OneThread NodeJS Developer

1. **Microservice Architecture Design in a NodeJS Environment:**

Scenario: You are tasked with designing a microservice architecture for an online retail system. This system should manage various aspects like product catalog, user accounts, orders, and payment processing.

Question: Describe how you would architect this system using NodeJS and NestJS. Discuss your choice of database(s) for each microservice, considering the type of data and interactions between services. Explain how these microservices will communicate with each other, ensuring data consistency, security, and system reliability. Include your approach to handling transactions, especially in a distributed system environment.

Deliverables:
- A pdf document containing your answer

2. **Coding Problem:**

Task: Create a set of API endpoints for handling CRUD operations of orders. This endpoint should process order details (like user ID, product IDs, quantities, and payment information). Handle GET, POST, PUT, PATCH and DELETE requests for the endpoint. Ensure that the endpoint validates incoming data, handles exceptions, and returns appropriate responses.

Deliverables:
- A live link of the application.
- Source code for the app, along with instructions on how to set up and run the application.

Deadline:
April 9, 2024