Senior Test Engineer – Technical Assessment

Welcome to the Technical Assessment! We've designed this challenge to evaluate your skills in test automation, with focus on creating robust, maintainable tests for core user journeys. Through this exercise, we aim to gain insights into your coding style, problem-solving approach, and adherence to best practices in test automation.

We'll be looking at the quality and structure of your code and your approach to ensuring reliability in tests. Feel free to treat this as a you would a real project – by writing clean, maintainable code, and sharing relevant assumptions or decisions you make along the way.

Good luck and thank you for your interest in the role!

Objective

In this assessment, you will automate test cases for the following features. Each feature represents a critical user journey through the site, and your goal is to create reliable, maintainable test scripts that validate these journeys. Here are the features we would like you to focus on:

1. **Feature: Basic Search**

   Verify that the basic search functionality returns correct results based on user input.

2. **Feature: Navigate to a specific link**

   Verify that users can navigate the website and successfully launch a specific link, ensuring the correct page loads with no errors.

3. **Feature: Browsing by Collection**

   Verify that users can browse available collections.

Each feature reflects a key interaction that users rely on. The primary objective is to design automated tests that verify these journeys while adhering to best practices in test automation. We encourage you to write tests that are efficient, easily maintainable, and built with scalability in mind.

As part of this assessment, we also encourage you to consider cross-browser compatibility in your test cases. While it's not required to run tests in multiple browsers, your solution should be designed with adaptability in mind, allowing tests to be easily executed across major browsers (i.e. Chrome, Firefox, Safari). Highlight any adjustments or additional configurations you would apply to ensure cross-browser support.

Scope

Testing URL

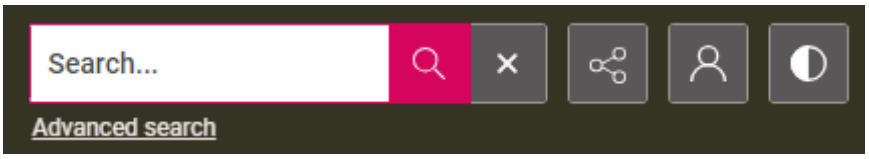
The website to be tested is available at: https://demo.quartexcollections.com/. Please use this site to execute all specified test scenarios.

Test Scenarios

You will find Gherkin scenarios below covering each feature to be automated. These scenarios provide the basis for the test cases you need to create. If you identify additional scenarios, you believe would enhance test coverage, feel free to document or implement them as well.

1. Feature: Basic Search

The basic search functionality is accessible from the header of every page. Entering keywords into the search box and clicking the magnifying glass will return all assets that match the search criteria.



Scenario 1

GIVEN user is on any page of the Quartex Published Site

WHEN user enters valid <Search term> in the basic search input box

AND the search button is clicked

THEN user is navigated to the Browse All page

AND the first page of search results is displayed

AND the <Asset listed> meets the search criteria

Example Test Data:

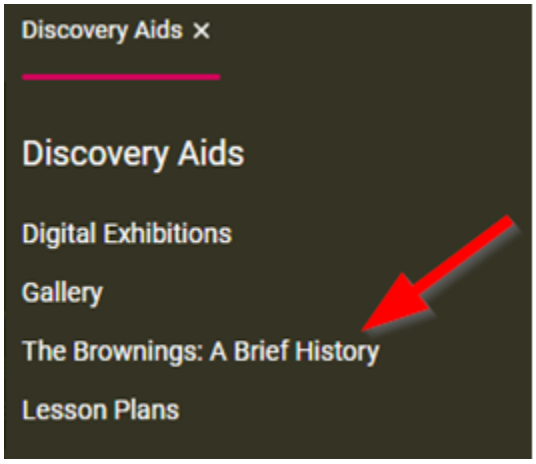
| *Search term* | *Asset listed* |

| *Brown* | *1 April 1875. Browning, Robert to Pollock, Lady.* |

2. Feature: Navigate to a specific link from a Timeline content block

The website can be navigated using either the mouse or keyboard. A navigation bar is available in the masthead on all pages, with additional links throughout the site.

For this feature, we focus on the Timeline content block, located under Discovery Aids > The Brownings: A Brief History.



Scenario 2

GIVEN user is on any page of the Quartex Published Site

AND user has navigated to a <Timeline content block >

WHEN user navigates to a <Timeline item>

AND user clicks a <Link>available on the <Timeline item>

THEN the correct <webpage is launched> in a new tab

Example Test Data:

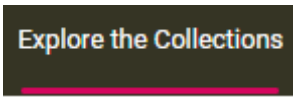
| Timeline content block | Timeline item | Link | Webpage is launched |

| https://demo.quartexcollections.com/discovery-aids/the-brownings-a-brief-history | 1845 | View one of their first love letters within The Browning Letters Collection. | https://demo.quartexcollections.com/Documents/Detail/10-january-1845.-browning-robert-to-browning-elizabeth-barrett./36113 |

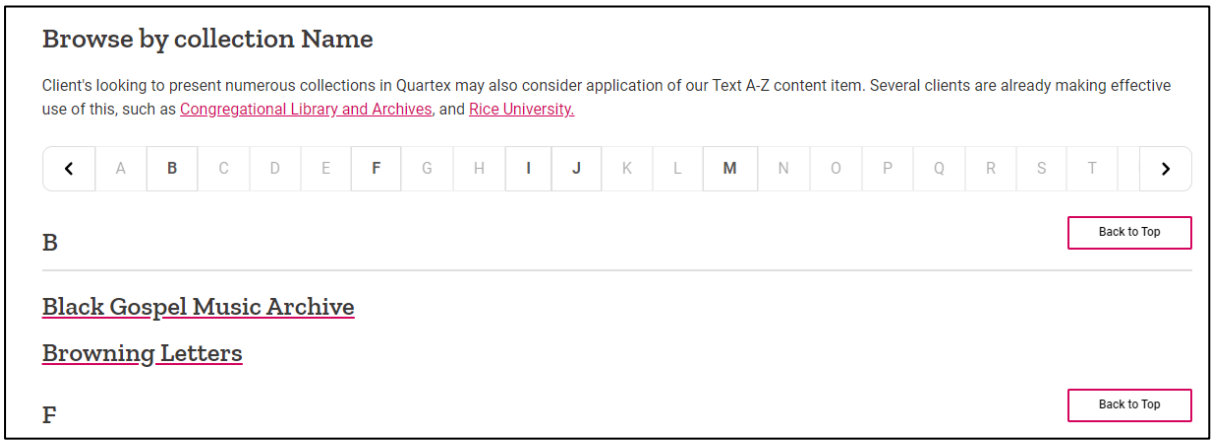
3. Feature: Browsing by Collection

The website displays a list of all asset collections, allowing users to navigate to their contents.

For this feature, we are testing the 'Explore the Collections' page.



And the 'Browse by collection Name' content block.



Scenario 3

GIVEN user is viewing the Browse by collection Name A-Z content block

WHEN user selects a <Letter> to browse

THEN the page is scrolled to display all collections starting with the chosen <Letter>

AND the expected <Collection> is displayed

Example Test Data:

| *Letter* | *Collection* |

| *W* | *War & Conflict* |

Preferred Framework

While we recommend using Playwright with TypeScript for this assessment, you may use another test automation framework if you're more comfortable with it. Ensure that your solution is well-documented, with any required setup instructions provided in your submission.

Cross-Browser Compatibility

Where feasible, design your tests with cross-browser compatibility in mind, making it easy to execute across common browsers (e.g., Chrome, Firefox, Safari). Highlight any specific configurations for cross-browser testing in your documentation.

Submission and Documentation

Please submit your work as a Git repository link (GitHub, GitLab, etc.). Ensure all necessary files are included for running the tests.

Provide a README file that outlines your approach, lists any assumptions made, and explains how to set up and run your tests. If using additional dependencies or configurations, document these as well.

Assumptions and Notes

If you make any assumptions about the scenarios or the site behaviour, please note them in your documentation. This helps us understand your thought process and any decisions made during the assessment.

And finally ...

Good Luck!! We're excited to see your solution.