QA Engineer Assignment

Objective: Evaluate the candidate's ability to design and implement a comprehensive testing strategy for a VueJS application, including unit tests, integration tests, and end-to-end tests.

Background: Our company has developed a web application using Quasar, VueJS 3 with Composition API. The application is a task management system that allows users to create requests. It also includes user authentication and data persistence using a REST API.

URL: https://careglp-staging.carevalidate.com/

email: qa+employee@carevalidate.com

password: bLPgk5tr7D3ZqpXvV@aNKz

Assignment Tasks:

1. Manual Testing:
   ○ Create a comprehensive test plan that includes test cases
   ○ Test with valid/invalid credentials, error messages, and session management.
   ○ "New Request" form flow.
   ○ Test data display, user interactions, and navigation.
2. End-to-End Testing:
   ○ Set up an end-to-end testing environment using Cypress.
   ○ Write test scenarios for login to the portal with the given credentials.
   ○ After login, go to Accommodations => New Request and select "Weight Loss Eligibility Intake Form", fill out the form, click on the "Submit" button, and confirm the success message.
   ○ Go to Accommodations => My Requests and confirm the submission. ○ Implement at least one custom Cypress command to enhance test readability and reusability.
3. Performance Testing:
   ○ Use Lighthouse or a similar tool to measure and report on the application's performance metrics.
   ○ Suggest optimizations based on the performance test results.
4. Documentation:
   ○ Write clear documentation for setting up the testing environment and running tests locally.
   ○ Create a test plan outlining your testing strategy, including test cases and coverage goals.
5. Accessibility Testing (Optional):

○ Conduct an accessibility audit.
○ Provide recommendations for improving the application's accessibility.
6. Test Automation (Optional):
○ Create a CI/CD pipeline configuration (e.g., GitLab CI, GitHub Actions) to run all tests automatically on each commit.
○ Implement test reporting and artifact storage in the CI/CD pipeline.

Help Links:

- https://www.cypress.io/
- https://testing.quasar.dev/packages/e2e-cypress/

Deliverables:

1. A zip file containing all test code, configurations, and documentation.
2. README file with instructions for setting up and running tests.
3. Test plan document (PDF or Markdown format).
4. Brief report on performance and accessibility findings with recommendations.

Evaluation Criteria:

- Code quality and organization
- Test coverage and effectiveness
- Understanding of VueJS and modern testing practices
- Ability to automate tests and integrate with CI/CD
- Clear communication in documentation and reporting