

ACE Platform - One-Page App Summary

What it is

ACE Platform is a monorepo web app with a React frontend and a Fastify backend.

It supports trainee operations with role-aware flows and a DDD/clean-architecture backend structure.

Who it's for

Primary users: trainees/students tracking daily activity, and admins managing trainee performance and operations.

What it does

- Login flow with JWT issuance and client-side token storage.
- Trainee dashboard UI with stats, weekly hours, worklogs, and meetings.
- Admin panel UI with tabs for students, worklogs, LeetCode, meetings, concerns, and requests.
- Sidebar navigation for attendance, worklogs, reports, blog posts, LeetCode, meetings, concerns, and requests.
- Backend user APIs: health check, create user, get user by ID.
- MongoDB persistence via Mongoose schema + repository mapping.
- Not found in repo: implemented backend endpoints for most admin/user dashboard data routes used by frontend services.

How it works (repo-evidenced architecture)

Components/services

- Frontend: React + Vite + React Router + React Query + Redux Provider + AuthContext + Axios service layer.
- Backend: Fastify app, auth/user routes, controllers, application use cases, domain entities/errors, Mongo repo.
- Data store: MongoDB via Mongoose (`UserModel`).

Data flow

1. User signs in from frontend `Login` page.
2. `authService.login` posts to `/api/auth/login`.
3. `AuthController` calls `LoginUser` use case.
4. Use case checks user via `MongoUserRepository`, validates password, then issues JWT.
5. Frontend stores token in `localStorage`; Axios interceptor adds `Authorization: Bearer <token>`.
6. Protected UI pages render; backend user APIs serve health/user data.

How to run (minimal)

1. From repo root: `npm install`
2. Start frontend: `npm run dev:frontend`
3. Start backend: `npm run dev:backend`
4. Optional env vars from code: `PORT`, `HOST`, `DATABASE_URI`, `JWT_SECRET`, `JWT_EXPIRES_IN`, `VITE_API_URL`
5. Not found in repo: documented `.env.example` and production deployment/run instructions.