

Full-Stack Developer experienced in building **scalable backend services** and **modern frontend/mobile apps**. Adept at designing distributed systems, and delivering seamless user experiences across web and mobile platforms.

Work Experience

Full-Stack Developer	Hamster POS	February 2025–Present
<ul style="list-style-type: none">Designed and implemented scalable backend microservices using DDD, Hexagonal Architecture, and CQRS patternsOwined the development of Order Service from scratch, implementing order placement with strict validation rules, cursor-based pagination, and state transition management to prevent invalid updates across orders/reservationsDesigned PostgreSQL schemas with optimized indexing and query patterns, implementing Hibernate batching and fetch strategies to eliminate N+1 queries and improve data operation performanceBuilt real-time Notification Service with WebSocket, implementing connection health monitoring, dead-connection cleanup, and error/timeout handling to ensure guaranteed delivery and optimal resource usageIntegrated Kafka with Confluent Schema Registry (Avro) for eventual consistency across microservices, enforcing strongly-typed event contracts with backward/forward compatibilityContributed to infrastructure by writing Dockerfiles for core servicesDesigned multi-layer printing ecosystem enabling custom JSON template management, printer configuration mapping, and high-fidelity receipt generation using modular rendering engine (bitmap, native ESC/POS, and hybrid) with Strategy Pattern. Implemented printer integration in Orders-Taking app for Network and Bluetooth connections with resilient connection handling to ensure smooth printing workflowsEngineered REST endpoints with robust validation and error handling, consistently enforcing domain invariants to ensure system integrity and predictable behavior.Applied core principles of readability, reusability, separation of concerns, single responsibility, and loose coupling across all designs to facilitate team collaboration and long-term maintainability.Developed Flutter Order-Taking App with secure authentication, token rotation, real-time order/reservation management, UX-critical features (urgency alarms, connection state indicators), and resilient disconnection/reconnection transitions with exponential backoff + Jitter. Integrated mobile-native featuresBuilt Customer Flutter App checkout flow with location-based delivery, cart validation, multi-currency support, and custom order/item notesNext.js admin dashboard: developed company/shop management and advanced shop setup stepper featuring nested steps, progress tracking, and auto-redirection for optimized UX		

Projects

- E-commerce app**: Full-stack e-commerce web app with **Stripe/PayPal** integration(using **Strategy** and **Simple Factory design patterns**), **Hibernate/MySQL** optimizations(incorporating **CTEs**, **Criteria API** and **tree data structure** to efficiently manage hierarchical data), **Dockerized** deployments (Docker Compose), hosted on **Railway & Netlify**.
- Microservices Application**: Used **Spring Cloud Config Server** for centralized configuration management, **Spring Cloud Service Registry (Eureka)** and **API Gateway** for dynamic service discovery and routing, and **RabbitMQ**.
- Real-time Chat Application**: Implemented **Spring WebSocket** with **STOMP** for real-time communication.

Skills

- Backend**: Java, Spring Boot, C#, Hibernate, Websocket, server-sent events, Apache Kafka, Schema registry, RabbitMQ, Redis, REST APIs, JUnit5, Mockito, Spring AI, Docker, Docker compose, AWS S3, Liquibase, Git, OAuth2,
- Architectures & Patterns**: DDD, Hexagonal, CQRS, Event-Driven, Microservices, OOP, SOLID, Design Patterns.
- Frontend (Web and Mobile)**: Next.js, React.js, Redux Toolkit, Shadcn, SWR, Tailwind CSS, Headless UI, JavaScript/TypeScript, Flutter, Dart.

Education and Certifications

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| • B.Sc. Computer Science , Lebanese University | 2022–2024 |
| • B.Sc. Physics , Lebanese University | 2019–2022 |