

## Junior Developer Home Task/Exam

### Objective:

The goal of this task is to assess your problem-solving skills, creativity, and understanding of key web development concepts. The task involves both front-end (React) and back-end (Node.js) components.

### Task Overview:

You are required to build a simple full-stack application. The application should allow users to input a list of URLs, fetch metadata (title, description, and an image) for each URL, and display the results on the front-end.

### Requirements:

#### 1. Front-End (React):

- Create a simple form where users can input multiple URLs (minimum 3).
- Implement a “Submit” button that triggers the fetching of metadata for each URL.
- Display the fetched metadata in a visually appealing way (title, description, image).
- Implement error handling for invalid URLs or cases where metadata cannot be retrieved.

#### 2. Back-End (Node.js):

- Set up a simple Node.js server with an endpoint `/fetch-metadata` that accepts a list of URLs.
- For each URL, the server should fetch the metadata (title, description, image) and return it as a JSON response.
- Implement error handling for cases where metadata cannot be retrieved (e.g., invalid URL, network issues).

#### 3. Additional Requirements:

- **Rate Limiting:** Implement rate limiting on the server to handle a maximum of 5 requests per second.
- **Security:** Ensure that the application is secure against common web vulnerabilities (e.g., XSS, CSRF).
- **Documentation:** Provide clear and concise documentation on how to set up, run, and test the application. Explain your design choices and any trade-offs you made.
- **Testing:** Write unit tests for both the front-end and back-end. Include at least 5 test cases.

### Submission Instructions:

- Submit your code in a GitHub repository.
- Include a README.md with instructions on how to set up and run your application.
- Provide a link to a live demo of your application (e.g., deployed on Heroku, Vercel).
- When you're done, please send your project, along with your CV, to [lital@hh-unicorn.com](mailto:lital@hh-unicorn.com).

### Time Limit:

You have 48 hours from the time you start the exam to submit your solution.