



LOGIQUE

TECHNICAL CAPABILITIES AND TECHNOLOGY ECOSYSTEM

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Engineering Solutions, Not Just Writing Code.

OUR VISION

To be a strategic partner in digital transformation by delivering robust, scalable, and custom-built technology solutions.

OUR MISSION

To provide our clients with a competitive edge by building and modernizing applications using best-in-class software engineering practices.

OUR FOCUS

We believe the best solutions are born from a deep understanding of business challenges, not from the limitations of a platform. Our approach gives us the freedom to engineer the most optimal solution.

Structure Organization





Our End-to-End Modernization Process

PHASE 1

Assessment & Discovery

- ✓ Legacy application analysis (architecture, tech stack, technical debt).
- ✓ Mapping business requirements and critical pain points.

PHASE 3

Infrastructure & Toolchain Procurement

- ✓ Cloud Provider selection (AWS, GCP, Azure).
- ✓ Environment setup and DevOps toolchain configuration (Kubernetes, Terraform, CI/CD tools).

PHASE 5

Deployment, Monitoring & Optimization

- ✓ Automated Deployment
- ✓ Proactive System Monitoring
- ✓ Continuous Optimization

PHASE 2

Strategic Planning & Architecture Design

- ✓ Defining the modernization strategy (e.g., Re-architect, Re-platform, Rebuild).
- ✓ Designing the target cloud architecture (e.g., Microservices, Serverless, Event-Driven).

PHASE 4

Agile Development & Implementation

- ✓ Custom code development using modern languages and frameworks.
- ✓ System integrations via robust APIs.

Our Development DNA

Secure, Performant, Agile

This is the DNA of every line of code we write and every system we release. We build our process on three reinforcing pillars: Integrated Security, Measured Performance, and Reliable Deployment Speed



Security by Design

Security isn't an afterthought, it's our foundation. We integrate security practices at every step of the way.

Key Points

1. Standards & Regulatory Compliance

Design guided by the OWASP Top 10 and data privacy regulations like GDPR/PDP.

2. Automated Security Testing

Our pipeline includes both SAST (static code analysis) & DAST (runtime analysis) for early vulnerability detection.

3. Secure Infrastructure

Implementing the Principle of Least Privilege, centralized secret management, and infrastructure hardening.

Performance-Oriented

Performance is a feature. We design, measure, and optimize our systems for a responsive user experience.

Key Points

1. Efficient Architecture Design

Utilizing smart caching (Redis), query optimization, and the right architecture for low latency.

2. Capacity Validation

Conducting Load & Stress Testing (using JMeter, k6) to ensure the system is ready for peak traffic.

3. End-to-End Optimization

A holistic focus on performance, from the backend and frontend (via CDN) to the underlying infrastructure.

Agile & Fast Deployment

We achieve speed through smart automation, not by sacrificing stability or security.

Key Points

1. Full CI/CD Automation

A completely automated build, test, and deploy process to eliminate manual errors and ensure speed.

2. Consistency with Docker

Applications are containerized with Docker for scalability across all environments.

3. Low-Risk & Phased Releases

Implementing Canary or Blue-Green deployment strategies for safe, zero-downtime releases.



CASE STUDIES

Building an E-Learning & Certification from Scratch with Microservices on the Azure Ecosystem

OUR SOLUTION & PROCESS

1. Domain-Driven Design (DDD) & Service Design

We mapped the e-learning business workflow into logical domains. This resulted in a clear microservice decomposition: Course Service, Enrollment & Payment Service, Learning Service, and a dedicated Certification Service.

2. Cloud-Native Architecture Design on Azure

We designed a cloud-native microservices architecture entirely on the Microsoft Azure ecosystem. Azure API Management served as the primary gateway to manage and secure all API access. An event-driven workflow was central to the design: when a user completes a course, the Learning Service publishes a CourseCompleted event to Azure Service Bus.

3. Development & Implementation on Azure

- Each service was developed using .NET Core, containerized with Docker, and deployed independently to Azure Kubernetes Service (AKS).
- Video content and course materials were securely stored in Azure Blob Storage and distributed globally with low latency via Azure CDN.
- The certificate generation process (as a PDF) was handled by a serverless Azure Function, triggered by events from the Service Bus—a highly efficient and cost-effective solution.
- The entire CI/CD process, from code commit to deployment on AKS, was fully automated using Azure Pipelines within the Azure DevOps ecosystem.
- Leverage trace and observability system while enhancing the security using service mesh Istio on AKS



CLIENT

A Corporate & Professional Training Institute (BUMA).



THE CHALLENGE

The client needed to pivot from in-person training to a digital-first business model. They required a premium e-learning platform to sell paid courses to professionals, accurately track user progress, and critically, automatically issue official certificates upon completion. The technical foundation had to handle enrollment spikes, reliably stream video content, and allow for future modules (like live webinars or simulations) to be added without disrupting the existing system.

RESULTS & BUSINESS IMPACT

- 1 Automated Certification System: 100% of certificates are now issued instantly and automatically upon course completion, eliminating manual administrative work and enhancing program credibility.
- 2 Reliable Learning Experience: The platform successfully served 5,000+ concurrent video streaming users during a major course launch, thanks to the scalability of AKS and the efficiency of Azure CDN.
- 3 Rapid Time-to-Market: New modules, such as "corporate training portals" or "advanced assessment engines," can be developed and launched as new microservices in a matter of weeks.
- 4 Integrated Ecosystem: Leveraging the full Azure ecosystem simplified infrastructure management, security (via Azure Active Directory), and billing, providing a cohesive and manageable operational environment.

TECHNOLOGY STACK



Building a Real-Time Auction Platform from Scratch with an Event-Driven Architecture

OUR SOLUTION & PROCESS

1. Discovery & Prototyping (Foundation Phase)

We started with intensive workshops to define the entire user journey, from registration and item listing to the final bid and payment. We delivered interactive prototypes (using Figma) to validate the core business logic and user experience before writing a single line of code.

2. Architecture

We architected a system from scratch using an event-driven architecture (EDA) to guarantee real-time responsiveness and future scalability. The system was designed as a set of decoupled microservices (Bidding, Auction Management, User Notifications, Payment Gateway etc) communicating asynchronously.

3. Build & Procure

- ✓ We built the core backend microservices in Node.js for its high performance in handling concurrent I/O operations.
- ✓ We chose RabbitMQ as the central message broker to manage event streams, creating a resilient "single source of truth" for all bidding activity.
- ✓ A real-time frontend was developed using React.js/Vue and WebSockets to push live updates (new bids, countdown timers) to all users instantly.
- ✓ The entire infrastructure was provisioned on Amazon Web Services (AWS) using Terraform (Infrastructure as Code) and deployed the app using auto-scaling group to provide high availability.
- ✓ Added Web Application Firewall as an Intrusion Prevention System to secure the application.



CLIENT

- Auction Express - Thailand
- JBAP - Philippines
- Toyota Auto Auction- Philippines
- UC Auction - Indonesia



THE CHALLENGE

The client had a strong business concept but no existing technology. They needed to build a secure, highly scalable, and real-time digital auction platform from the ground up. The primary requirement was to provide a seamless, trustworthy bidding experience to rival established auction houses, ensuring no bids were ever missed, especially in the final, frantic moments of an auction.

RESULTS & BUSINESS IMPACT

- 1 Launched a fully functional, market-ready platform from concept to production in 4 months.
- 2 Achieved true real-time bid updates, pushed to all clients in under 300ms - 600ms, creating a dynamic and trustworthy user experience.
- 3 The platform successfully handled over 3000 - 5000 concurrent users in its first major auction without any performance degradation.
- 4 The event-driven nature of the system provided a full audit trail of every bid, enhancing transparency and trust with high-value clients.

TECHNOLOGY STACK



Node.js(Expressjs)



React.js(Next)



Vue(Nuxt)



WebSockets (Socket Io)



RabbitMQ



Redis



PostgreSQL



Docker



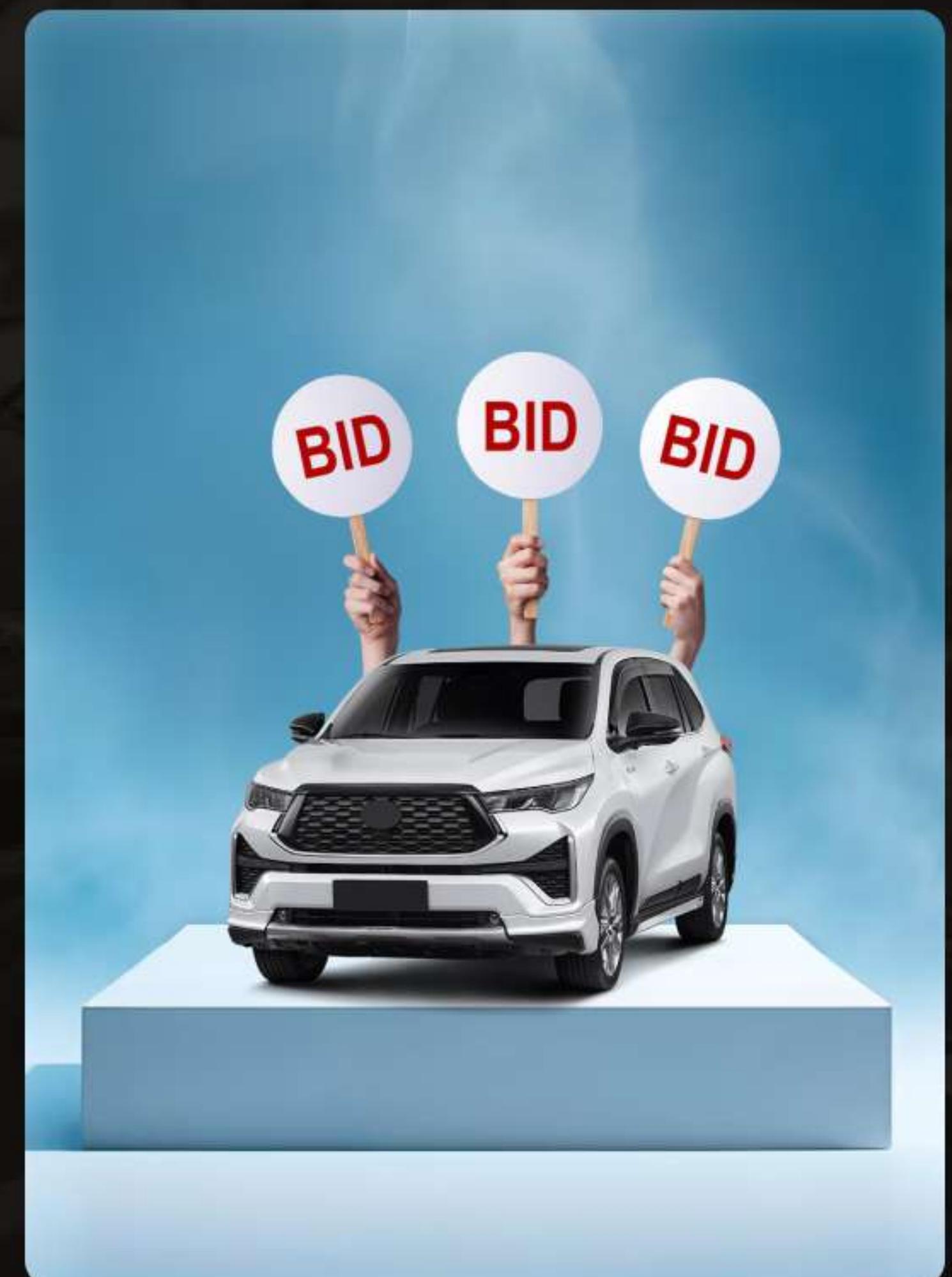
Mongodb



API Gateway (Krakend)



Laravel



Legacy System Rebuild

Hino in The Box Apps

OUR SOLUTION & PROCESS

1. Assessment

- ✓ Reviewed the existing React Native codebase and dependency chain.
- ✓ Identified technical debt, outdated libraries, and compatibility issues that hindered feature development.

2. Rebuild & Architecture

- ✓ Rebuilt the application entirely using Flutter to ensure long-term maintainability, better performance, and multi-platform capability (Android, iOS, and Web).

3. Implementation

- ✓ Migrated all core functionalities from the old app into Flutter.
- ✓ Introduced a responsive UI/UX design adaptable for both mobile and web.
- ✓ Set up CI/CD pipelines for web app deployment to streamline releasing new versions.



CLIENT

PT Hino Finance Indonesia



THE CHALLENGE

The original Hino In The Box mobile app was developed in React Native (Android only) and had been dormant for a period. When development resumed in late 2024, the outdated React Native version and legacy dependencies made adding new features difficult. Additionally, the client requested a web app and iOS version, which were not supported by the existing setup.

RESULTS & BUSINESS IMPACT

- 1 Delivered cross-platform apps (Android, iOS, and Web) from a single codebase.
- 2 Improved app performance with faster load times and smoother user experience.
- 3 Enabled easier future feature maintenance and integration thanks to a modernized codebase.

TECHNOLOGY STACK



Flutter



Dart



Firebase



Rest API



CI/CD



Local Auth



Building the Tokoparts E-commerce Platform with Digital Integration Hub

OUR SOLUTION & PROCESS

1. Central Integration Layer

- Instead of fragile point-to-point connections, we built an intelligent intermediary layer. Asynchronous data exchange with supplier APIs and internal systems is managed by a Message Broker (like RabbitMQ). This ensures that the platform remains fast and fully operational, even when communicating with dozens of external systems simultaneously.

2. The Right Tech for the Right Job (Polyglot Approach)

- We leveraged the best technology for each task :
 - ✓ PHP Laravel: For the core B2C/B2B e-commerce backend, customer portals, and complex business logic.
 - ✓ Node.js: To build a high-performance dedicated microservices for ingesting real-time price data from supplier feeds.
- ✓ Polyglot Persistence:
 - ✓ Using MySQL for transactional order data and PostgreSQL for product & pricing catalog.

3. Modern & Scalable DevOps Foundation

- All services were containerized with Docker. This allows critical services, like inventory updates or payment processing, to scale independently to handle peak demand without affecting the overall user experience.



CLIENT

Tokoparts - A Major Automotive Spare Parts Distributor



THE CHALLENGE

Tokoparts needed a unified digital platform to serve both B2C (individual car owners) and B2B (workshops/mechanics) customers. Their core problem was managing immense complexity, a catalog of over 2 Million SKUs from hundreds of different suppliers, each with its own separate system.

Data across their internal SAP, WMS, and CRM made real-time stock and price information impossible, hindering efficiency and customer trust.

RESULTS & BUSINESS IMPACT

1 The Most Comprehensive & Accurate Parts Catalog

Real-time integration with hundreds of supplier APIs created a single source of truth for stock and pricing, establishing Tokoparts as the most reliable player in the market.

2 Streamlined Order Fulfillment

Seamless, automated communication with the WMS and SAP systems reduced order processing time by 60% and minimized human error in the warehouse.

3 Empowered B2B Partners

The new platform provided a dedicated portal and APIs for workshops (B2B clients), allowing them to check inventory and place orders directly from their own systems, dramatically increasing partner loyalty.

4 A Scalable Foundation for Growth

The modular architecture allows Tokoparts to easily onboard new suppliers or integrate with new logistics partners in weeks, not months, providing a true competitive advantage.

TECHNOLOGY STACK



PHP
Laravel



Node.js



MySQL



PostgreSQL



MongoDB



Docker



Jenkins
(CI/CD)





Deployment, Monitoring & Optimization

How we maintain the deployment and go-live monitoring

When we bring a new application live, our goal is to make the process smooth, safe, and invisible to the end user. We use automated delivery pipelines so that every change is tested and deployed consistently, reducing human error and downtime. Once the system is live, we continuously watch over its health with near-real-time dashboards and alerts, allowing us to detect and fix issues before they affect customers. We also regularly fine-tune performance, improve security, and update the system so it keeps running efficiently as demand grows.

Our Approach in Action

1. Automated Deployment

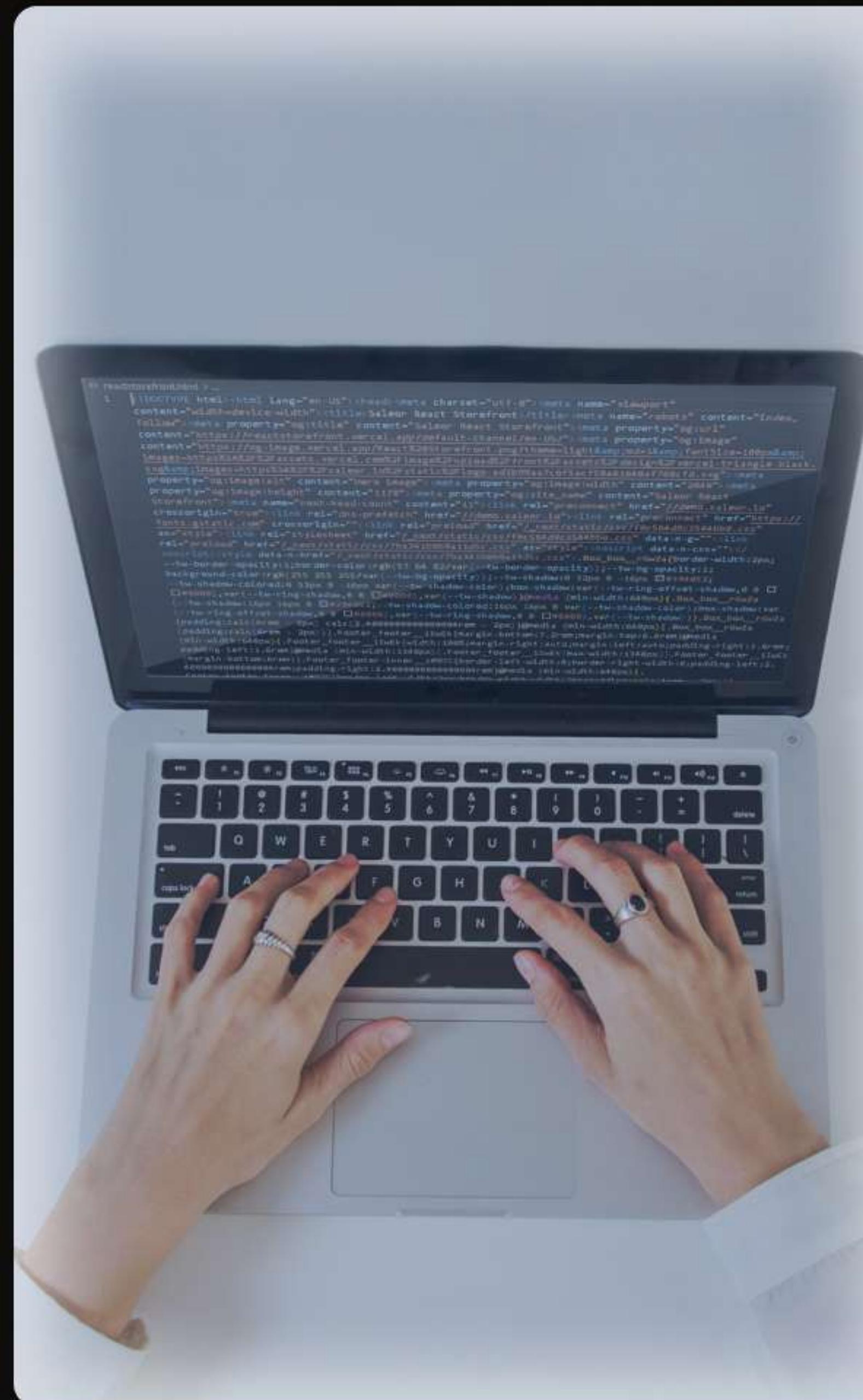
- ✓ CI/CD Pipelines using Gitlab CI / Jenkins for automated build, test, and deploy.
- ✓ Infrastructure as Code (Terraform, Ansible) for consistent and repeatable environment setup.
- ✓ Containerized Delivery with Docker and Kubernetes for scalable, isolated deployments.
- ✓ Blue-Green / Canary Releases to minimize downtime and reduce deployment risk.

2. Proactive Monitoring

- ✓ Real-Time Observability using Prometheus + Grafana dashboards.
- ✓ Centralized Logging via Loki / ELK for quick root cause analysis.
- ✓ Alerting & Incident Management integrated with Slack / Uptimerobot

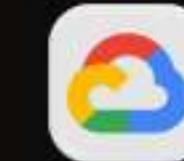
3. Continuous Optimization

- ✓ Automated Scaling based on live performance metrics.
- ✓ Security Hardening with WAF, vulnerability scanning, and SonarQube code quality checks.
- ✓ Performance Tuning from ongoing profiling and load testing.
- ✓ Post-Deployment Review for feedback loops and process improvement



Our Core Technology Stack

CLOUD



Google Cloud



AWS



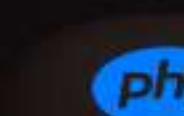
Microsoft Azure

BACKEND



Node.js

Express.js, Fastify, Typescript, Javascript



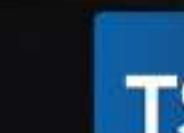
PHP

Laravel, Cake PHP, Codeigniter etc

FRONTEND



HTML5, CSS3, JavaScript
ES6+



TypeScript, JS Framework
React, Next.js, Vue.js, Nuxt



CSS Framework & UI Kit
Tailwind CSS, Material UI, Shadcn UI



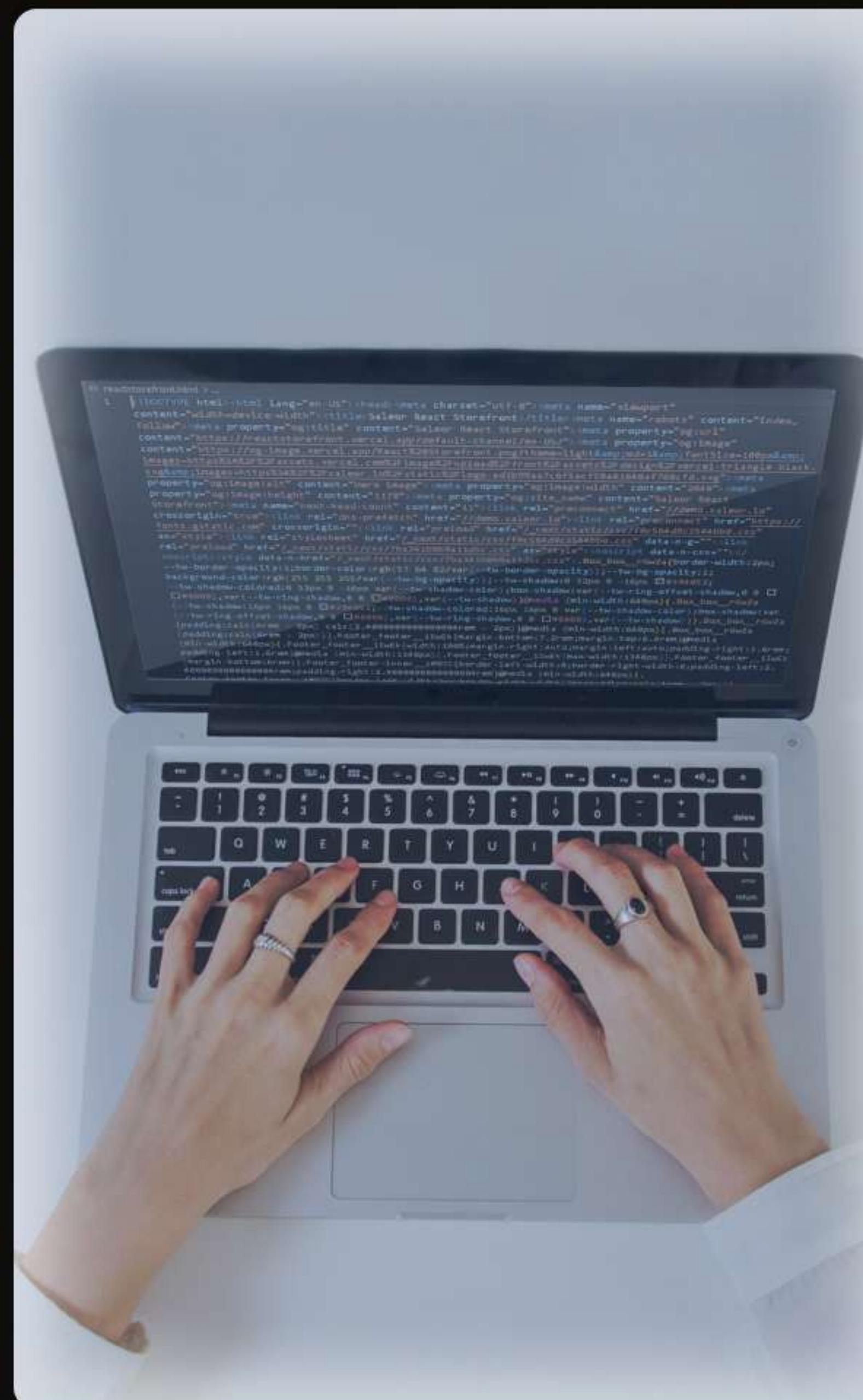
Tools & Libraries
Vite, Vitest, Jest, Storybook



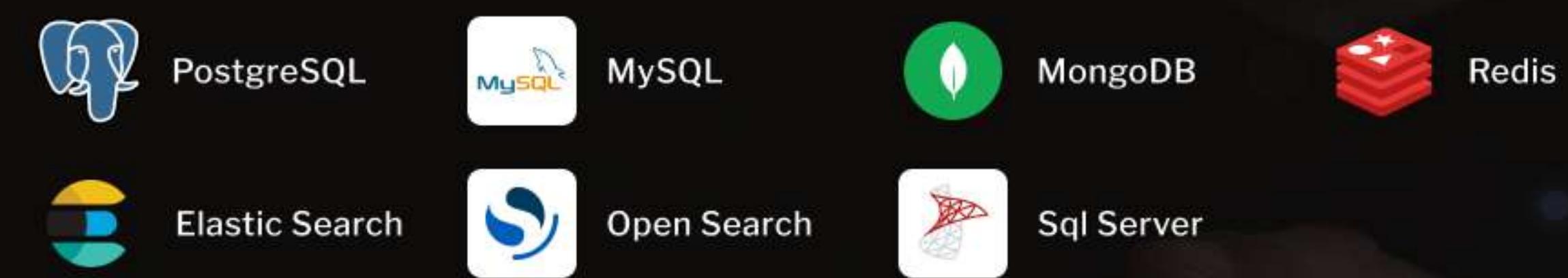
CMS
WordPress, Strapi, Payload



Dart, Flutter



DATABASES



DEVOPS & CONTAINERIZATION



MOBILE



Our Competitive Advantage



Deep Technical Expertise

Our team consists of senior software engineers with proven experience in complex system engineering.



Full Control & Transparency

Clients get complete control over the architecture and codebase, with no vendor lock-in from proprietary platforms.



Focus on Business Impact

We measure success by tangible outcomes: speed, scalability, and cost-efficiency not just project completion.



Mature Agile Methodology

Our adaptive process ensures a rapid feedback loop and full alignment with stakeholders.

THANK YOU

**Let's Connect and Build Valuable
Digital Solutions Together.**

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