

KTS App Summary (Repo-Evidenced)

What it is

KTS (ClassBridge) is a React Native school management app built with Expo and Supabase. It unifies academics, operations, and communication for school staff and students.

Who it's for

Primary persona (explicit single persona): Not found in repo.

Evidence-backed users: super admin, admin/teacher, student, and driver roles.

What it does

- Role/capability-based access and route protection across app screens.
- Attendance, timetable, syllabus, tasks, assessments, and progress tracking.
- Fees and finance workflows, including invoices and finance module screens.
- Announcements and push notifications via Supabase functions.
- Learning resources support (PDF/video) and AI-assisted test generation/chatbot.
- Transport operations: buses, drivers, assignments, and live bus tracking.

How it works (compact architecture)

- UI layer: Expo Router routes in app/* map to feature screens in src/features/*.
- App shell: app/_layout.tsx wires QueryClient, Auth, Theme, notifications, and error boundary.
- Data layer: hooks/services call src/lib/supabase.ts; React Query handles cache/retries.
- Backend: Supabase Postgres + RLS with migrations in supabase/migrations/*.sql.
- Server logic: Edge Functions in supabase/functions/* (tasks, notifications, transport).
- Flow: sign in -> profile lookup -> capability-gated navigation -> table queries/mutations -> optional notification function calls

How to run (minimal)

1. Install Node.js 18+ and npm.
 2. Copy .env.example to .env and set EXPO_PUBLIC_SUPABASE_URL / EXPO_PUBLIC_SUPABASE_ANON_KEY.
 3. Run: npm install
 4. Run: npm run env:check
 5. Run: npm run dev
 6. Optional: npm run ios or npm run android
- Web run script (npm run web): Not found in repo package scripts.