

JOEL TEODORO GÓMEZ

SOFTWARE ENGINEER

Backend Software Engineer with 4+ years of programming experience, focused on backend development and microservices architecture, specialized in Golang (Go).

Experienced in building end-to-end booking systems in production environments. I have worked on well-known platforms such as Andorra.com and CityXerpa, where I design and develop core backend services for hotels and bus reservations, covering search, filtering, booking, payments, cancellations, refunds, emails, and ticket changes.

I work mainly with Go, MySQL, Redis, REST, gRPC, GraphQL, and Kubernetes on Google Cloud, using GitLab CI/CD for automated deployments. I have a strong foundation in low-level architectures, distributed systems, hexagonal architecture, clean code, and performance-oriented, event-driven backend development, with additional experience in Java and Spring Boot, PostgreSQL, Kafka, RabbitMQ, Docker, Linux, C, JavaScript, and Python.

EXPERIENCE

Dribba - Backend Software Engineer (Golang)

Dec 2024 – Present

Clients / Projects: Andorra.com, CityXerpa

RESPONSIBILITIES

- Designed, developed, and maintained **backend microservices in Golang** within a **distributed, production-grade environment**.
- Took **full ownership of multiple microservices built from scratch**, from **architecture and implementation to deployment and maintenance**.
- Implemented **complex business logic** for **travel and transportation domains**, including **hotels and bus booking systems**.
- Built **end-to-end booking flows** covering **search, filtering, availability management, reservations, payments, cancellations, refunds, invoicing, and ticket changes**.
- Integrated **payment gateways (RedSys)**, handling **transaction states, retries, refunds, and failure scenarios**.
- Developed **search and recommendation systems**, including **price-based filtering, availability rules, and business-driven ranking logic**.
- Implemented **seat and availability management** to ensure **data consistency during concurrent booking operations**.
- Worked with **GraphQL, gRPC, and REST APIs**, selecting the **appropriate protocol per service**.
- Designed services following **hexagonal architecture**, applying **clean code and separation of concerns**.
- Integrated **asynchronous processing and messaging** using **queues and Pub/Sub mechanisms**.
- Developed and maintained **transactional email systems**, including **HTML templates and notification workflows**.
- Debugged, extended, and optimized existing microservices, resolving **production issues** and improving **performance and reliability**.
- **Optimized database access** by improving **query design**, applying **pagination strategies, indexing, and best practices** to achieve **high-performance data retrieval**.
- Deployed and operated services using **Docker and Kubernetes on Google Cloud**, leveraging **GitLab CI/CD for automated builds and deployments**.

KEY ACCOMPLISHMENTS

- Delivered **two critical backend microservices from scratch**, successfully **deployed to production** and supporting **core business functionality**.
- Implemented the **entire hotel booking domain**, including **availability search, room management, pricing logic, payments, cancellations, refunds, and invoicing**.
- Built the **bus reservation system**, covering **schedule search, seat allocation, promotions, ticket management, cancellations, and refunds**.
- Integrated **real-world payment processing (RedSys)** with **robust error handling and transactional safety**.
- **Improved overall system performance** by **optimizing database queries, introducing pagination, and reducing response times in high-traffic endpoints**.
- Ensured **system reliability** through **idempotent operations, retry mechanisms, and failure handling in distributed environments**.
- Contributed to improving backend quality by applying **clean architecture, performance optimizations, and maintainable code practices**.

MOST RECENT PROJECTS

EasyCab Autonomous Taxi System

Technologies: Spring Boot, Kafka, Sockets, PostgreSQL, Docker

<https://github.com/JoelTeoGom/easycab>

- Designed a distributed backend simulating autonomous taxis with **real-time sensor communication**.
- Implemented **custom socket-based protocols** and **Kafka-based messaging** for **fault-tolerant, real-time coordination**.
- Built **scalable request handling** using **dynamic Kafka topics** and **centralized system logic**.
- **Deployed the system across multiple virtual machines** to simulate **real distributed communication, network conditions, and service coordination**.

Custom HTTP Server (from scratch)

Technologies: Go, Concurrency, TCP, net/http

<https://github.com/JoelTeoGom/my-http-server>

- Built a **custom HTTP server from scratch in Go**, implementing core HTTP concepts over TCP connections.
- Gained a deep understanding of **HTTP protocol internals**, request/response lifecycle, headers, routing, and connection handling.
- Worked directly with **TCP networking, goroutines**, synchronization primitives, and maps to handle concurrent requests efficiently.
- Strengthened low-level knowledge of **how web servers work internally**, including concurrency, performance, and network communication.

HTMX E-commerce Application

Technologies: HTMX, Go (Golang), PostgreSQL, Docker, JWT, Tailwind

<https://github.com/JoelTeoGom/htmx-golang-ecommerce>

- Developed a **lightweight e-commerce platform** using **server-side rendering** with HTMX, minimizing JavaScript complexity.
- Designed and implemented the **backend in Go**, handling routing, business logic, and database interactions.
- Implemented **authentication and authorization** using **JWT**, securing protected routes and user sessions.
- Built core e-commerce features including **product management, cart handling, and order processing**.
- Applied **security best practices** to protect against **XSS, CSRF, and SQL injection**.
- Containerized the application using **Docker**, enabling consistent local development and deployment across environments.

SKILLS

- Fast learner | Team player | Adaptability | Problem solving | Active listening | Ownership | Communication
- Java (+4 years) | Go (Golang) | C | Python | JavaScript | Node.js
- ReactJS | Spring Boot | RabbitMQ | Kafka | gRPC | GraphQL | REST | Webhooks | Sockets
- PostgreSQL | MySQL | Redis | Stripe | RedSys | Microservices architecture | Event-driven architecture | Hexagonal architecture | RESTful APIs |
- HTTP/HTTPS | WebSockets
- Linux | Bash | Git | Docker | Kubernetes | Google Cloud Platform (GCP) | Cloud Run | GitLab CI/CD | GitLab Runner | Jira
- Object-oriented programming (OOP) | HTML/CSS | Email templates | JSON | Unit Testing | Clean code | Performance optimization

EDUCATION

Software engineering degree at Universitat Rovira i Virgili

Sept. 2020 - June 2024 [Tarragona, Spain]

LANGUAGES

Spanish, Catalan, English