

# CASE STUDY

## From Vision to Implementation: A Scalable Corporate Wellness Platform Using Spring Boot & React.js

### Challenges

Corporate organizations face growing demands to provide holistic wellness services to their employees, spanning diagnostics, fitness, mental health, and lifestyle support. Managing these offerings has been complex due to:

- **Fragmented Systems:** Corporations rely on multiple wellness providers without a unified platform to manage services, subscriptions, or employee utilization.
- **Manual Processes:** Employee onboarding, service subscriptions, and reporting were cumbersome, often requiring repetitive data entry and Excel-based tracking.
- **Lack of Real-time Insights:** Existing solutions did not provide dynamic dashboards or analytics, limiting corporate admins' ability to monitor service usage and employee engagement.
- **Limited Flexibility:** Adding new services, providers, or corporate clients required significant effort, hindering scalability.
- **Authentication Challenges:** The absence of modern login methods (e.g., Single Sign-On) created friction for employees and administrators.
- **Payment Complexity:** Supporting both prepaid corporate-funded models and self-pay employee transactions (through SSO and non-SSO providers) required a unified and secure payment management system.

### Tech Stack:

Spring Boot, JPA/Hibernate, PostgreSQL, React.js, Material UI, Typescript, Redux RTK query, Spring Security, IDFC Razorpay Integration, AWS SES, Maven, RESTful APIs with RBAC

### Solutions

To address these issues, the project team designed and implemented the Wellness Application, a scalable Spring Boot and React.js platform connecting corporates, employees, and wellness providers.

Key features included:

- **Unified User Management:** Onboarding workflows for Clients' Admins, Corporate Admins, and Employees with "Save" vs. "Publish" functionality for flexible account activation. Bulk employee upload via Excel simplified large-scale onboarding.
- **Service Provider & Service Management:** Centralized onboarding of providers (labs, gyms, hospitals) and their service offerings, including service descriptions and pricing.
- **Corporate Subscriptions:** Corporations could subscribe to specific services on behalf of employees, with clear prepaid vs. self-pay differentiation in the employee dashboard.
- **Service Requests & Payments:** Employees could request services, track their status, and pay via integrated Razorpay (for non-SSO providers). Prepaid services were automatically reconciled against the corporation's advance balance.
- **Dashboards & Reporting:** Interactive dashboards for Corporate Admins and Employees with real-time insights on service utilization, engagement rates, upcoming events, and budget tracking.
- **Dynamic Picklists:** A configurable picklist management system to handle hierarchical data like Country, State, and City, eliminating hardcoded dependencies.
- **Secure Authentication:** Support for both SSO and traditional email/password logins, with strict role-based access control (RBAC).
- **Future-Proof Architecture:** Built with modular microservice principles, ensuring easy scalability and adaptability for new services and integrations.

### Benefits

The benefits that the client achieved are as follows:

- **Streamlined Corporate Wellness Management:** Corporates gained a single platform to manage employee onboarding, subscriptions, and payments.
- **Enhanced User Experience:** Employees accessed a modern, intuitive dashboard to explore, request, and track wellness services.
- **Real-Time Insights:** Corporate admins benefited from graphical dashboards showing service utilization, employee engagement, and prepaid balance tracking.
- **Scalability & Flexibility:** Architecture designed to support thousands of corporates, hundreds of providers, and hundreds of thousands of employees.
- **Secure & Compliant:** Robust password hashing, encrypted data storage, and RBAC ensured secure operations aligned with industry standards.
- **Reduced Manual Effort:** Automated reporting, bulk employee uploads.