Project Review

Group 6

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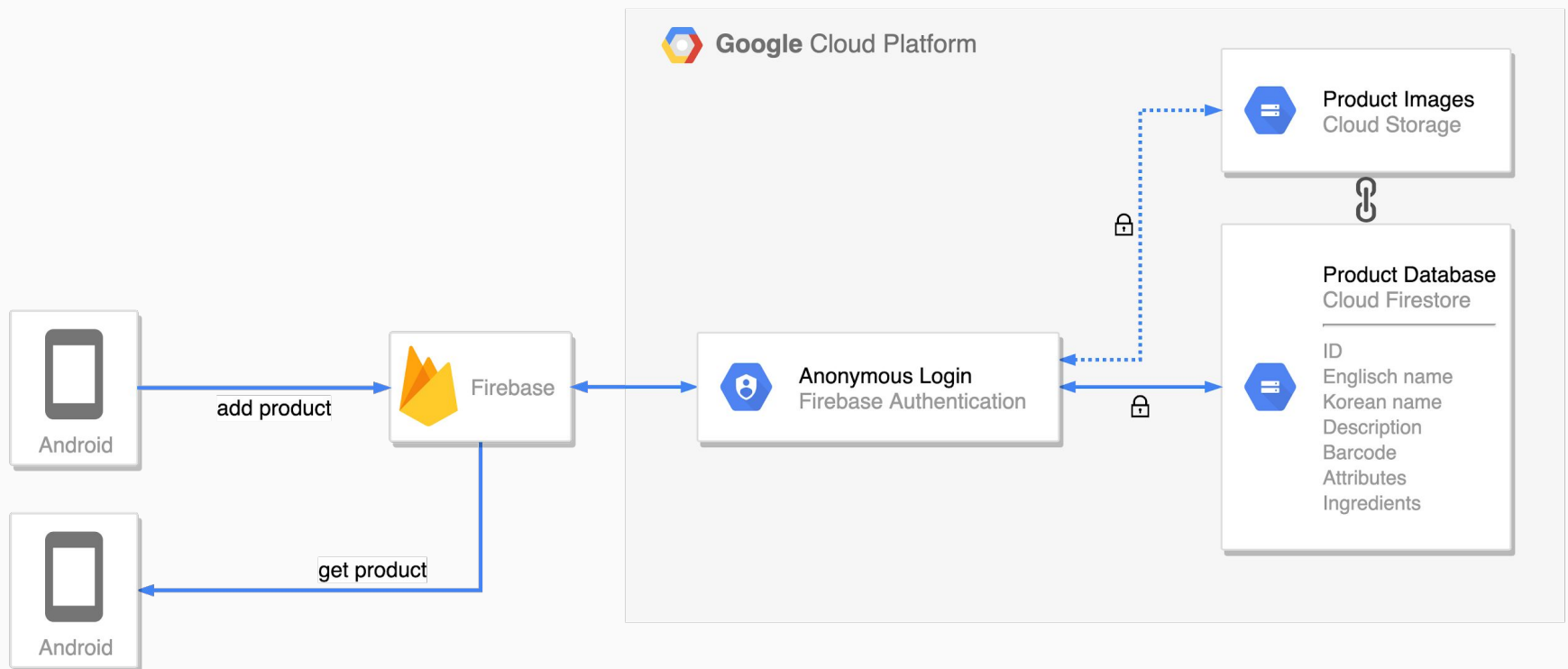Alexander Kranzer
Yuna Jeong
Bogyu Jeong

Refined Project Idea

- **Basic Idea:** Users can search for a product and determine if it's vegetarian or vegan
- **Target Users:** Foreigners in Korea
- **Key Solution Approach:** Users search for a product → App shows ingredient list and whether a product is vegetarian or vegan
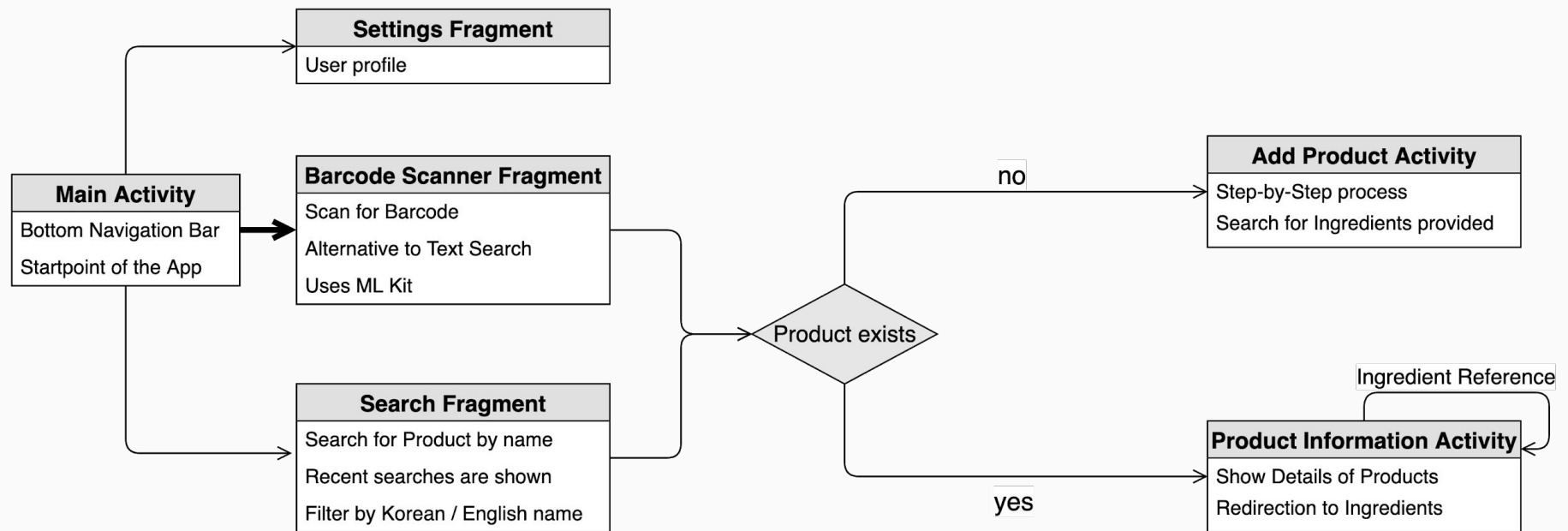
Use Cases

- User adds a product
- User reads information for a product
- User searches for a product
  - via text search
  - via barcode scanner

System Overview

UI Overview

Settings Fragment

User profile

Main Activity

Bottom Navigation Bar

Startpoint of the App

Barcode Scanner Fragment

Scan for Barcode

Alternative to Text Search

Uses ML Kit

Search Fragment

Search for Product by name

Recent searches are shown

Filter by Korean / English name

Product exists

no

Add Product Activity

Step-by-Step process

Search for Ingredients provided

Ingredient Reference

Product Information Activity

Show Details of Products

Redirection to Ingredients

yes

Key Technical Challenges

Problem	Solution
Firebase Firestore doesn't provide a search function	On device search
Real-Time barcode scanning	Usage of ML Kit
Deep nesting of ingredients	Only load ingredients on demand

Project Schedule

- **Doruk:** Barcode Scanner Fragment
- **Philipp:** Add Product Activity
- **Alexander:** Firebase Backend
- **Yuna:** Main Activity with Navigation + Search Fragment
- **Bogyu:** Product Information Activity

Remaining Tasks

- **Doruk:** Improve Barcode Scanner Fragment
- **Philipp:** Add Product Activity
- **Alexander:** Image Recognition
- **Yuna:** Improve Search Activity
- **Bogyu:** Improve Product Information Activity

Not assigned yet: Settings Fragment, Setup Activity, Automatic Filling of Database

Final Deliverable and Success Criteria

- Users who can't speak Korean can find information about products

  - Users can search for products by name or barcode scanning

  - Ingredient list, vegetarian/vegan?

- If a product cannot be found, the user can add it