



Abstract

- Supplement Analyzer is a cross-platform mobile application that gives greater understanding to supplement ingredient labels.

Features

- Firestore backend for saving large amounts of data and sqlite database for saving user data
- Implements ml kit for Optical Character Recognition
- In depth information on supplement ingredients.
- Uses flutter, which allows the program to run on both ios and android.

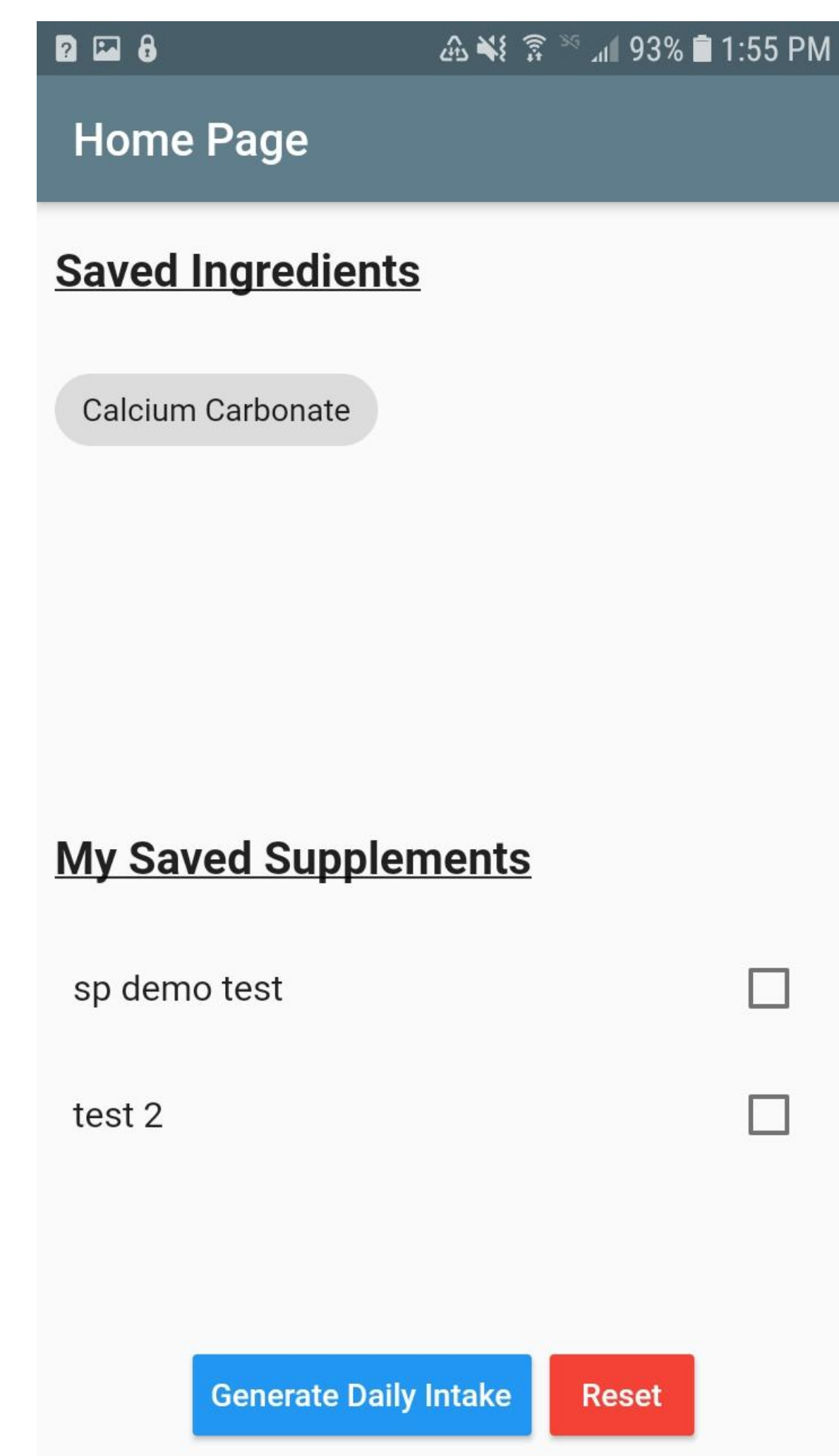


Challenges

- Using OCR(Optical Character Recognition) to read labels from the curved bottle.
- Extract the letters from blur image or picture.
- Lack of design mode, which makes UI development much more difficult.

Implementation

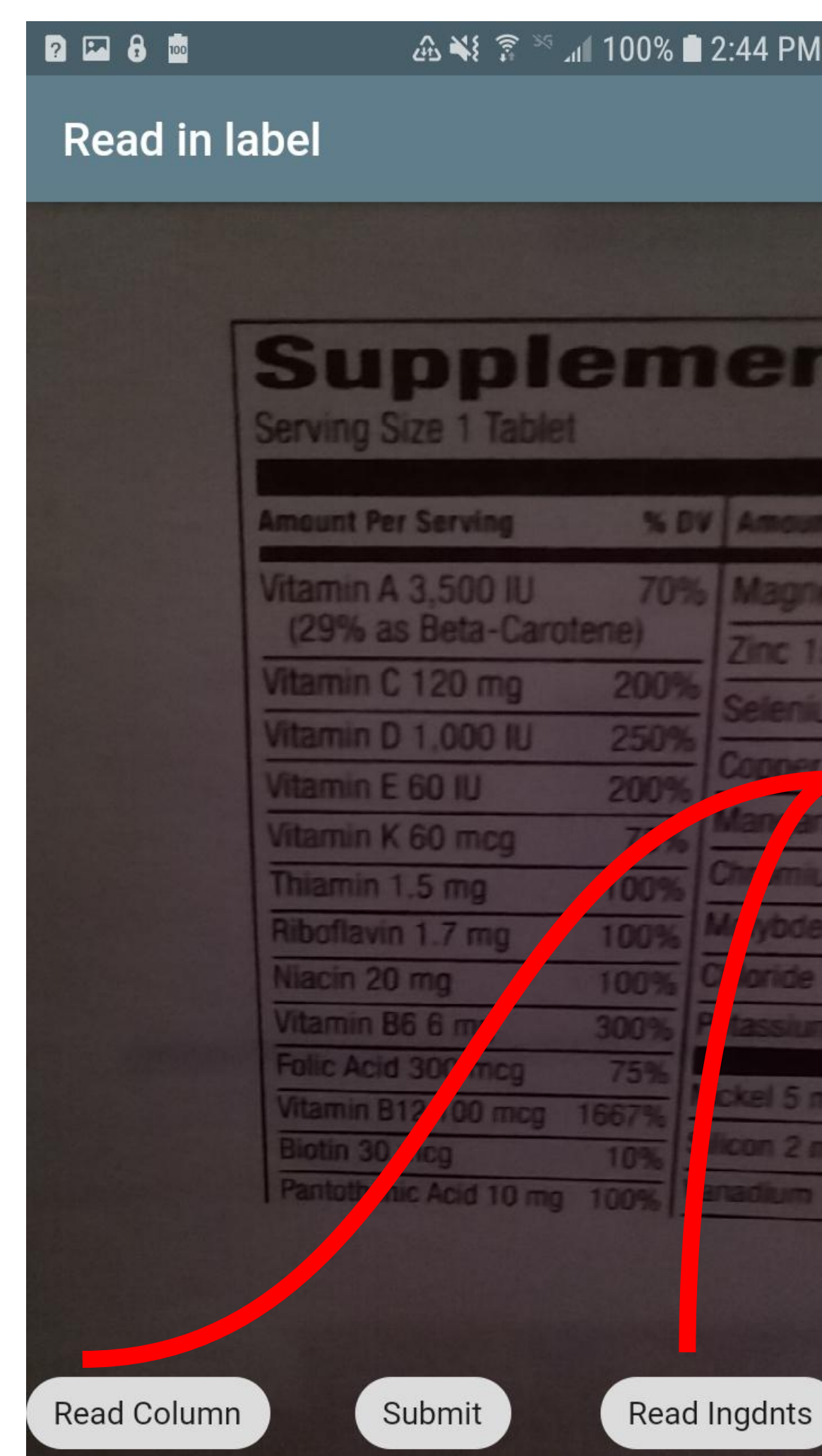
User Homepage



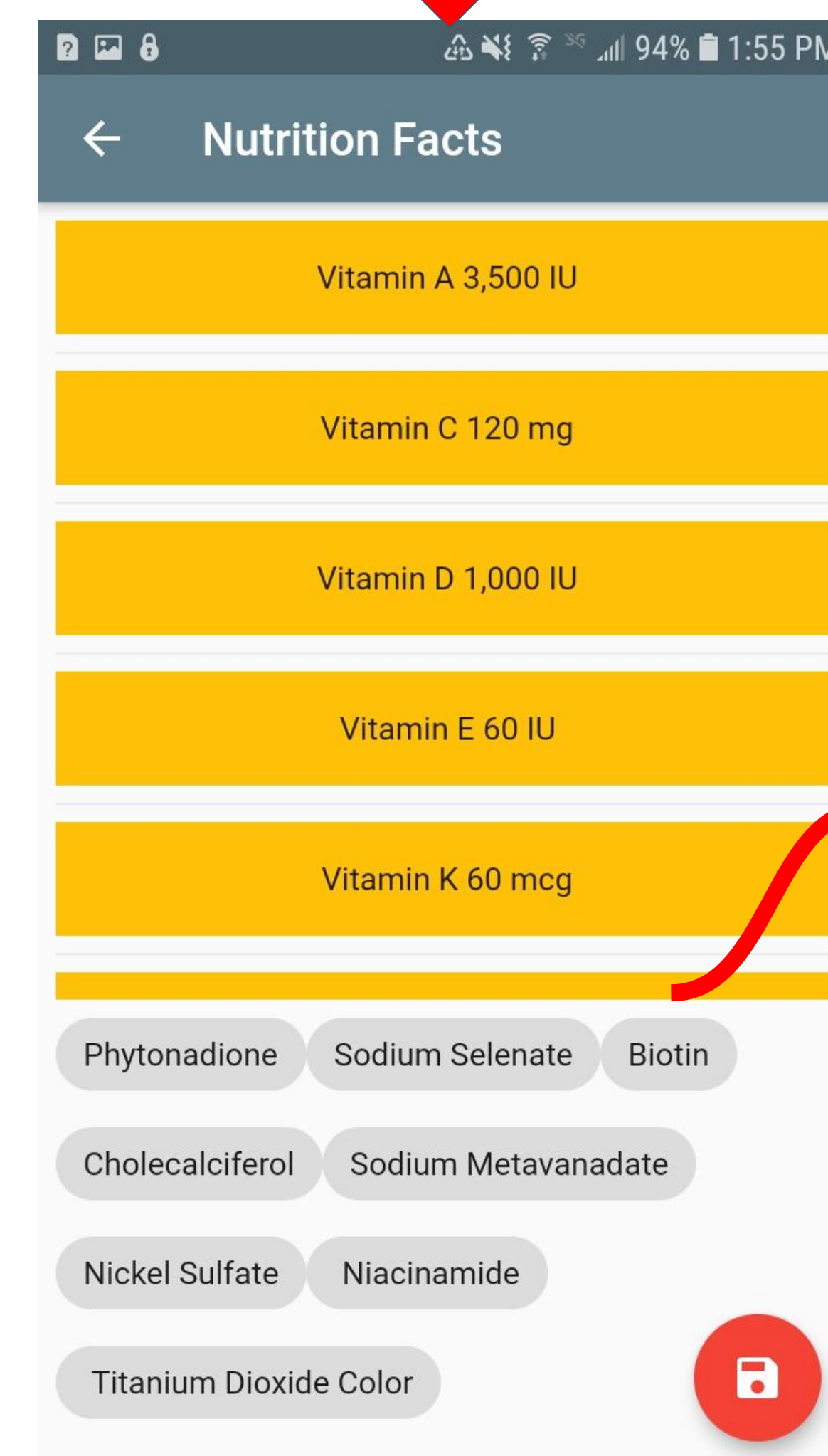
Daily Intake



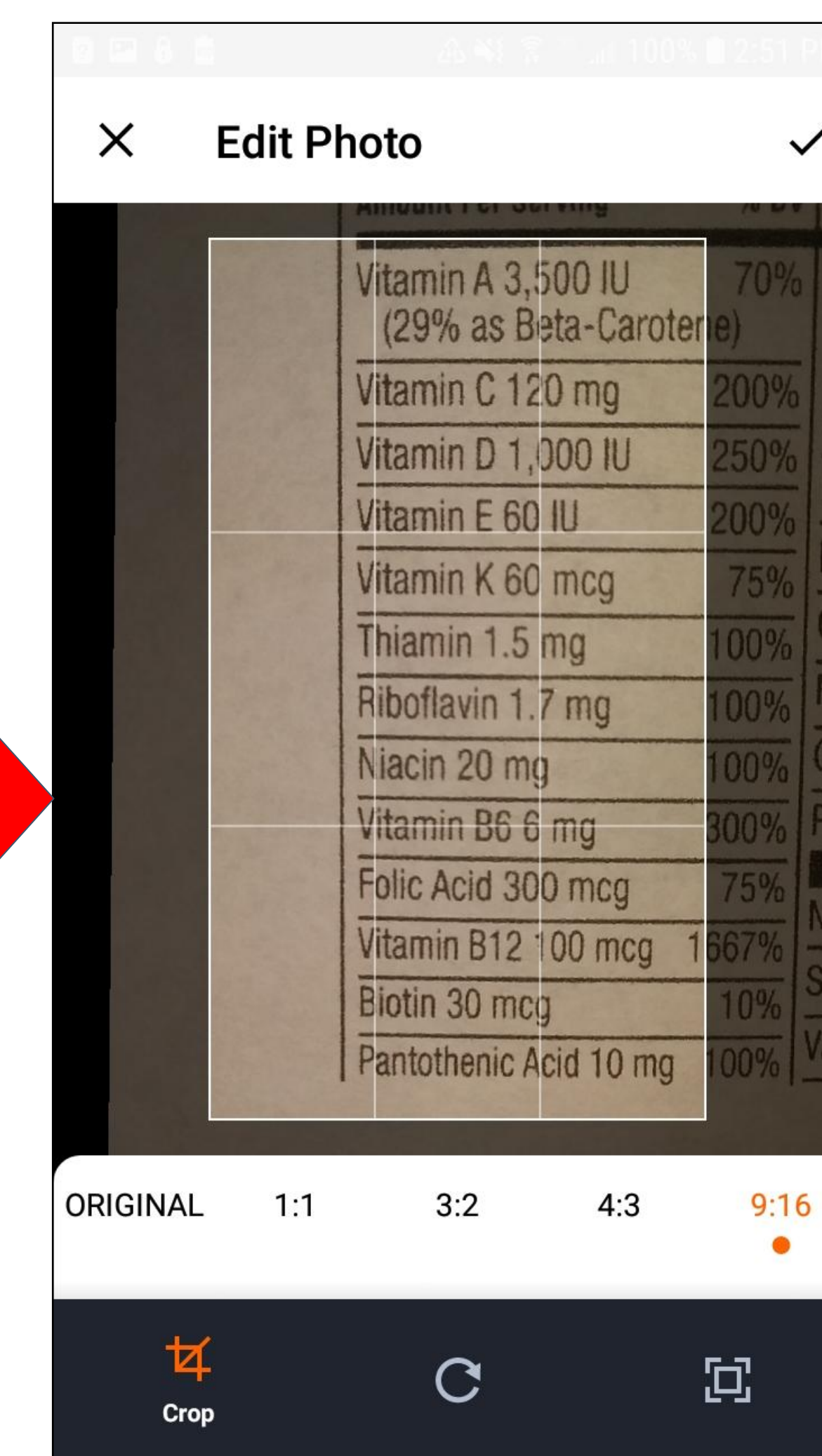
Capture Image



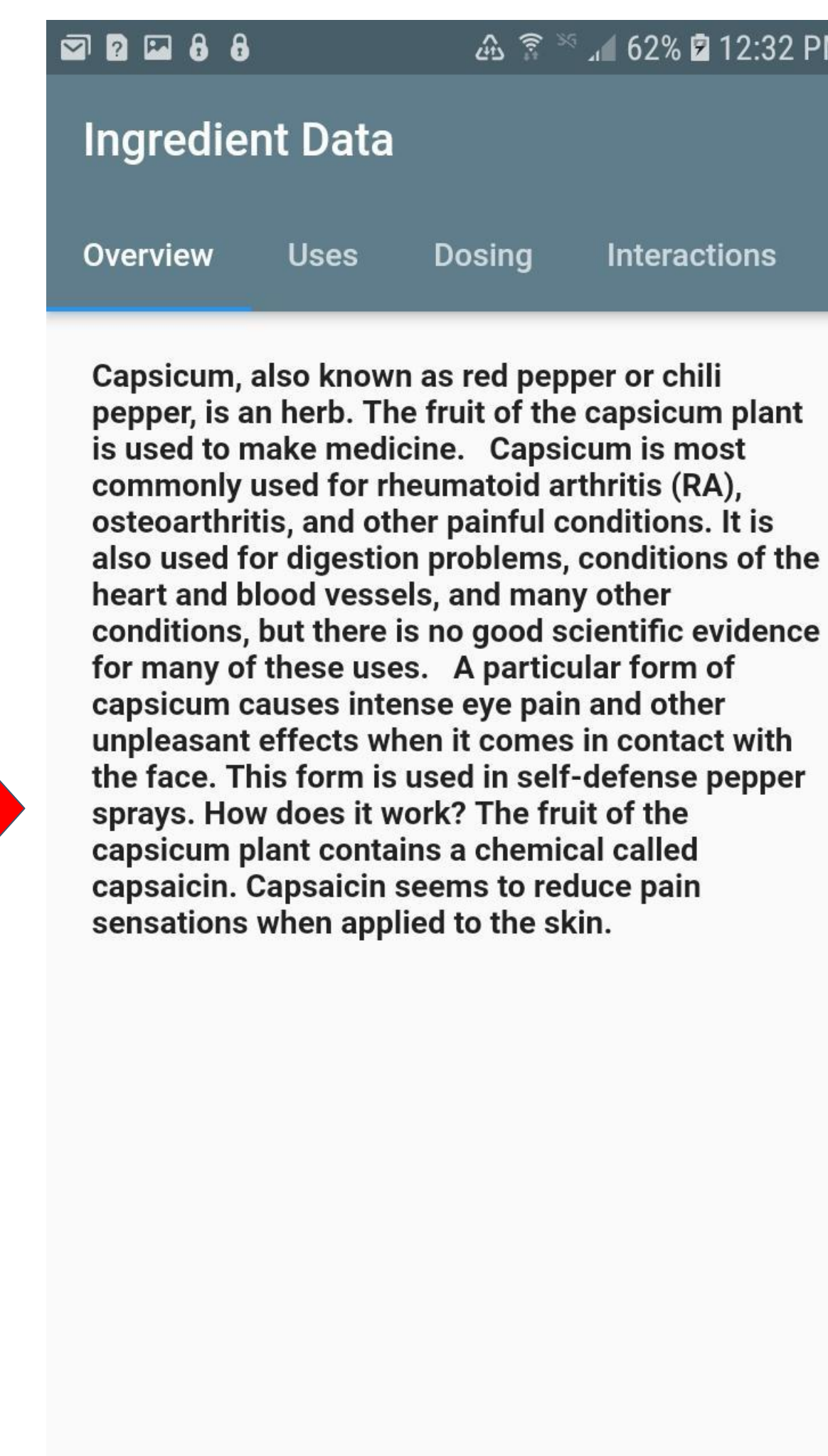
Display Label



Crop Image

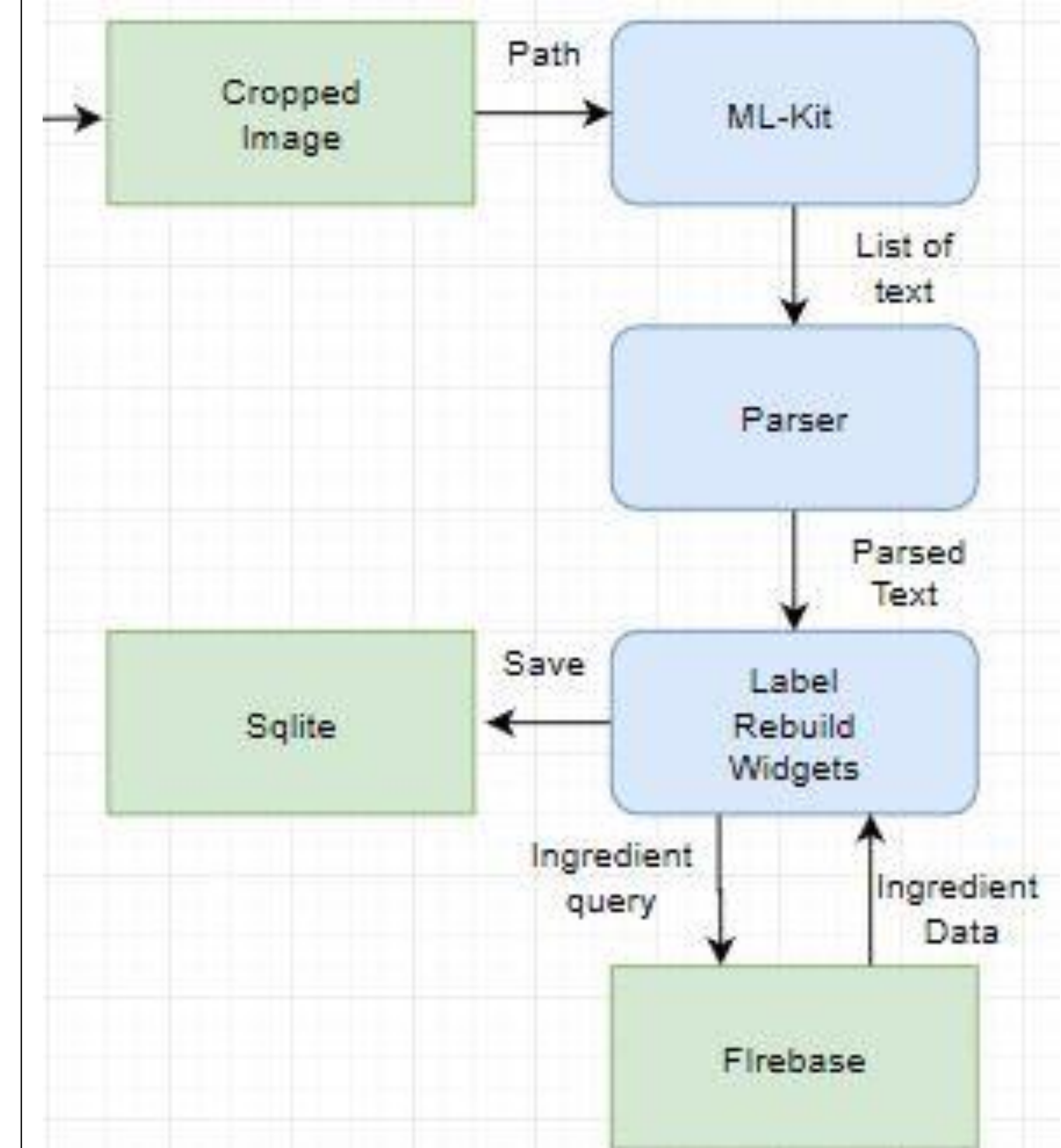


Ingredient Data



Data Flow Diagram:

Rebuilding the label



Conclusion

- In completing this project we have been able to implement many topics learned in our coursework.
- We set up multiple databases, a backend server, performed web scraping and gained experience with parsing.
- By using Flutter we have gained experience with a framework that is used by many large corporations.