FABIEN TANGUY

Senior Web Systems Architect | Performance, Reliability & Data Engineering

+33 06 52 33 32 12 | tanguyfab@gmail.com | fabien-tanguy.github.io

1) Profile

Senior consultant with over 15 years of experience, specialising in the design and stabilisation of high-stakes web platforms. My approach is based on architectural pragmatism: securing the entire value chain, from solid data foundations to fine-tuning the user experience.

As an expert in modern ecosystems (Next.js, React), I do more than just deliver interfaces: I guarantee their fluidity, speed (Web Vitals), and resilience by placing intelligence in the right place. My role is to secure the transition from business requirements to technical implementation by leveraging the power of the relational model (SQL) for data reliability, while mastering critical Front-end performance levers (SSR/ISR, asset optimisation).

2) My Added Value: Reliability & Technical Pragmatism

Reliability through data (SQL-Centric)

Far from considering the database as simple storage, I make it the guarantor of business consistency.

- **Securing at the source:** Using SQL constraints, transactions, and views to make business rules explicit and immutable.
- **Backend Sobriety:** Designing services that focus on the essentials, limiting unnecessary abstractions that complicate maintenance and debugging.

Modernisation Strategies

I prioritise operational efficiency.

- **Bespoke Migration:** Capability to lead global refactors ("Big Bang") or progressive transitions depending on the business context and delivery imperatives.
- **Rational Arbitrations:** Choice of architectures (Modular monolith vs. Services) based on the reality of needs rather than technological trends.

Strategic Front-End Expertise

The front-end as the convergence point of experience and performance.

- **Interactivity Optimisation:** Implementing smooth journeys (**SSR/ISR**) based on healthy state management and rigorous interface contracts.
- **Field Resilience:** Designing solutions capable of functioning in a degraded or offline mode (**Offline-first**), a critical challenge for mobile business tools.

3) Key Skills

Levels: **Expertise** = pilot and challenge; **Mastery** = autonomous; **Knowledge** = regular use.

Domain	Technologies / Concepts	Level	Examples / Context
Data engineering	SQL (PostgreSQL, Oracle, T-SQL), Integrity constraints, Transactions, Complex views, Embedded business logic	**Mastery**	Making business rules explicit at the data level to guarantee auditability and prevent backend regressions.
	Optimisation (EXPLAIN/ANALYZE), Auditability. Non-DBA: Ops in tandem.	**Knowledge**	
Backend & API	Node.js	**Mastery**	Enterprise portals, APIs, integrations. Designing lightweight and robust backends relying on a solid data layer.
	Go, Ruby on Rails, .NET Core	**Knowledge**	
Frontend	Core Web Vitals (LCP/FCP/TTI), caching, perceived speed, production robustness. PWA, Service Worker, local persistence, synchronisation.	**Expertise**	AXA critical journeys, FDJ UNITED peak loads, SOLERA Offline-first.
CI/CD & Infra	GitLab CI, Azure DevOps, Jenkins, Oracle Cloud (OCI),	**Mastery**	Industrialisation, delivery pipelines.
Qualité & Delivery	Refactoring, code review,, documentation	**Expertise**	Technical referent, delivery acceleration.

4) Vision & Principles: Efficiency through Pragmatism

- **Model Longevity:** A well-thought-out data schema often outlives several versions of the code. Stabilising the data means securing the product for years to come.
- **Efficiency at the Source:** Before multiplying cache layers or Front-end reactivity, I verify the efficiency of the queries. A well-placed index or a SQL query optimised after analysis often solves performance issues more durably.
- **Architectural Modularity:** Transforming a function call into a network call (Micro-services) adds a frequently underestimated complexity. I prioritise code modularity over physical system decoupling, except in cases of extreme scalability needs.
- **Modernisation Strategy:** Whether it is a complete refactor or a progressive replacement, the choice must be guided by the maintenance cost and the actual technical debt. My role is to provide the most cost-effective arbitration for the business.

5) Case Studies (selection)

FDJ UNITED (La Française des Jeux) – Squad Technical Referent

Dec 2021 – Jan 2025 | Regulated online gaming platform | High traffic, extreme peaks

- **Context:** Modernising the fdj.fr gaming journey with zero tolerance for instability during peaks (draws/jackpots) and compliance requirements.
- **Challenge:** Managing the complexity of hybrid user journeys (Logged-in vs. Prospect) on a legacy foundation where tracking was incomplete, unstable, and represented a major technical debt (requiring a dedicated ticket for every new feature).
- **Contributions:**
    - **Generic Personalisation Architecture:** Designed a dynamic rendering engine capable of handling "User" vs. "Non-logged-in" journey variants in an agnostic manner, thus avoiding business logic duplication.
    - **Engineering a Unified Tracking Library:** Created a standardised library to fill legacy blind spots. This solution automated behavioural data collection across the entire conversion funnel.
    - **Delivery Standardisation:** Integrated tracking as a cross-cutting component, removing friction for developers and guaranteeing total visibility over critical journeys.
- **Impact:**
    - **Time-to-Market Acceleration:** Elimination of the workload related to feature-specific tracking, freeing up development time for business value.
    - **Data Quality:** 100% coverage of gaming journeys, allowing precise performance analysis of conversion funnels.

ACCOR GROUP – Lead Front-end / Solutions Architect

Dec 2018 – Oct 2021 | Internal workplace portal | 15 languages, shared terminals

- **Context:** Design and "from scratch" implementation of a centralising portal (Dashboard, KPIs, Training docs, customisable App Launcher) for group employees. Deployed on shared terminals in hotels ("kiosk devices"), the project required absolute fluidity (zero latency) and a major evolution of the data model to move from a MVP to industrial management of the entire estate and different brands.
- **Challenges:**
    - **Critical Performance:** Guaranteeing a latency-free experience on shared terminals and heterogeneous networks.
    - **Data Scalability:** Pivoting the post-MVP data model to integrate the specificities of different hotel chains and data sources.
- **Contributions:**
    - **High-Performance Front-end Architecture:** Designed a reactive interface with no perceived latency, optimised for short and frequent user sessions on shared terminals.

    - **Post-MVP Architectural Pivot:** Led the global refactor of the data model after the initial phase to absorb the complexity of various hotel chains and diverse data sources.
    - **Data Engineering & Backend:** Worked on the SQL layer (stored procedures, schema optimisation) to align complex business rules (user/hotel lifecycle, fine-grained permissions) and guarantee minimum response times.
    - **Access Securing:** Implemented specific SSO flows for multi-user environments, ensuring security and rapid reconnection.
- **Impact:**
    - **Global Scalability:** Successful transition from a prototype to an industrial platform capable of managing the group's entire employee estate.
    - **Operational Efficiency:** Elimination of latency on workstations, allowing instant access to essential hotel business tools.
    - **Domain Reliability:** Stabilisation of business rules at the data level, drastically reducing inconsistencies in permissions and KPIs.

SOLERA GROUP – Web Consultant – Lead Technical Front-end

July 2017 – June 2018 | PWA

- **Context:** Development of an offline-first Progressive Web App (PWA) for insurance experts to manage home insurance claims directly in the field.
- **Challenge:** Guaranteeing reliable data entry and robust synchronisation in areas with low connectivity (dead zones) while managing highly complex and evolving business form logic.
- **Contributions:**
    - **Offline-first Architecture:** Designed and implemented local persistence and synchronisation workflows via Service Workers to ensure service continuity without a network.
    - **Dynamic Form Engine:** Developed a native JS library driven by Backend API schemas, allowing business rules to be reflected without weighing down the front-end.
    - **Structured Data Capture:** Created an on-site image annotation module to feed intelligent quoting tools.
- **Impact:**
    - **Operational Continuity:** Total elimination of field data entry losses and immediate productivity gains for experts.
    - **Data Integrity:** Perfect alignment between field findings and quoting engines thanks to backend-driven validation.

AXA GROUP – Web Consultant – Front-end

Feb 2016 – April 2017 | Regulated Journeys & Compliance

- **Context:** Integral refactor of life insurance payment and withdrawal modules in a highly regulated banking environment.
- **Challenge:** Strictly aligning Front-end validation logic with complex business rules to guarantee regulatory compliance without degrading the user experience.
- **Contributions:**
    - **Compliance Alignment:** Implemented application validation logic synchronised with business constraints and current compliance rules.
    - **Traceability & Auditability:** Designed and deployed an exhaustive tagging plan to ensure total traceability of user interactions for audit purposes.
    - **Critical Journey Optimisation:** Ergonomic and technical refactor of financial modules to secure complex transactions.
- **Impact:**
    - **Regulatory Securing:** Guaranteed compliance of online payment and redemption operations.
    - **Analytics Tracking Reliability:** Full visibility of conversion funnels via precise tracking with no impact on performance.

6) Certifications & Diplomas

- Oracle Database SQL Certified Associate (1Z0-071) (2025)
- Oracle APEX Developer Certified Professional (2025)
- Oracle Cloud / Autonomous Database Foundations (2025)
- IBM SkillsBuild – Cybersecurity Fundamentals (2025)
- **CNAM Paris - Professional Certificate in Web Programming** • 2010
- **Cambridge - First Certificate (FCE), Cape Town** • 2000
- **École Internationale Tunon (Paris) - Bachelor in Hospitality Management** • 2000
- **Lycée Jules Ferry (Versailles) - BTS Electronics** • 1998