I'll provide a comprehensive summary of our progress so far and recommendations for cleanup and next steps.

Summary of CtrlSketch Pro Features

Core Drawing Functionality

* Vector-based drawing tools with precision control for technical diagrams
* 11x17 inch (1632x1056 px) canvas optimized for industrial/engineering drawings
* Comprehensive shape toolset (rectangles, lines, circles, polygons, text)
* Advanced properties system for each element with BOM integration
* Custom shape libraries for quick reuse of common elements
* Rulers, grid system, and snap functionality for precise alignment

Multi-Page Document Management

* Tab-based interface for multiple drawings within one project
* Page management with rename, reorder, duplicate, and delete functions
* Standardized templates for new pages
* Document navigation with thumbnail previews

File Operations

* Save/load functionality with project versioning
* Export to PDF, PNG, SVG and other formats
* Import from existing drawings and CAD formats
* Auto-save and recovery features

Collaboration Features

* Real-time collaboration via WebSockets
* Multi-user cursor tracking and presence indicators
* Status indicators showing connection health
* Chat interface for team communication
* User permissions and role management

Bill of Materials (BOM) Integration

* Automatic parts list generation from drawing elements
* Cost calculation and summaries
* Part categorization and filtering
* CSV/Excel export for BOM data
* Integration with parts database

Engineering Tools

* Measurement tools with unit conversion
* Calculator for technical calculations
* Dimension tools for indicating measurements on drawings
* Formula support for parametric elements

Performance System

* Canvas optimization for handling complex drawings
* Metrics tracking for system performance
* Dashboard for monitoring system health
* Resource usage tracking and warnings

Subscription Management

* Tiered pricing model (Basic, Pro, Team)
* Per-seat pricing for team deployments
* Stripe integration for payment processing
* User account management

Cleanup Recommendations

1. **Code Organization**
   * Consolidate duplicate components (we have multiple App.jsx/tsx variants)
   * Organize components into logical folders (tools, canvas, collaboration, etc.)
   * Standardize on either .jsx or .tsx file extensions
2. **Technical Debt Resolution**
   * Fix TypeScript type errors throughout the codebase
   * Resolve Stripe API version conflicts in server/routes/stripe.ts
   * Address React warnings in components
3. **Documentation**
   * Ensure all components have proper JSDoc comments
   * Update API documentation for backend endpoints
   * Add setup instructions for new developers
4. **Testing**
   * Add unit tests for critical utilities and components
   * Implement integration tests for collaboration features
   * Create performance benchmark tests

Next Steps

1. **Database Integration**
   * Complete migration from in-memory storage to PostgreSQL
   * Implement proper database models for all entities
   * Create data migration scripts
2. **Deployment Preparation**
   * Finalize Supabase deployment configuration
   * Set up automated deployment pipeline
   * Configure environment variables for production
3. **User Experience Enhancement**
   * Implement onboarding flow for new users
   * Add interactive tutorials and tooltips
   * Enhance error handling with user-friendly messages
4. **Feature Completion**
   * Finalize tablet/mobile support for field usage
   * Complete licensing implementation across subscription tiers
   * Add admin portal for team subscription management

Immediate Action Items

1. **Consolidate Code Base**
   * Remove experimental/duplicate files (AppSimple.jsx, DashboardStatic.jsx, server.js)
   * Ensure main App.tsx is the central entrypoint
   * Fix primary component dependencies
2. **Resolve Critical Issues**
   * Fix Stripe API version conflict (update to latest version)
   * Resolve Dashboard rendering issues before deployment
   * Address any security concerns in the authentication flow
3. **Documentation Updates**
   * Ensure all deployment docs are up-to-date
   * Review and update README.md with latest project status
   * Document database schema and relationships

Supabase password: tTCmb3DQNi!Q7U2