

Phase 1: Core Modules

Objective: Build and integrate core user-facing features and foundational admin panel functionality to establish the app's primary functionality.

Milestone 1.1: User Onboarding & Role-Based Access (2-3 Days)

- **Tasks:**
 - Implement Firebase Authentication (Email, Google, Phone OTP).
 - Develop role selection UI (Veterinary Doctor, Pharmacist, Farmer).
 - Create profile setup screens and preferences.
 - Configure app permissions (notifications, storage).
 - Set up Firestore data structure for user roles and profiles.
- **Deliverables:**
 - Functional onboarding flow with role-based access.
 - User data stored in Firestore with secure Firebase Rules.
 - Tested authentication across iOS and Android.

Milestone 1.2: Question Bank & Lecture Section (3-7 days)

- **Tasks:**
 - **Question Bank:**
 - Build navigation: Category → Subject → Topic → Questions.
 - Implement demo/paid access and analytics (accuracy %, weak topics, speed).
 - Integrate AI explanations (Google Cloud NLP).
 - Add action icons (view, report, bookmark, sticky notes, likes).
 - **Lecture Section (New):**
 - Develop navigation: Category → Subject → Topic → Lectures.
 - Implement video/audio lecture playback (Firebase Storage or third-party like Vimeo).
 - Add features: bookmark, notes, progress tracking, offline download (with DRM).
 - Include action icons (views, report, bookmark, likes).
 - Admin panel integration for uploading/managing lectures.
- **Deliverables:**

- Question bank with analytics and AI explanations.
- Lecture section with video/audio playback and user interactions.
- Firestore structure for lectures and questions.

Milestone 1.3: Short Notes & Drug Calculator (7-10 days)

- **Tasks:**
 - Implement navigation: Category → Subject → Topic → Notes.
 - Integrate AI text-to-speech (e.g., flutter_tts or Google Cloud TTS).
 - Develop text highlighting and auto-flashcard generator.
 - Add AI summary button (e.g., Google Cloud NLP for summarization).
 - Implement action icons (bookmark, sticky notes, likes, mark as read, report).
- **Deliverables:**
 - Notes module with AI features and user interactions.
 - Flashcard generation and storage in Firestore.
 - Tested text-to-speech on iOS and Android.

Milestone 1.4: Drug Calculator Integration & Admin Panel Foundation (10-13 days)

- **Tasks:**
 - Integrate pre-developed drug calculator into app (Home/Tools section).
 - Develop admin panel dashboard (React + Tailwind CSS) with user, revenue, and engagement metrics.
 - Set up Firebase Hosting and Cloud Functions for admin panel backend.
 - Implement content management for subjects, topics, and questions.
- **Deliverables:**
 - Drug calculator accessible from app.
 - Admin panel with basic dashboard and content management UI.
 - Deployed admin panel on Firebase Hosting.

Phase 2: Advanced Features (13-16 days)

Objective: Implement gamification, quiz/PYQ, and e-book modules, along with advanced admin panel features.

Milestone 2.1: Gamification & Battle Mode (4–5 weeks)

- **Tasks:**
 - Build 1v1 and group battle modes with category lock.
 - Implement “Play with Friends” (room code) and “Let’s Play” (random users).
 - Develop leaderboard (daily, weekly, monthly) using Firestore.
 - Add power-ups (50:50, skip, timer freeze) with coin system.
 - Implement timer sync logic (question changes after both respond or timeout).
 - Set up admin panel controls for battle categories and power-up rules.
- **Deliverables:**
 - Fully functional battle mode with real-time gameplay.
 - Leaderboard UI and admin controls.
 - Firestore structure for game data and coin transactions.

Milestone 2.2: Quiz & PYQ Module (16-21 days)

- **Tasks:**
 - Build navigation: Category → Subject → Quiz/PYQ.
 - Implement dynamic quiz creation (5–200+ questions).
 - Develop practice, review, and retake modes.
 - Add bookmarking, flag for review, and time stats.
- **Deliverables:**
 - Quiz and PYQ module with flexible question ranges.
 - User progress tracking in Firestore.
 - Tested quiz flow on iOS and Android.

Milestone 2.3: E-Book Module (19-22 days)

- **Tasks:**
 - Develop e-book listings with description and “Buy Now”/“Open” buttons.
 - Implement secure e-reader (no screenshot/copy/download, using flutter_pdfview or WebView).
 - Add subscription logic (3M, 6M, 1Y, lifetime).
 - Implement highlighting, sticky notes, flashcards, and resume reading.
 - Set up admin panel for e-book uploads and review management.
 - **Deliverables:**
 - Secure e-reader with subscription-based access.
 - E-book management UI in admin panel.
 - Firestore structure for e-books and user annotations.
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Phase 3: Polish & Additional Features

Objective: Finalize payment system, add AI translation, notifications, and referrals, and enhance admin panel analytics.

Milestone 3.1: Payment & Subscription System

- **Tasks:**
 - Implement feature-specific subscriptions (Notes, Quiz, PYQ, etc.).
 - Integrate Stripe/Razorpay and in-app purchases (in_app_purchase package).
 - Develop coin system for gamification features.
 - Create plan management UI (view plans, history, renewals).
 - Set up admin panel for subscription and refund management.
- **Deliverables:**
 - Functional payment system with subscription options.
 - Admin panel UI for subscription oversight.
 - Tested payment flows on iOS and Android.

Milestone 3.2: Additional Features & Admin Enhancements

- **Tasks:**
 - Integrate AI language translation (Google Cloud Translation API).
 - Implement promo codes and group/college discounts.
 - Develop refer & earn system (rewards on paid subscriptions).
 - Set up push notifications (Firebase Cloud Messaging) for content updates and leaderboards.
 - Enhance admin panel with user management (block/suspend), notifications, and analytics (CSV exports).
 - **Deliverables:**
 - Multi-language support for notes and UI.
 - Functional referral and notification systems.
 - Admin panel with advanced analytics and user controls.
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Phase 4: Testing & Deployment

Objective: Ensure quality, security, and scalability before launch.

Milestone 4.1: Testing & Optimization

- **Tasks:**
 - Conduct unit tests for critical logic (payment, gamification, subscriptions).
 - Perform integration tests for Firebase services (Auth, Firestore, Cloud Functions).
 - Test on iOS/Android emulators and physical devices.
 - Optimize Firestore queries and Firebase costs (e.g., caching for AI APIs).
 - Validate security (Firebase Rules, secure e-reader).
- **Deliverables:**
 - Bug-free app and admin panel.
 - Optimized Firebase data models.
 - Test reports for all modules.

Milestone 4.2: Deployment & Handoff

- **Tasks:**
 - Deploy app to App Store and Google Play.
 - Deploy admin panel to Firebase Hosting.
 - Set up CI/CD pipeline (GitHub Actions or Bitrise).
 - Provide documentation for codebase and Firebase setup.
 - Train client on admin panel usage.
- **Deliverables:**
 - Live app on iOS and Android stores.
 - Deployed admin panel.
 - Source code in private GitHub repository.
 - Documentation and training session.

Summary

- **Total Estimated Hours:** 150 hours
- Advance Payment For APIs = 2500 INR
 - Stripe API
 - AI - OpenAI API
 - Firebase
- **Total Timeline:** Atleast 16 days
- **Milestone Schedule:**
 - Phase 1: 2500 INR – 3 days
 - Phase 2: 2500 INR – 3 days
 - Phase 3: 2500 INR – 3 days
 - Phase 4: 2000 INR – 3 days

Total = 12000 INR (Fair Price for all development)

Tech Stack

Dart and Flutter – This means one code base several abilities.(IOS, Android and Browser)

A Scalable Backend capable of any number of users.

A great UI/UX for users to come back, for it to have virality.