

## Backend Homework — Node.js / TypeScript / SQL

Build a small usage-based billing system with products, customers, wallets, usage events, and a cron job that updates balances.

### Requirements — Tech

- Node.js
- TypeScript
- SQLite
- Prisma
- A cron job running at least every minute

### Endpoints

1. **Submit usage**  
This endpoint receives a customer, a product, and a number of units, and records the usage event in the system.
2. **Credit wallet**  
This endpoint adds funds to a customer.
3. **Get balance**  
This endpoint returns the customer's wallet balance as maintained by the cron, returns the customer's usage details, and indicates whether the customer still has available funds.
4. **List products**  
This endpoint returns all products with their unit prices.

### Cron

The cron must run every minute and update customer balances based on the recorded usage events.

### Data

The system must be seeded with around ten customers with different balances and usage patterns, and scripts or tests must be provided to populate the database easily.

### Tests (required)

Automated tests must cover the main flows including submitting usage, adding funds, retrieving the balance, and verifying that the cron updates customer balances correctly.

### Quality Expectations

The solution must show clean and maintainable code, good architectural practices, proper input validations, and high-quality reliable tests.