

# Assignment: Software Development Engineer - NodeJs Intern

Your task is to build a simple stateless microservice in Nodejs, with two major functionalities -

- Authentication
- Image Thumbnail Generation

We have no requirements for which frameworks/libraries to use, choose whichever seems best suited for the task!

## Required Endpoints

The API should feature the following endpoint functionality -

### Public Endpoints

The Login Request body should contain an arbitrary username/password pair. Treat it as a mock authentication service and accept any username/password. Return a signed Json Web Token(JWT, <https://jwt.io/>) which can be used to validate future requests.

### Protected Endpoint

The following endpoint should be protected. The JWT obtained in the “Login” endpoint must be attached to each request. If the JWT is missing or invalid, these endpoints should reject the request.

- Create Thumbnail Request should contain a public image URL. Download the image, resize to 50x50 pixels, and return the resulting thumbnail.

## General Requirements

### Code Requirements

- Use modern javascript ES6 syntax.

### Other Requirements

- Use Git for version control, and host the project in a Github repository. Send the Github link to [kartik.bansal@cashflo.io](mailto:kartik.bansal@cashflo.io) in an email
- The project should contain documentation with setup and usage instructions.
- The project should install all dependencies with “npm install”, should start the server with “npm start”, and should run the test suite with “npm test”.
- Really, please just don’t use “console.log” as the primary debugging/logging tool.
- Javascript Style and Linting
- Use a javascript linter, along with a linting npm script. We like clean code.

### Bonus Points

- Extra Documentation
- Include JSdoc comments and/or Swagger specifications to impress us.
- Logging / Monitoring
- Integrate a centralized app logging/monitoring system.

### How we will judge the task

- Project organization and code readability (50%)
- API functionality correctness (15%)
- Input validation and error handling (15%)

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- API speed and efficiency (10%)
- Documentation (10%)
- Bonus Points (up to +20%)