**Image Processing API**

This API provides functionality for resizing and serving images in two different ways: as a simple placeholder API for rapid prototyping and as a library to serve properly scaled versions of images to reduce page load size.

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**Introduction**

The Image Processing API is designed to be a versatile tool for developers working with images in web applications. It offers two primary use cases:

1. **Simple Placeholder API:** Allows developers to quickly prototype their frontend by providing an endpoint to resize and serve images based on URL parameters.

2. **Library for Scaled Images:** Provides a mechanism to serve properly scaled images to reduce page load size, eliminating the need to resize and upload multiple copies of the same image.

**Features**

* Resize images dynamically using URL parameters.
* Serve resized images to reduce page load size.
* Cache resized images to improve performance.
* Support for both simple placeholder images and scaled images.

**Installation**

1. **Clone the repository**:

git clone https://github.com/Ahsin-khan/image-processing-api.git

3. **Install dependencies**:

express: "^4.18.3", @types/express: "^4.17.21", typescript: "^5.4.2", @types/node: "^20.11.25", nodemon: "^3.1.0", ts-node: "^10.9.2", jasmine: "^5.1.0", @types/jasmine: "^5.1.4", jasmine-spec-reporter: "^7.0.0", jimp : "^0.22.12", @types/jimp: "^0.2.28", supertest: "^6.3.4", @types/supertest: "^6.0.2", eslint: "^8.8.0", prettier: "^2.5.1", @typescript-eslint/eslint-plugin: "^7.2.0", @typescript-eslint/parser: "^7.2.0", eslint-config-prettier: "^8.3.0", eslint-plugin-prettier: "^4.0.0".

**Usage**

**Script:**

* npm run prettier (Formatting)
* npm run lint (Error Checking)
* npm run test (For transpiling and Testing)
* npm run start (To start the server and autosaving by Nodemon)

**Endpoints**

**Placeholder API**

* **Endpoint**: /api/simpleResize/image
* **Description**: Resizes and serves images based on URL parameters for rapid prototyping.
* **Complete url:** http://localhost:5000/api/simpleResize/image?filename=hill&width=200&height=400

**Library for Scaled Images**

* **Endpoint**: /api/scaledResize/image
* **Description**: Resizes and serves properly scaled images to reduce page load size.
* **Complete url:** http://localhost:5000/api/scaledResize/image?filename=hill&width=200&height=400

**Testing**

The project includes unit tests using Jasmine. To run the tests, use the following command:

**Npm run test**

**Contributing**

Contributions are welcome! If you have any suggestions, bug reports, or feature requests, please open an issue or submit a pull request.

**License**

This project is licensed under the MIT License.