CJE Platform — Full Technical Requirements (Developer Document)

Tech Recommendation: Flutter orReact Native because:

- One codebase for Android + iOS
- Faster UI development
- Better performance for large lists, calendar, and documents
- Easier animations
- Better long-term maintainability
- Stable for enterprise, used by major apps (eBay, Alibaba, BMW)

1. Platforms

Android (APK distribution) — required for MVP

iOS (TestFlight) — required for MVP

Client does NOT want App Store yet. Only internal distribution.

2. User Roles & Permissions

This app is built on a strict hierarchy exactly matching their student council structure.

2.1 Students (Basic Users)

Can:

- Read announcements (school + county)
- View meetings (AG + BEX)

- View initiatives
- View school & county documents
- Vote in polls (if allowed)
- Receive notifications

Cannot:

- Upload documents
- Publish announcements
- Manage users
- Create meetings
- Create or edit initiatives

2.2 Class Representatives

Can:

- Everything students can
- Draft initiatives
- Send initiatives to School Rep for approval
- Comment & vote on initiatives
- Participate in school polls

Cannot:

- Publish announcements
- Upload documents
- Manage users

2.3 School Representatives

Can:

- Everything class reps can
- Create/edit **school announcements**

- Approve or reject initiatives
- Upload school documents
- Create internal school meetings

Cannot:

- Edit county-level AG meetings
- Manage accounts
- Modify GDS (support groups)

2.4 Departments (3 Total)

PR & Communications
Volunteering
School Inclusion

Can:

- Create and manage department meetings
- Upload department documents

Cannot:

- Manage users
- Edit GDS
- Create county-level AG meetings

2.5 BEX (County Executive Board)

This is the highest role.

Full Access:

- User management
- Approve/Suspend accounts

- Create county AG meetings
- Set agenda
- Upload minutes
- Attendance management (manual add/remove)
- Publish county announcements
- Approve/modify initiatives
- Create county polls
- Warning & absence management (manual only)
- Create and manage GDS groups
- Dashboard + analytics
- County-wide notifications

Restrictions:

- Cannot access other counties' instances
- Cannot modify other counties' internal data

3. App Sections

3.1 Login & Signup

- Email + password
- Google login
- User fills:
  Name, School (dropdown), City (dropdown), Phone
- Must enter **city password** (admin-provided)
- Superadmin has dedicated access portal

3.2 Home Dashboard

Shows:

- Next meeting

- Recent announcements
- New initiatives
- New documents
- Active polls

Global icons:

- Calendar
- Search
- Notifications

3.3 Meetings

Types:

- County AG Meetings (BEX only)
- BEX Meetings
- Department Meetings
- School Meetings (internal)

Meeting Screen:

- Title
- Location
- Date & time
- Slide menu (simplified tabs):
  - Agenda
  - Documents
  - Participants

Removed from client requirement:

- Meeting status
- Summary
- Status bar

3.4 Initiatives

General list:

- Title
- Initiator name + school
- Short preview
- Status: Proposed / In debate / Adopted / Rejected

Inside initiative:

- Title + initiator + 3-dot menu
- Status pill
- Tabs:
    - Description
    - Expected impact
    - Comments & support

Poll System:

Two types:

1. **School Polls**
2. **County Polls**

BEX sees all stats & graphs.

3.5 Announcements (Comunicate)

Types:

- CJE announcements
- School announcements

General:

- Filter: All / CJE / School
- Each card shows: title, date, preview, issuer badge

Details screen:

- Title
- Issuer
- Full text
- Date
- Attachments
- 3-dot menu (publish now, delete)

Removed:

- Comments
- Reactions
- Analytics
- Urgency filter
- Urgent badges

3.6 Documents

Categories:

- Statut Elevului
- Regulamente
- Metodologii
- Formulare

Each document shows:

- Title
- Category
- Issuer

- Year
- Type (PDF/DOCX/PNG/JPG/XLSX)

Features:

- Open
- Download
- Delete (restricted to BEX/admin)
- Folders + tags

Removed from MVP:

- Version history
- Full-text search → only Title + Tags

3.7 Administration Panel

Sections:

- Users
- Schools
- GDS (Support groups)

Users:

- List with name, school, role, status
- Click → actions:
    - o Absences (manual add/remove)
    - o Warnings (manual add/remove)

Schools:

- List of all schools
- Click to view members

GDS:

- List of all GDS groups
- View-only for MVP

4. Global Features

4.1 Notifications

- All users receive push notifications
- Standard notifications only
- No "urgent notifications"

4.2 Unified Calendar (MVP Simplified)

Only:

- Monthly view
- Click → open event details

Removed:

- Daily/weekly view
- Color-coded filters
- Category filtering

4.3 Unified Search

MVP search:

- Title

- Tags

Removed:

- Full-text metadata
- Multi-layered filters

5. Hosting & Backend

Backend Options:

Recommended: **Supabase (EU region)**
 Why:

- Fast
- Secure
- Email auth + Google auth ready
- Real-time subscriptions
- Row-level security
- Fits the budget

6. Milestones (Developer Version — No Prices)

(You will add prices separately later)

Milestone 1 — Project Setup & Backend

- Flutter project setup
- Supabase backend setup
- Auth system (Email + Google)
- User model + roles

- City/Schoo/Role linking
- Superadmin panel structure

Deliverable: Working signup/login + role assignment

Milestone 2 — Core Sections (Announcements + Meetings)

- Announcements module
- School + county filters
- Upload attachments
- Display lists/details
- Meeting module
- Agenda + documents + participants

Deliverable: Announcements + Meetings fully functional

Milestone 3 — Initiatives & Poll System

- Initiative creation/approval workflow
- Status updates (Proposed → Adopted etc.)
- Comments + support
- Polls (school / county)

Deliverable: Complete initiatives + polls workflow

Milestone 4 Documents Center

- Document categories
- Upload
- Download
- Folder/tag organization
- Admin delete

Deliverable: Fully functional documents module

Milestone 5 Admin Panel (Web + In-App)

- Manage users
- Schools
- GDS
- Warnings
- Absences
- Role editing
- CSV import

Deliverable: Complete admin system

Milestone 6 Global Features & Calendar

- Notifications
- App-wide search (title/tag)
- Monthly calendar view

Deliverable: Global utilities + calendar

Milestone 7 iOS Build + Testing + Final QA

- TestFlight setup
- Internal APK build
- Bug fixing
- Optimizations
- Final QA + Load testing

Deliverable: Final Android + iOS builds

7. This Document Covers EVERYTHING

You can give this directly to your development team.
 It includes:

✔ Full role definitions

✔ Full permissions matrix

✔ Full feature list

✔ Removed/trimmed features

✔ Screen-by-screen structure

✔ Backend requirements

✔ Tech stack

✔ Milestones