



## Your Waste-Reducing Smart Fridge Companion

### Introduction

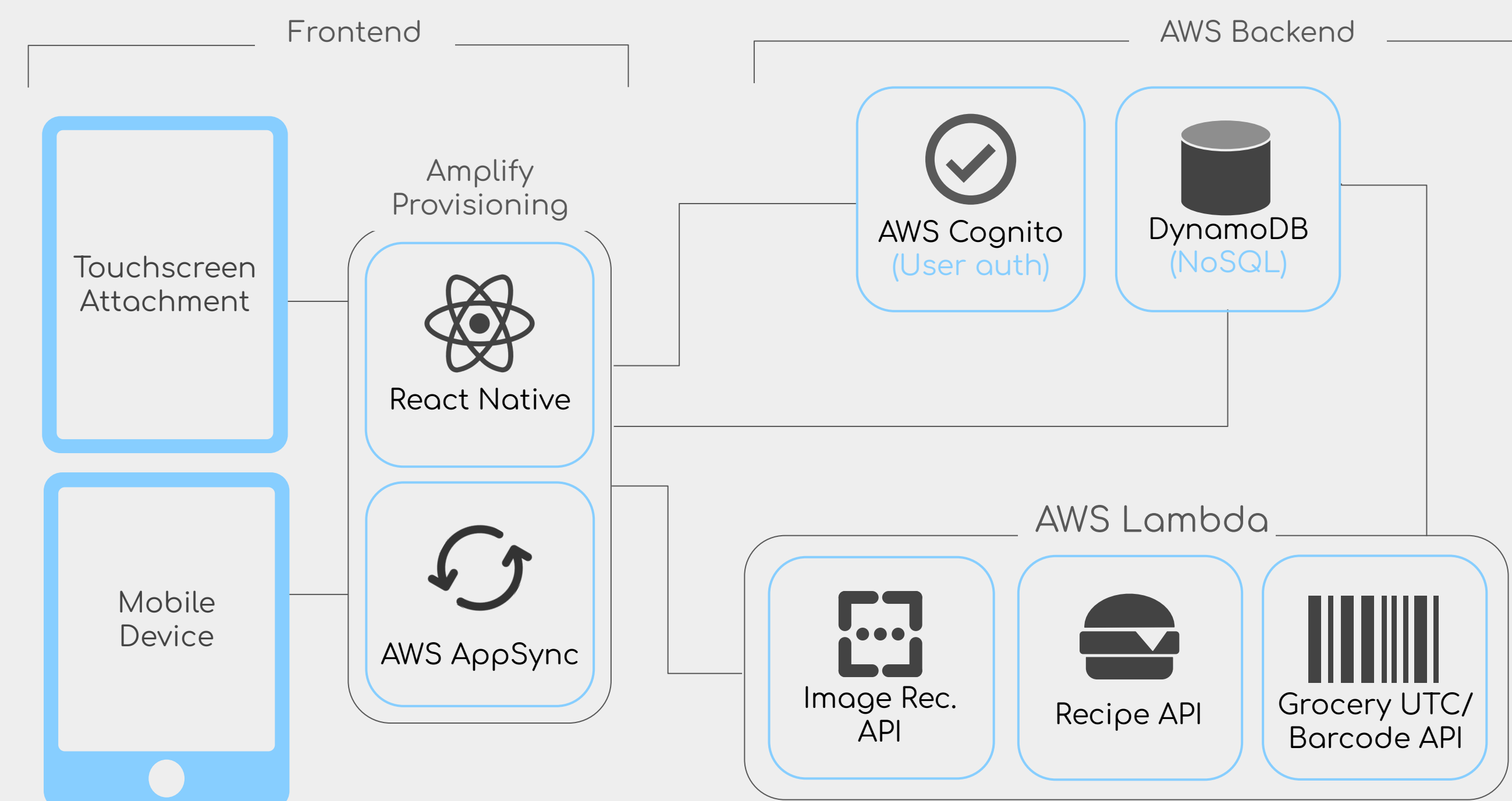
#### Problem Statement

- America wastes approximately 2.5 billion tons of food annually
- Groceries spoil due to forgetfulness
- High costs for existing smart-fridges

#### Solution Concept

- Mountable touchscreen device + mobile app
- Convert ordinary refrigerator into grocery-managing smart fridge

### System Diagram



### Technical Details

#### Frontend

- React Native UI for mobile devices & touchscreen hardware
- Access AWS backend via GraphQL

#### Backend

- DynamoDB to store user data
- Lambda to access external APIs
- Cognito for user authentication

#### Hardware (Concept)

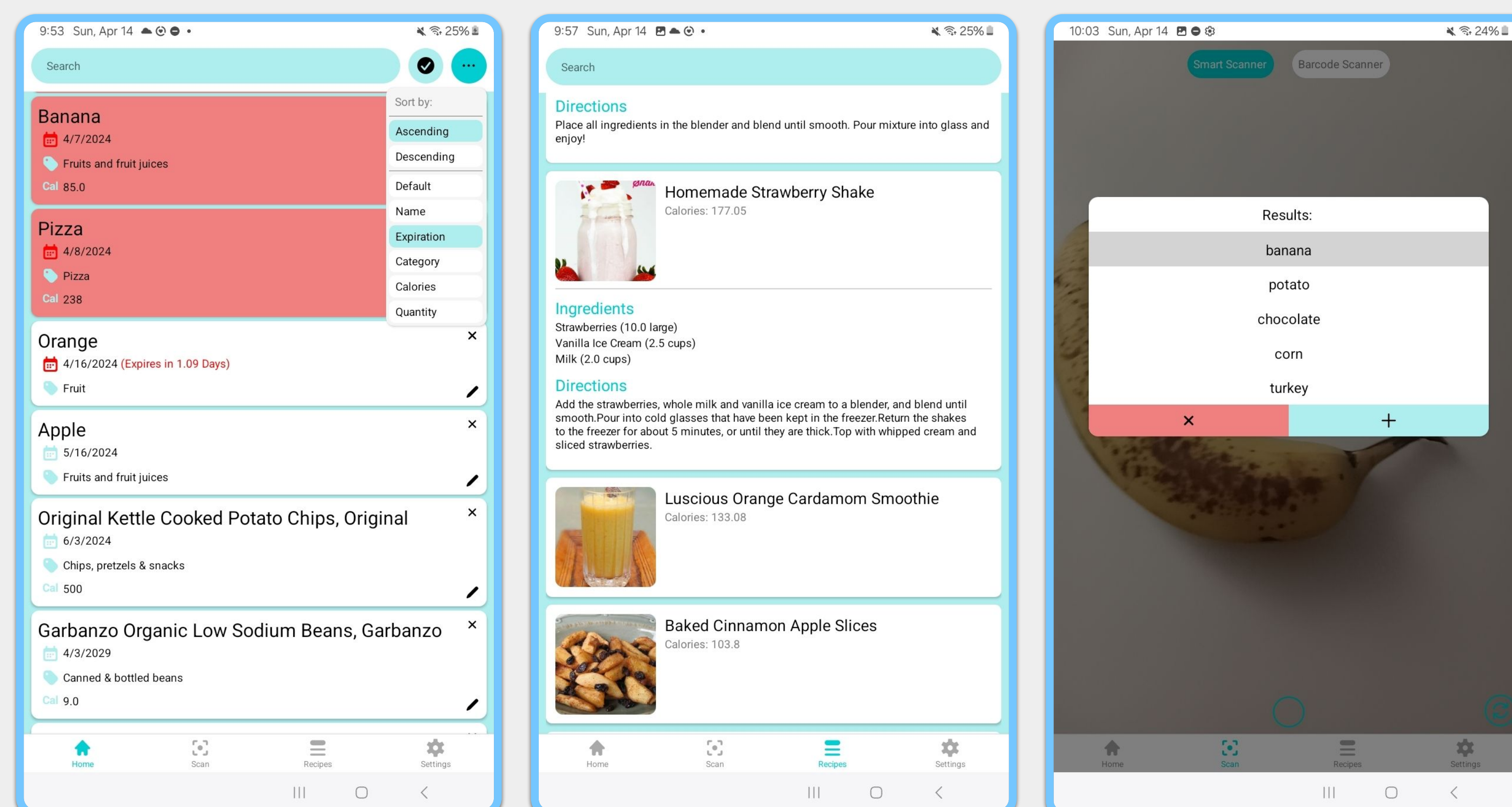
- Samsung A7 Lite tablet used
- 3d-printed housing w/ magnet inserts

### Results

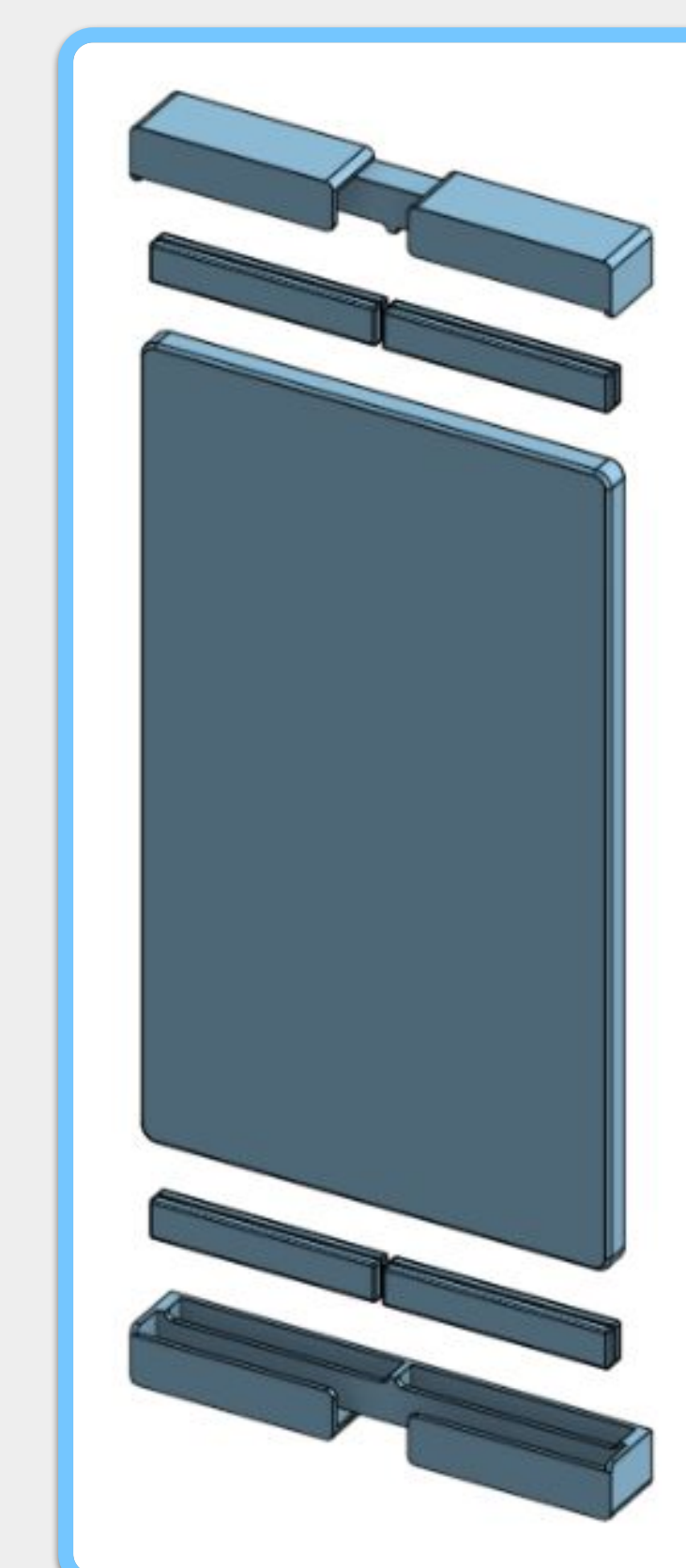
#### App Features

- Track grocery items with expiration dates & nutrition info
- Add items via image recognition, barcode scanner, or manual input
- Generate recipe suggestions from current items

#### User Interface



#### Enclosure



### Future Improvements

- Voice-recognition to access core functionalities
- Text recognition to input items via receipt scans
- Stable build for iOS devices (currently Android only)