Technical Documentation

Project-Portfolio

Overview

This project is a **modular, full-stack, and production-ready developer portfolio system**, composed of:

- A **client-facing frontend** (`portfolio-client`) for showcasing projects, skills, contact, etc.
- An **admin-facing dashboard** (`portfolio-admin`) for managing portfolio data.
- A **unified backend** (`portfolio-backend`) built with Spring Boot, integrated with PostgreSQL and Supabase Storage, exposing REST APIs for both frontends.

Technologies Used

Shared Tech

Category	Stack/Tools
SCM	Git + GitHub
Build Tool	Maven (backend), Vite (frontend)
Versioning	SemVer + Git tags
Linting/Formatting	ESLint, Prettier
CI/CD	GitHub Actions
Deployment	Vercel (frontend), Railway (backend)

Client Frontend (`portfolio-client`)

Area	Stack
Framework	React 19 + Vite
Styling	SCSS + Bootstrap 5
State	React Context API
Animation	Framer Motion
Routing	React Router DOM v7
Translation	i18next
HTTP Client	Axios
Form Handling	React Bootstrap

Admin Frontend (`portfolio-admin`)

Area	Stack
Framework	React 19 + Vite
Routing	React Router
Auth	JWT + Protected Routes
UI Library	Bootstrap Admin Dashboard
File Upload	Supabase Storage Integration
DataGrid	React Table or MUI (optional)

Backend (`portfolio-backend`)

Area	Stack
Language	Java 17
Framework	Spring Boot 3
ORM	Spring Data JPA (Hibernate)
DB Migration	Flyway
DB	PostgreSQL (Supabase)
REST Docs	Swagger
Mapper	MapStruct
File Storage	Supabase Buckets
Validation	Hibernate Validator
Testing	JUnit 5, Mockito
Auth (optional)	Spring Security + JWT

Deployment Options

Component	Platform	Method
Client Frontend	Vercel	Vite + GitHub CI/CD
Admin Frontend	Vercel (private)	Auth + protected dashboard
Backend API	Railway / Render	Java service
Database	Supabase (PostgreSQL)	DB + file uploads
File Uploads	Supabase Storage	via API or SDK

Testing

Layer	Test Type	Tech
Unit	JUnit + Mockito	Services
Web	WebMvcTest	Controllers
DB	DataJpaTest	Repositories

Status

➢ Frontend – Completed

➢ Admin Panel – Under development

➢ Backend – Under development