Goal

Develop a production-ready, web-based platform called PTO Connect designed to modernize Parent-Teacher Organization operations. The platform will streamline communication, event planning, budgeting, fundraising, and stakeholder collaboration through intuitive tools, role-based access, and embedded AI features. The app should be mobile-friendly, scalable, and secure, with future potential for native mobile apps.

Core MVP Modules & Features

1. User Roles & Permissions

- Roles: admin, board_member, committee_lead, volunteer, parent_member, teacher

- Features:

  - Role-specific dashboard views

  - Permissions for viewing, editing, creating, and approving content

  - Role-based signup via unique PTO code or QR

2. Communication Suite

- In-app announcements and threaded group messaging

- Email/SMS alerts via Twilio

- AI-generated newsletters and meeting summaries

- AI meeting assistant for live transcription and highlights

3. Event & Project Planner

- Calendar view with:

  - Event creation

  - Task assignment & deadlines

  - Volunteer sign-up & RSVP tracking

- AI idea suggestions based on past events or seasonal themes

- Auto-cloning templates with updated dates/content

4. Budgeting & Finance Tracker

- Income/expense entry with custom categories

- AI-generated monthly summaries and projections

- Export to PDF/CSV

- Upload & tag receipts

- Multi-user approval & audit trail

- Email reports directly to stakeholders

5. Fundraising Toolkit

- Campaign builder for:

  - Donations, product sales, pledge drives

- Stripe integration for payments

- Custom donor pages

- Progress tracking dashboards

- AI fundraising content & email/post templates

- Public landing pages for external donors

6. Social Media Tools

- Connect to Facebook & Instagram via Meta Graph API

- AI caption generator & image promo generator

- Schedule posts and view engagement metrics

7. Teacher Collaboration

- Teachers can:

  - Submit requests

  - Participate in surveys

  - Upload classroom wishlists

  - Propose events

- PTO can track responses, approvals, and engagement

8. Smart Templates & Automation

- Save & reuse templates for events/fundraisers

- Pre-schedule:

  - Emails, SMS, tasks, and social posts

- Use prompt-based automation: Plan a Fall Festival fundraiser with food trucks and games

9. Document Vault + AI Search Assistant

- Store policies, bylaws, meeting notes, etc.

- AI assistant powered by Retrieval-Augmented Generation (RAG)

- Users can ask: Can we approve funds without a quorum?

Technical Foundation

Layer	Tech Stack
Frontend	React + TailwindCSS
Backend	Node.js + Express
Database/Auth	Supabase (PostgreSQL)
Hosting	Frontend: Vercel Backend: Render (https://api.ptoconnect.com)
AI Services	OpenAI (via backend API)
Integrations	Twilio, Stripe, Meta Graph API

Phase 1 MVP Deliverables

1. Multi-role onboarding system

2. Role-based dashboards

3. Event calendar and task tracker

4. Fundraising builder with Stripe

5. Messaging center with AI newsletter

6. Promo image + social post scheduler

7. Teacher feedback interface

8. AI-powered event/fundraiser generator

9. Template reuse engine

10. Search bar with document-aware AI assistant

Future Enhancements (Post-MVP)

- Native mobile apps (iOS/Android)

- District-level PTO dashboards

- AI onboarding wizard

- Custom PTO branding and theme editor

- Multi-language interface

- AI-driven auto-categorization for receipts and emails