like you would do it in your role as QA Engineer (prioritize the bugs, consider different stakeholders that might read your report, add relevant attachments, and consider anything else that could support further debugging).
- Imagine you are responsible to release a new version of our website to production. You only have an hour left for pre-release testing otherwise the release would need to be postponed. Please provide a **brief** overview on how you would approach testing the release candidate. Think about the following questions for example: Which aspects do you need to consider when testing the trivago website? How would you choose and prioritize what you are checking? How do you determine if it is ready to be released or not? (Note: no formal test plan required for this task)
- Please provide three example defects (specific to trivago) that would be a release blocker in your opinion.

## Task 2 – Data Analysis

As a QA, you've been assigned an investigation task to determine the possible explanation(s) regarding the increase in Bounce Rate for Firefox users on our Australian platform in the screenshot below (screenshot 2 is our Brazilian platform):

*(Background: "Bounce Rate" is a term we use to identify sessions that enter our website and end/leave either immediately or within a few seconds)*



Please analyze the data, explain your conclusions and what steps you would take to further investigate the possible causes (assuming you were working in QA at trivago).



### Task 3 – Test Case Automation

In your role as a QA you're required to implement an acceptance test suite for the trivago website. One of the tests required is an end-to-end test that should replicate a real user flow on our "Discover" product: <https://discover.trivago.co.uk/>

Your task is to create an automation test case based on the steps that you believe a typical, successful user would make on Discover.

**Identify the flow/steps that you believe could be a realistic example of a typical user flow on Discover and create an e2e test case that would cover this if it were run within a test automation suite.**

**Note: For this task, the final step of the user flow should be clicking on the "View Deal" button.**

*You can make it as simple or complex as you like, using any common format you prefer e.g: simple instructions/steps, BDD scenarios, pseudo-code, scripts etc.*