

SDET Challenge

Thank you for your interest in the SDET position at Reckit, Inc.

As part of our assessment process, we'd like you to complete a technical challenge that will evaluate your API testing skills.

Challenge Objectives

The goal of this challenge is to assess your ability to:

- **Design and implement comprehensive API test suites** - Create thorough tests for REST APIs using Node.js-based testing frameworks (Jest with Supertest, Mocha with Chai-HTTP, or similar)
- **Identify bugs and inconsistencies** - Find and document issues within the API implementation, including edge cases and failure conditions
- **Write clean, maintainable test code** - Demonstrate proper test organization, reusable components, and industry best practices for test structure
- **Test Automation Setup** - Include configuration files (like GitHub Actions workflow) that show how your tests would integrate into a CI/CD pipeline, even if not actually executed during assessment
- **Test for reliability and edge cases** - Implement tests that handle rate limiting, error conditions, malformed inputs, and boundary conditions
- **Document findings effectively** - Provide clear, organized documentation of discovered issues, test coverage, and instructions for running your test suite

This challenge simulates a real-world scenario where you are tasked with testing a newly developed API before it goes to production. The API contains various intentional issues that your tests should identify.

API Access Details

You have been granted access to a Product Inventory API for testing purposes:

- **API Base URL:** <https://sdet-challenge-rho.vercel.app>

- **Your Personal Access Token:** [You'll receive this in email or DM]

This token provides you with a personal testing environment that is isolated from other candidates.

How to Authenticate

All API requests require authentication using your personal token:

Authorization: Bearer [YOUR TOKEN]

Please include this header with every request to the API.

Available Endpoints

The API includes the following endpoints:

Endpoint	Method	Description	Auth Required
/api/products	GET	List all products (with pagination)	Yes
/api/products/:id	GET	Get product details by ID	Yes
/api/products	POST	Create a new product	Yes
/api/products/:id	PUT	Update a product	Yes
/api/products/:id	DELETE	Delete a product	Yes
/health	GET	Check API health status	No

Alternatively you can use the Postman Collection which can be downloaded from [here](#).

Evaluation Criteria

Your submission will be evaluated based on:

1. **Test Coverage:** How thoroughly you test the API endpoints and operations
2. **Bug Discovery:** Number and significance of issues found
3. **Code Quality:** Organization, readability, and maintainability of your test code
4. **Automation:** Effectiveness of your CI/CD integration

5. **Documentation:** Clarity and thoroughness of your documentation

Getting Started

1. Verify your API access by listing products:

```
curl -H "Authorization: Bearer [YOUR TOKEN]" https://sdet-challenge-rho.vercel.app/api/products
```

2. Begin designing and implementing your test suite

Submission Details

Please submit your completed test suite via GitHub repository within 24 hours of receiving the assignment

Ensure you include:

- All test code
- Documentation of any issues/bugs you discover
- A README explaining how to run your tests
- GitHub Actions workflow (or similar CI configuration)

Once your repository is ready, please send an email to shravan@goreckit.com with:

- The link to your GitHub repository
- Any additional notes or documentation
- Any challenges you faced during the assignment

Good luck, and we look forward to seeing your solution!

And, lastly..

