## BGHS Alumni Website — Project Architecture

### Backend Runtime

* Next.js 14 (App Router) in a single Node process
* API endpoints implemented as route handlers under app/api/\*\*

### Data Layer

* Supabase (Postgres + Auth + Storage)
* Key tables: profiles, events, password\_reset\_otps, gallery-related tables
* RLS enabled; service-role key used for admin flows

### Auth and Verification

* Supabase Auth manages users
* OTP Flows
  + Send OTP: app/api/auth/forgot-password, app/api/auth/send-otp
  + Verify OTP: app/api/auth/verify-otp
  + Helpers: lib/otp-utils.ts, lib/email-service.ts, lib/sms-service.ts
* Registration
  + API: app/api/auth/register
  + UI: app/register/page.tsx (email/phone verify before submit)

### UI Layer (App Router)

* End-user pages: app/login, app/register, app/forgot-password, app/events/\*\*, app/gallery/\*\*, app/profile
* Admin dashboards: app/admin/\*\* (users, events)
* TailwindCSS via app/globals.css with utility classes: btn-primary, input-field, card

### Media & Storage

* Gallery and thumbnails served through app/api/gallery and app/api/thumbnails/[filename]
* Integrations: R2/OneDrive helpers in lib/r2-storage.ts, lib/onedrive-\*.ts

### Utilities

* lib/supabase.ts: client factory (browser/server)
* lib/auth-utils.ts: roles/permissions
* lib/email-service.ts (SendGrid-ready) and lib/sms-service.ts (Twilio-ready; logs in dev)
* lib/onedrive-api.ts, lib/onedrive-simple.ts: OneDrive flows

### Admin APIs

* app/api/admin/users: list/create/update/delete profiles (service role)
* app/api/admin/reset-password: force-reset by admin

### Scripts & SQL

* scripts/\*\*: setup and test scripts (OneDrive, R2, gallery tests)
* SQL: create-password-reset-table.sql, add-education-fields.sql, supabase-schema.sql, etc.

### Configuration

* .env.local for Supabase/SendGrid/Twilio/OneDrive/R2
* next.config.js, tsconfig.json, Tailwind config in tailwind.config.js

### Build & Run

* Dev: npm run dev
* Build: npm run build
* Start: npm run start (serves pages and API routes)