NutriScan - Development Roadmap

Overview

Timeline: May 25 - June 16 (~3 weeks)

Goal: Launch NutriScan - a mobile app that reveals ingredient data, research, and discussion via barcode scanning.

Week 1: Foundation & Core Logic (May 25-31)

- Set up Ionic + Angular project (cross-platform)

- Connect Firebase (Authentication, Firestore, Functions)

- Implement anonymous login and random username generator

- Configure Firestore structure (ingredients, discussions, etc.)

- Integrate barcode scanner (@ionic-native/barcode-scanner)

- Fetch product data from Open Food Facts API

- Display list of ingredients

Week 2: Ingredient Pages & Community (June 1-7)

- Create Ingredient Detail UI with tabs: Studies, News, Discussions

- Firestore integration for discussions (post, reply, upvote)

- Style Reddit-like threaded comments

- Set up Cloud Functions to fetch studies (PubMed/Semantic Scholar) and news

- Cache content in Firestore

Week 3: Enhancements, Polish & Launch Prep (June 8-16)

- Implement AI-generated study/article summaries (NLP/API)

- Add bookmarks/watchlist (local or Firestore)

- Add dietary filters (e.g., allergen flags)

- Offline caching for last 5 viewed ingredients

- Refine UI/UX (animations, spacing, fonts)

- Add AdMob for monetization

- Performance optimization

Ingredient Insight - Development Roadmap

- Final testing on Android devices

- Prepare Play Store assets (description, screenshots, icon)

- Submit to Play Store by June 14

Key Tools & APIs

Purpose	Tool/Service
Barcode -> Ingredients	Open Food Facts API
Research Studies	PubMed or Semantic Scholar API
News Articles	Google News API / Scraper
Auth	Firebase (Anonymous)
Data Storage	Firebase Firestore
Comments/Threads	Firestore + Usernames
Ads	AdMob
Summarization	OpenAI API / NLP Summarizer
UI Framework	Ionic + Angular