

Glassdoor Software Engineer Intern - Take Home Assignment

Report

Name: Abhilash Sulibela

Project: [intern-first](#)

Email: abhilash1869@gmail.com

Phone: +1 - 682-561-6134

Introduction:

- The project primarily makes use of **Spring-Boot** framework
- The project uses **Java 8**, It also makes use of an Embedded MongoDB to account for various model lookups.
- I've ensured to cater to all the goals that were enlisted in the readme to fortify the project although not completely but to the best possible attempt given the time constraints.
- It is my understanding that any online payment processing system has 2 major requirements
 - Reliability / Availability
 - Security (Both Internal / External)
- To help scale the system, I've used the microservice architecture so that it facilitates horizontal scaling also can help in multiple-zone deployments to fortify the availability of the system
- To provide for reliability I would make use of a Real-time messaging queue such as **Apache Kafka** to process incoming payment requests
- Security is of paramount importance in this system as any mistakes (internal / external) both have financial liability. I would propose to use token based authentication system through Spring-Security.

Execution:

- The currently implemented system is fully functional end-to-end with REST API's and an embedded database (mongoDB) which is loaded with sample data upon start
- The API's are exposed through **Swagger**
- To access a user friendly UI to use the API,
 - Run the project
 - Navigate to <http://localhost:8080/swagger-ui.html>

Note:

- Currently the system supports only 2 kinds of payment method
 - Credit_card
 - Debit_card
- A payment is successful only if both the Payee & Payer support the respective payment method

Conclusion:

- A payment processing system really has a lot of things to be considered to design an architecture. I've tried to make the best out of the given time but I'm eagerly waiting to for your review on the same.
- Thank you so much for providing me an opportunity & considering my candidacy. Looking forward to hear from glassdoor soon.