This is Brand Engagement Network Inc.

Congratulations! You are now in the second step of the selection process. The purpose of this step is to validate that your skills match some of our needs. For this purpose, below you will find a small task split in different parts.

Part 1: Test Case Writing

Scenario: A new feature in a web application allows users to register an account. The registration form includes fields for username, password, email, and a "Subscribe to newsletter" checkbox.

Task: Write a set of test cases covering functional, boundary, and edge cases.

Part 2: Bug Identification and Reporting

Scenario: having the page hosted in this server: http://13.209.85.69/

Task: Identify, document, and report the bugs. Emphasize clarity and detail in the bug report, including steps to reproduce, expected vs. actual results, and severity assessment.

Part 3: Automated Testing Challenge (optional writing the full script)

Scenario: having the page hosted in this server: http://13.209.85.69/ Task: Write a script that automates the test for the page hosted above.

Part 4: Performance Testing Scenario

Scenario: You are given a basic cloud service that is the entry point for our mobile app. This service is responsible for signing up and signing in users and related helper functionalities. This application is expected to handle up to 10,000 concurrent users during peak hours.

Task: Develop a performance testing plan outlining the following aspects:

1. **Objectives**: Define what you aim to achieve with this performance test (e.g., maximum load handling, response time under load).

- 2. **Tools**: Choose a performance testing tool (e.g., JMeter, LoadRunner) and justify your choice.
- 3. **Test Cases**: Describe at least three test cases that you would execute (e.g., searching for books, viewing book details, adding books to the cart).
- 4. **Metrics**: List the key metrics that you would monitor (e.g., response time, error rate, throughput).
- 5. **Test Environment**: Describe the setup of your test environment (e.g., server configuration, network settings).
- 6. Analysis: Explain how you would analyze the results of the performance test.

Part 5: Problem-Solving Questions

Scenario 1: During a release cycle, you find that the number of bugs reported in the new features is significantly higher than in the previous releases. The development team claims that the features were developed according to specifications.

Task: Write a response detailing how you would handle this situation, including steps to identify the root cause and possible solutions to reduce the number of bugs in future releases.

Scenario 2: You are part of a QA team that is transitioning from manual to automated testing. However, some team members are resistant to this change, citing a lack of experience in programming.

Task: Describe how you would address this challenge to ensure a smooth transition to automated testing while keeping the team motivated and engaged.

Part 6: Tool Proficiency

Task 1 (JIRA): Given a scenario where multiple high-priority bugs have been reported in a new feature, draft a bug report for one of these bugs in JIRA. Include fields like Summary, Description, Steps to Reproduce, Expected Result, Actual Result, Priority, and Attachments (if applicable).

Task 2 (Postman): Create a collection in Postman to test a simple REST API (e.g., a CRUD API for users in our app). The collection should include requests for creating a new user, retrieving information about a user, updating a user, and deleting a user. Include tests in each request to validate the response status code and response body.

You have 2hours to finish.