Task Queue API with Rate Limiting

Overview

This Node.js API handles tasks with user-specific rate limiting. It supports 1 task per second and 20 tasks per minute for each user. The tasks are queued and processed according to the rate limits.

Features

- User-specific rate limiting
- Task queueing using Bull and Redis
- Logs task completion in a file
- Resilient to failures and edge cases

Prerequisites

- Node.js
- Docker
- Redis

Environment Variables

```
PORT=3000
REDIS_URL=redis://127.0.0.1:6379
RATE_LIMIT_POINTS=20
RATE_LIMIT_DURATION=60
```

Installation

1. Clone the repository:

```
git clone https://github.com/SunkePavanKumar/user-task-queuing.git
cd user-task-queuing
```

2. Install dependencies:

```
npm install
```

3. Start redis using docker:

```
docker-compose up -d
```

4. Start the server:

```
npm run dev
```

Usage

Send a POST request to the /api/v1/task route with a JSON body containing the user ID:

```
{
  "user_id": "123"
}
```

Running Tests

```
npm run test
```