

Leo MD 306 Social Media App

Project Proposal

Logo Placeholder



AlgoArena Competition
Leo Club of University of Sri Jayewardenepura

Phase 1: Concept & Design

November 10, 2025

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1 Executive Summary

- **Project Name:** Leo Connect
- **Platform:** Cross-platform Mobile Application
- **Target Audience:** Leo Club members, university students, and community supporters across Sri Lanka & Maldives
- **Core Purpose:** A dedicated social media platform to showcase Leo Club activities, foster community engagement, and strengthen the Leo movement across MD 306.

2 Problem Statement

Currently, Leo MD 306 lacks a centralized, mobile-first platform for:

- Real-time updates from 200+ Leo Clubs across 12 districts
- Streamlined content management for club webmasters
- Easy access to Leo district information and club activities
- Engagement tracking and community building among 8000+ Leos

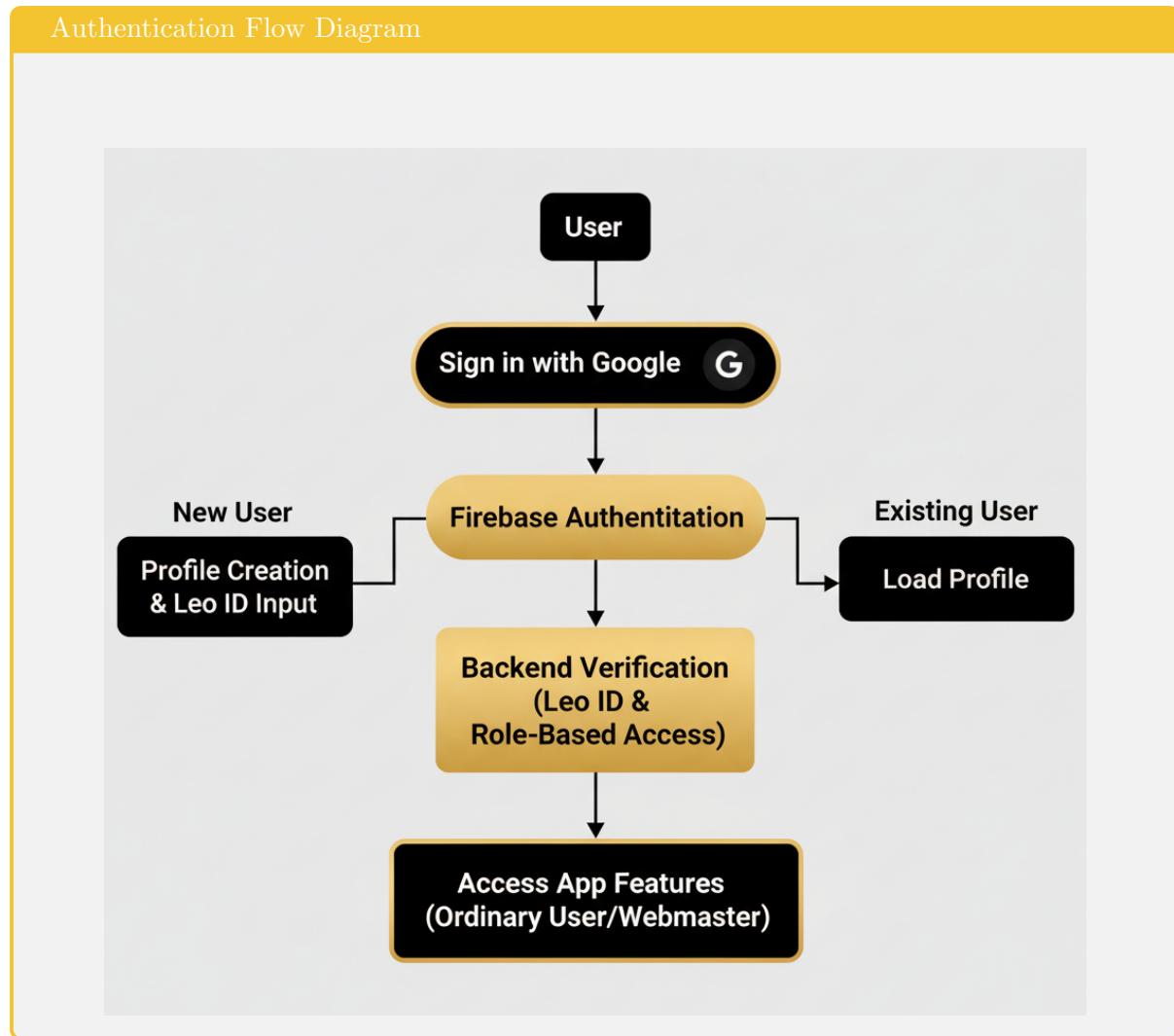
Solution: A mobile-first social media application that bridges Leo Clubs with their communities while maintaining organizational structure and content authenticity.

3 Key Features & Innovations

3.1 Core Functionality

3.1.1 Authentication & User Management

- Google Authentication for secure sign-in
- Custom profile creation with Leo ID verification system
- Role-based access (Ordinary Users vs. Webmasters)



3.1.2 Content Management

- **Club/District Accounts:** Official posting capabilities for verified webmasters
- **User Engagement:** React, comment, and share posts
- **Follow System:** Users can follow specific clubs or districts

3.1.3 Navigation Structure

- **Home Feed:** Personalized content from followed clubs/districts
- **Explore:** Discover new clubs and trending posts
- **Districts Section:** Dedicated navigation for all 12 Leo districts
- **Profile:** User settings, followed clubs, and Leo ID verification

3.1.4 Leo District Integration

- Interactive map of Sri Lanka & Maldives showing all 12 districts
- District-specific feeds and information
- Club directory with contact details and social links

3.2 Innovative Features

3.2.1 Leo Journey Timeline

- Visual storytelling of Leoism history (from 1917 Lions founding to present)
- Interactive timeline with key milestones
- “Strive to Thrive” yearly theme integration

3.2.2 Impact Tracker

- Real-time statistics of Leo activities (service hours, projects, members)
- Visual dashboards for district and club-level impact
- Gamification elements to encourage community service

Impact Tracker Mockup

Leo Connect

Impact Dashboard

Strive to Thrive

100,000+
Total Service Hours

500+
Projects Completed

8,000
Active Members

Monthly Service Hours

Month	Hours
Jan	100,000
Feb	105,000
Mar	110,000

Project Types

Type	Percentage
Community	~35%
Education	~25%
Environmental	~15%
Health	~10%
Eduramity	~10%

Achievement Badges

40

Level 5: Community Champion
Top Contributor

Top Contributor

3.2.3 Event Integration

- Calendar view of upcoming Leo events
- Event registration and RSVP functionality
- Live event updates and photo sharing

3.2.4 Smart Notifications

- Personalized alerts based on followed clubs
- District-wide announcements
- Achievement badges for active engagement

3.2.5 Offline Mode

- Cache recent posts for offline viewing
- Queue actions (likes, follows) for sync when online

4 Technical Architecture

4.1 Frontend

Framework: Kotlin Multiplatform

- Cross-platform (iOS & Android) from single codebase
- Native performance and smooth animations
- Rich UI component library

4.2 Backend & Database

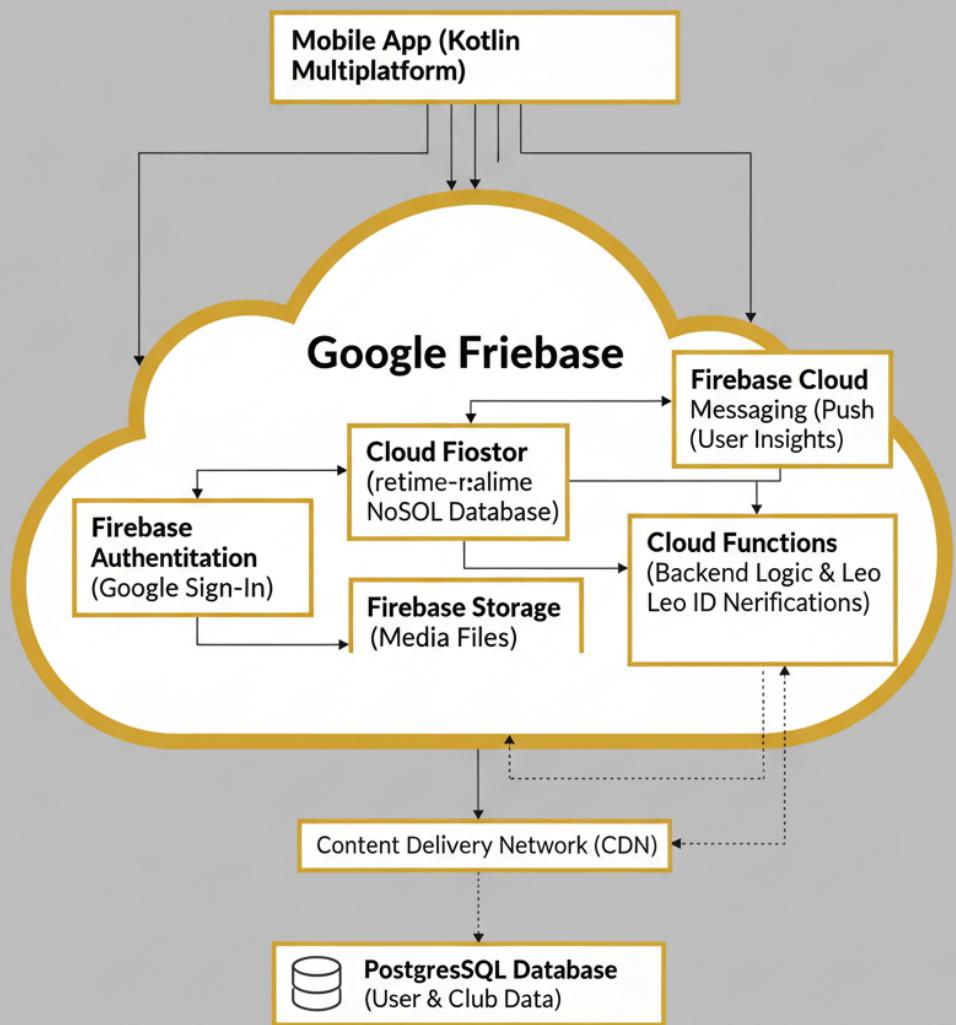
Primary: Firebase

- **Authentication:** Firebase Auth with Google Sign-In
- **Database:** Cloud Firestore (real-time, scalable NoSQL)
- **Storage:** Firebase Storage for images/videos
- **Cloud Functions:** Backend logic and Leo ID verification
- **Analytics:** Firebase Analytics for user insights

4.2.1 Data Structure

System Architecture Diagram

System Architecture Diagram - Leo Connect App



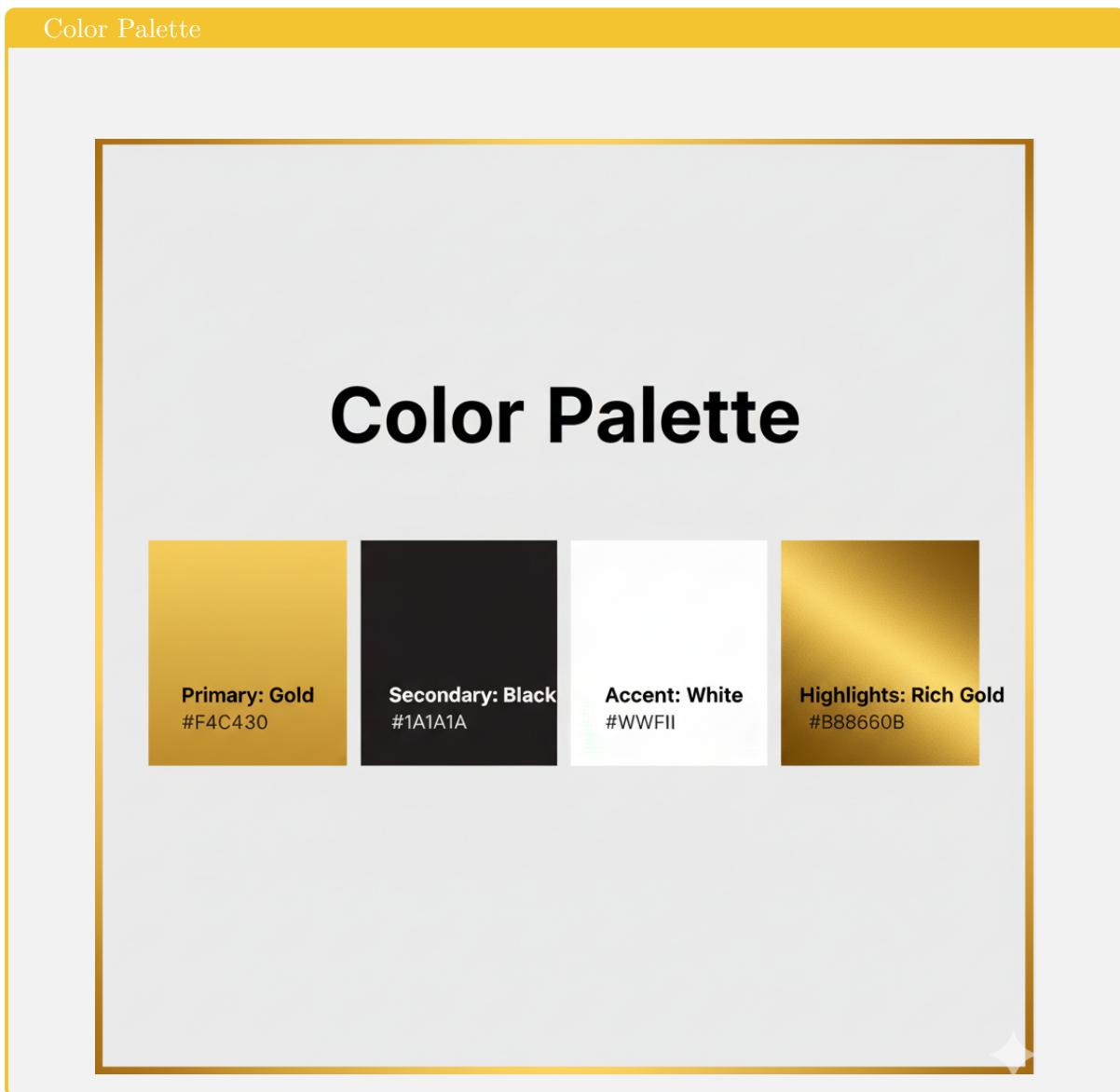
4.3 Additional Technologies

- **Push Notifications:** Firebase Cloud Messaging
- **Image Optimization:** Cloudinary/Firebase Storage
- **Analytics:** Firebase Analytics + Google Analytics

5 Design Philosophy

5.1 Color Palette

- **Primary:** Gold (#FFD700, #F4C430)
- **Secondary:** Black (#000000, #1A1A1A)
- **Accent:** White (#FFFFFF)
- **Highlights:** Rich Gold (#B8860B) for premium features

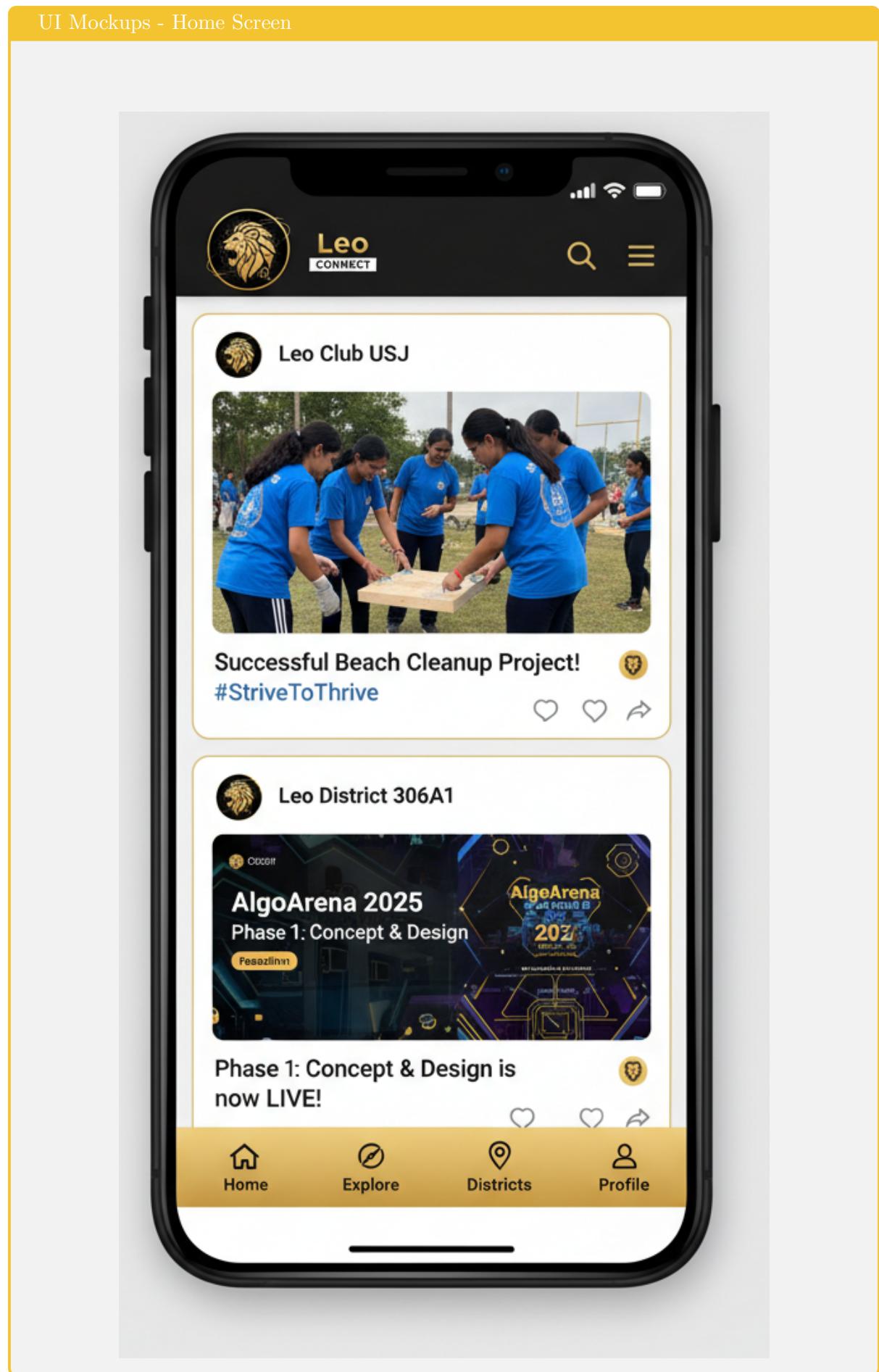


5.2 UI/UX Principles

1. **Leo Brand Identity:** Maintain official Leo colors and ethos
2. **Intuitive Navigation:** Bottom navigation bar with clear icons
3. **Content-First Design:** Emphasize posts and visual content
4. **Accessibility:** High contrast, readable fonts, scalable UI
5. **Minimalist Approach:** Clean layouts, purposeful animations

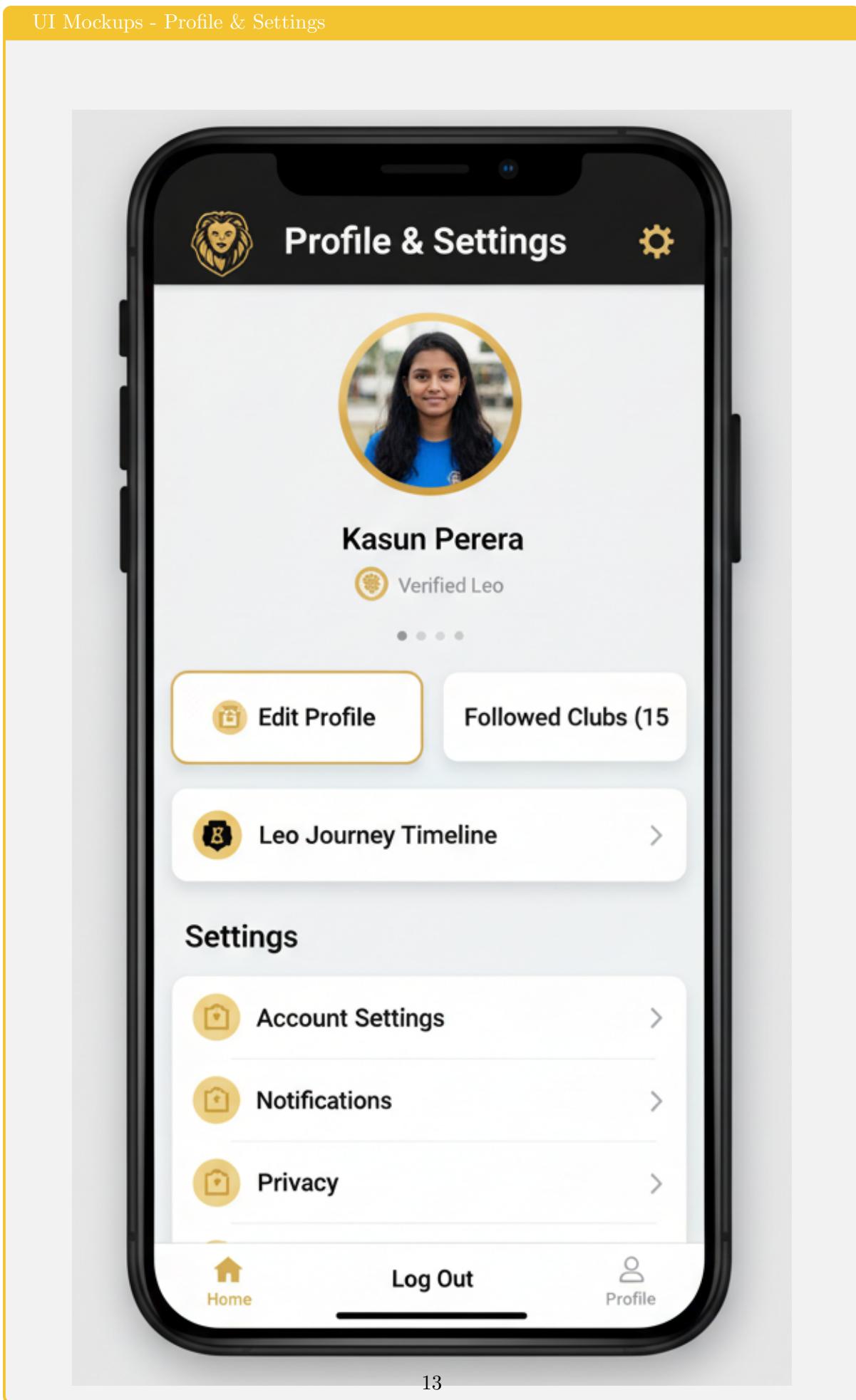
5.3 Screen Categories

- Authentication & Onboarding
- Home Feed & Discovery
- District Browser
- Profile & Settings
- Post Creation (Webmasters)
- Verification & Admin



UI Mockups - Districts Section





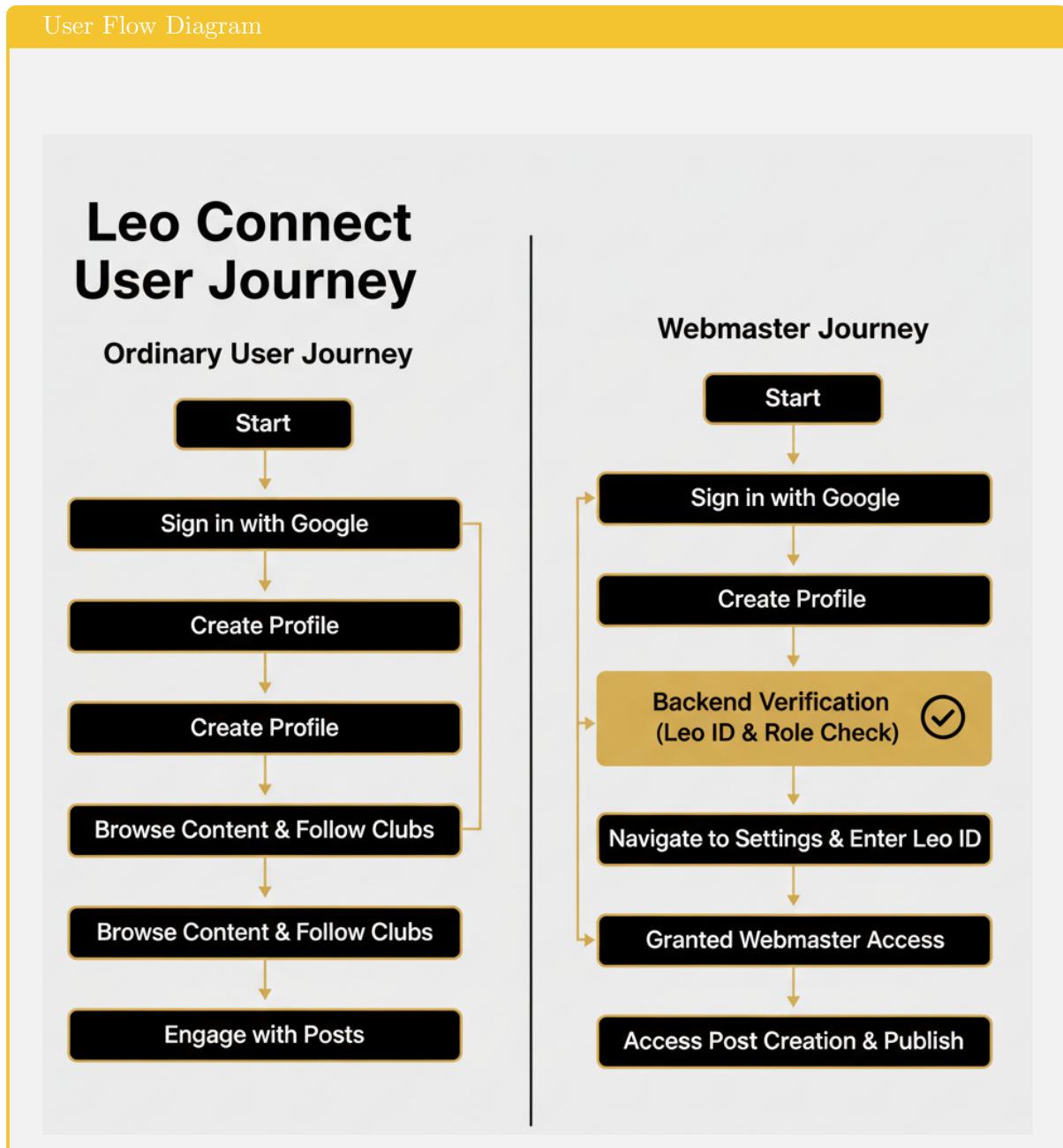
6 User Flow & Logic

6.1 Ordinary User Journey

1. Sign in with Google → Create profile
2. Browse content → Follow clubs/districts
3. Engage with posts → Build connections

6.2 Webmaster Journey

1. Sign in with Google → Create profile
2. Navigate to Settings → Enter Leo ID
3. Backend verification → Granted webmaster access
4. Access post creation → Publish to club/district account



6.3 Content Distribution

- Posts are tied to club/district accounts (not individual webmasters)
- Users see posts from followed clubs in chronological feed
- Discover page shows trending and recommended content

7 Implementation Phases

7.1 Phase 1: Foundation (Weeks 1-2)

- Authentication system
- Basic UI framework

- Firebase integration
- User profile management

7.2 Phase 2: Core Features (Weeks 3-4)

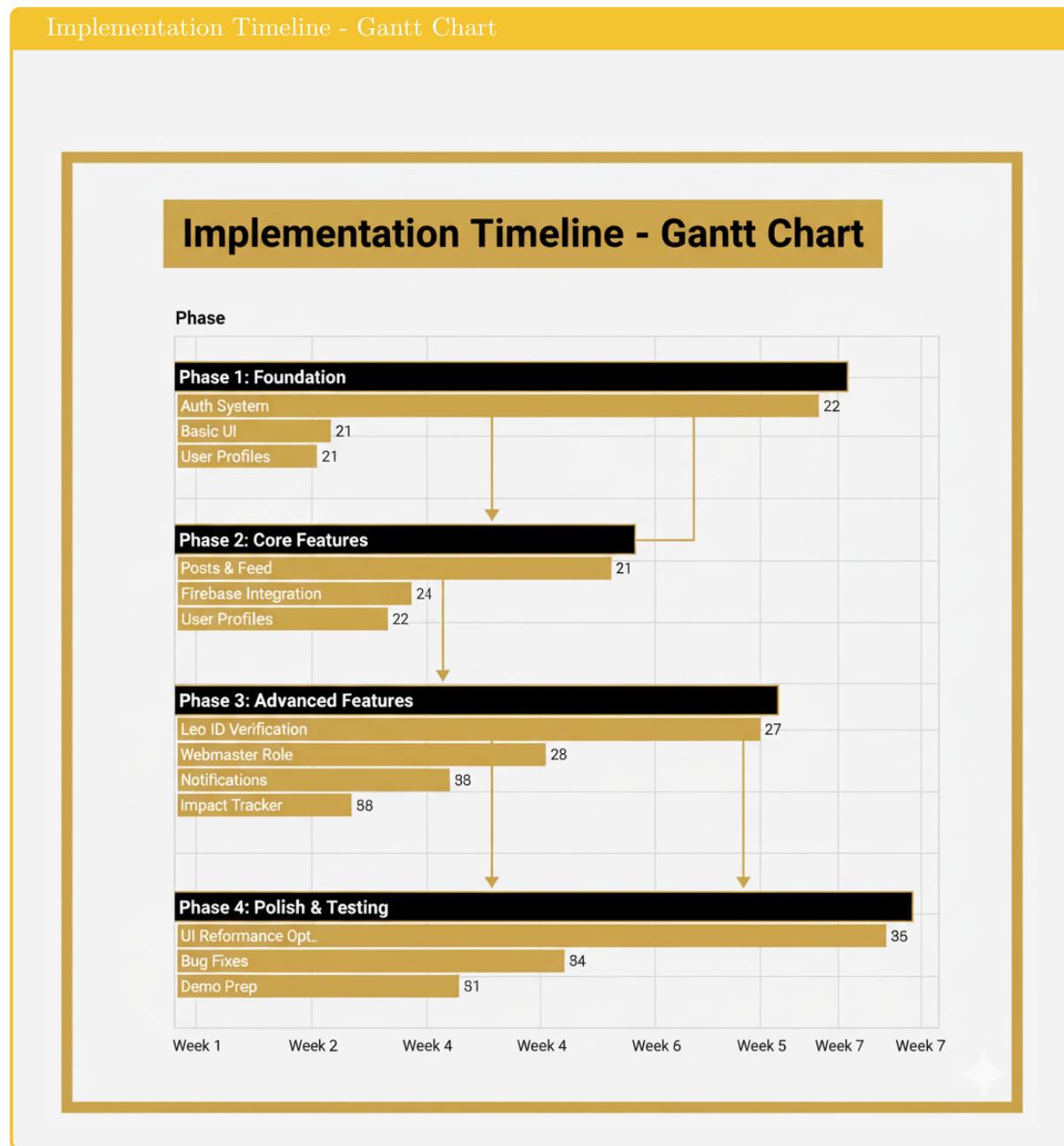
- Post creation and display
- Follow system
- Districts section
- Reactions and engagement

7.3 Phase 3: Advanced Features (Weeks 5-6)

- Leo ID verification
- Webmaster role management
- Notifications system
- Impact tracker

7.4 Phase 4: Polish & Testing (Week 7)

- UI refinement
- Performance optimization
- Bug fixes
- Demo preparation



8 Security & Privacy

1. **Authentication:** Secure Google OAuth 2.0
2. **Role Verification:** Backend validation of Leo IDs
3. **Data Protection:** Firestore security rules
4. **Content Moderation:** Webmaster-only posting prevents spam
5. **Privacy Controls:** Users control visibility and data sharing

9 Scalability Considerations

- **Cloud Infrastructure:** Firebase auto-scales with user growth

- **CDN Integration:** Fast content delivery worldwide
- **Modular Architecture:** Easy to add new features
- **API Design:** RESTful structure for potential web extension
- **Database Optimization:** Indexed queries, pagination

10 Success Metrics

1. **User Adoption:** 70%+ of active Leos onboard within 6 months
2. **Engagement:** Average 10+ interactions per user per week
3. **Content Volume:** 50+ posts per week from clubs/districts
4. **Retention:** 60%+ monthly active users
5. **Performance:** App load time 1 second, 99.9% uptime

11 Competitive Advantages

1. **Leo-Specific:** Purpose-built for Leo MD 306 ecosystem
2. **Verified Content:** Only authorized webmasters can post
3. **District Focus:** Unique navigation for organizational structure
4. **Offline Support:** Works without constant connectivity
5. **Impact Tracking:** Quantifies Leo service contributions

12 Future Enhancements

- **Multi-language Support:** Sinhala, Tamil, English
- **Live Streaming:** Real-time event broadcasts
- **Mentorship Matching:** Connect Alphas with Omegas
- **Service Hour Logging:** Digital record of community service
- **Inter-District Challenges:** Gamified community engagement

13 Budget & Resources

13.1 Required

- Firebase Spark Plan (Free tier suitable for Phase 1)
- Figma Pro (for collaborative design)
- GitHub (version control)
- Testing devices (Android & iOS)

13.2 Optional

- Firebase Blaze Plan (pay-as-you-go for scale)
- Domain for landing page
- App Store/Play Store developer accounts (\$25 + \$100/year)

14 Team Roles & Responsibilities

- **Lead Developer:** Flutter implementation, Firebase integration
- **UI/UX Designer:** Figma mockups, design system
- **Backend Developer:** Cloud Functions, security rules
- **QA Tester:** Testing, bug reporting
- **Content Strategist:** Leo MD 306 content integration

15 Conclusion

Leo Connect represents more than a social media app—it's a digital ecosystem designed to amplify the Leo movement across Sri Lanka & Maldives. By combining modern mobile technology with the rich heritage of Leoism, we create a platform that serves, connects, and inspires 8000+ Leos while remaining true to the motto: "Strive to Thrive."

This proposal demonstrates technical feasibility, creative innovation, and deep understanding of Leo MD 306's needs. We're excited to bring this vision to life.

Submission Date: November 10, 2025

Competition: AlgoArena by Leo Club of University of Sri Jayewardenepura

Phase: 1 - Concept & Design

Appendix

References

- Leo MD 306 Official Website: <https://leomd306.org>
- Lions Clubs International: <https://lionsclubs.org>
- Firebase Documentation: <https://firebase.google.com>
- Flutter Documentation: <https://flutter.dev>

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