PLOTLINE

Full Stack Development Internship

Problem statement

A digital invoicing platform is essential for businesses to manage their invoicing, payments, and financial transactions efficiently. Your task is to develop a Node.js server coupled with an intuitive user interface for an invoicing system that ensures smooth operations and provides a user-friendly experience.

Instructions

Create a Node.js server which should expose the features via APIs based on REST principles and handle different scenarios that may arise during billing processes. Additionally, develop a user-friendly UI that interacts seamlessly with these APIs, providing a comprehensive frontend solution for users to effectively engage with the billing system.

Context

- The company offers various products and services, each with its own pricing.
- A user can create his account, add/remove items to/from their cart, and view his total bill during checkout.
- Integrate tax calculation based on the price range of the product using the following rules:
  - Apply Tax **PA** if the price range of the product is greater than 1000 and less than or equal to 5000. The tax percentage should be 12% of the price.
  - Apply Tax **PB** if the price of the product is above 5000. The tax percentage should be 18% of the price.
  - Apply Tax **PC** to all products with a flat tax amount of 200.
- Integrate tax calculation based on the price range of the services using the following rules:
  - Apply Tax **SA** if the price range of the service is greater than 1000 and less than or equal to 8000. The tax percentage should be 10% of the price.
  - Apply Tax **SB** if the price of the service is above 8000. The tax percentage should be 15% of the price.
  - Apply Tax **SC** to all services with a flat tax amount of 100.
- The tax should be applied to each product/service individually, not on the entire bill.

Must Haves

The platform should have following functionalities for users:

- See all products and services information with their prices.
- Add/Remove a product or service to the cart.
- Clear the cart.
- View total bill (should include price, quantity, and tax on each item as well as total value of selected items)
- Place the order

Good to have

- Functionality for users to create an account
- Functionality for users to see all the orders placed
- Appropriate test cases in the backend to simulate practical scenarios that you would want to test the system for.

Note: Use an appropriate database to handle the problem.

Submission (send it to geetika@plotline.so)

- Link to the deployed application and relevant credentials to test out.
- Link to the code hosted in a private repository on Github/Gitlab/Bitbucket. (Please provide access to amit@plotline.so and rajat@plotline.so for evaluation)

Your submission will be evaluated on:

1. Functionality and robustness
2. Project structure
3. Code quality (Clarity, Readability, Best practices, Efficiency, etc.)
4. Code maintenance through the course of development on Version Control System (commits etc.)

Write back to us on geetika@plotline.so in case of any questions/ clarifications.