Backend Developer - Mini POS API Challenge

Project Overview

Build a REST API for a simple Point of Sale system. You have **3 days** to deliver a working solution.

Language: PHP / JavaScript (Node.js) / Go
Delivery: Git repository with runnable code

Core Requirements

Database Design

Design tables for:

- Products (with inventory)
- Sales transactions
- Transaction items

Essential APIs

- Product management (CRUD operations)
- Process sales transactions
- View transaction history

Key Challenges

Stock Management

Handle inventory properly when sales occur. What happens when someone tries to buy more than available stock?

Transaction Logic

A sale involves multiple products with different quantities. How do you ensure data consistency?

Error Handling

What should happen when things go wrong? Invalid data, missing products, database errors?

Data Validation

Users will send bad data. How do you handle and respond to it?

Technical Expectations

Code Organization

Structure your project in a maintainable way. You can use any pattern that you can use like repository pattern or service pattern.

Database Queries

Write efficient queries and handle database connections properly.

API Responses

Return consistent, useful responses with appropriate HTTP status codes.

Business Logic

Implement the core POS functionality correctly.

What We Evaluate

Problem-Solving: How you approach the challenges
Code Quality: Readability, structure, and naming
Functionality: Does everything work as expected?
Error Handling: How you handle edge cases
Database Design: Table structure and relationships

Submission

- Working API with all endpoints
- Database schema/setup files
- README with setup instructions
- Example API calls or test data

Send the submission to developer@cazh.id

Show us how you think through problems and write clean, functional code. Focus on making it work well rather than adding extra features.