Money Tracker

CASA0015 Mobile Systems & Interactions

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Money Tracker GitHub Repository - https://github.com/virgolibra/casa0015-mobile-assessment

Intro & Idea

- The money tracker is an application to help users take note of their daily expenses.

- The inspiration is from personal finance management.

- Although we can view transactions from most of our bank Apps.

- Some of them are not in detail and will not be updated in time, which will be pended during weekend.

Intro & Idea

- If we do not pay by card, our bank apps won't help us record our expenses.

- If we pay by cash or do not pay by ourselves (by friends, families etc.)

- For me, I often cannot remember clearly that,
  - What did I buy?
  - How much did I pay?
  - Where did I buy it?

- And it is hard to remember again

Intro & Idea

- By using this app, users can manually enter the item description, amount

- Optional upload of the receipt to save every expense in the daily life.

- Users can view the items they saved with detailed information and the location where the item is created.
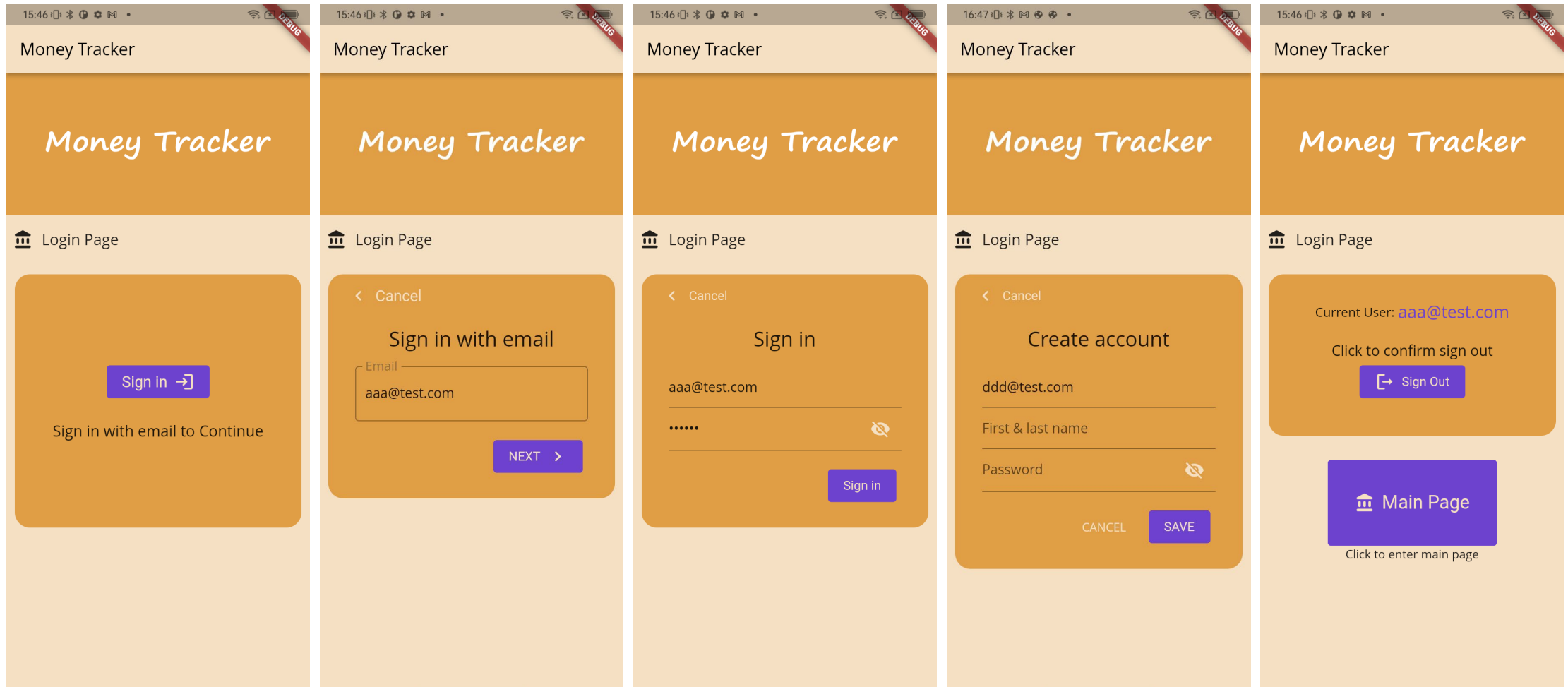
Design

- Splash Page
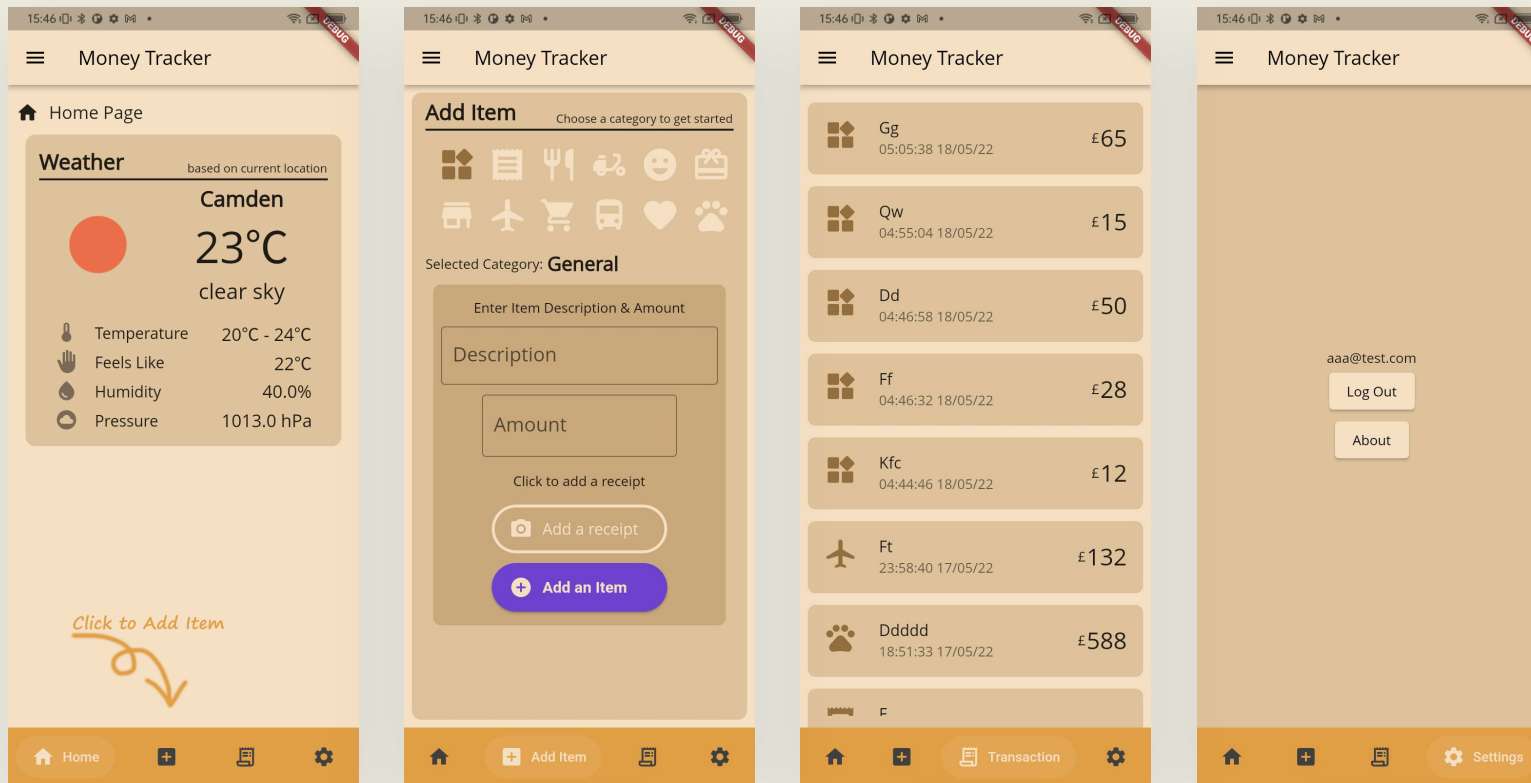
- Now is static

- Could add animation as improvement.
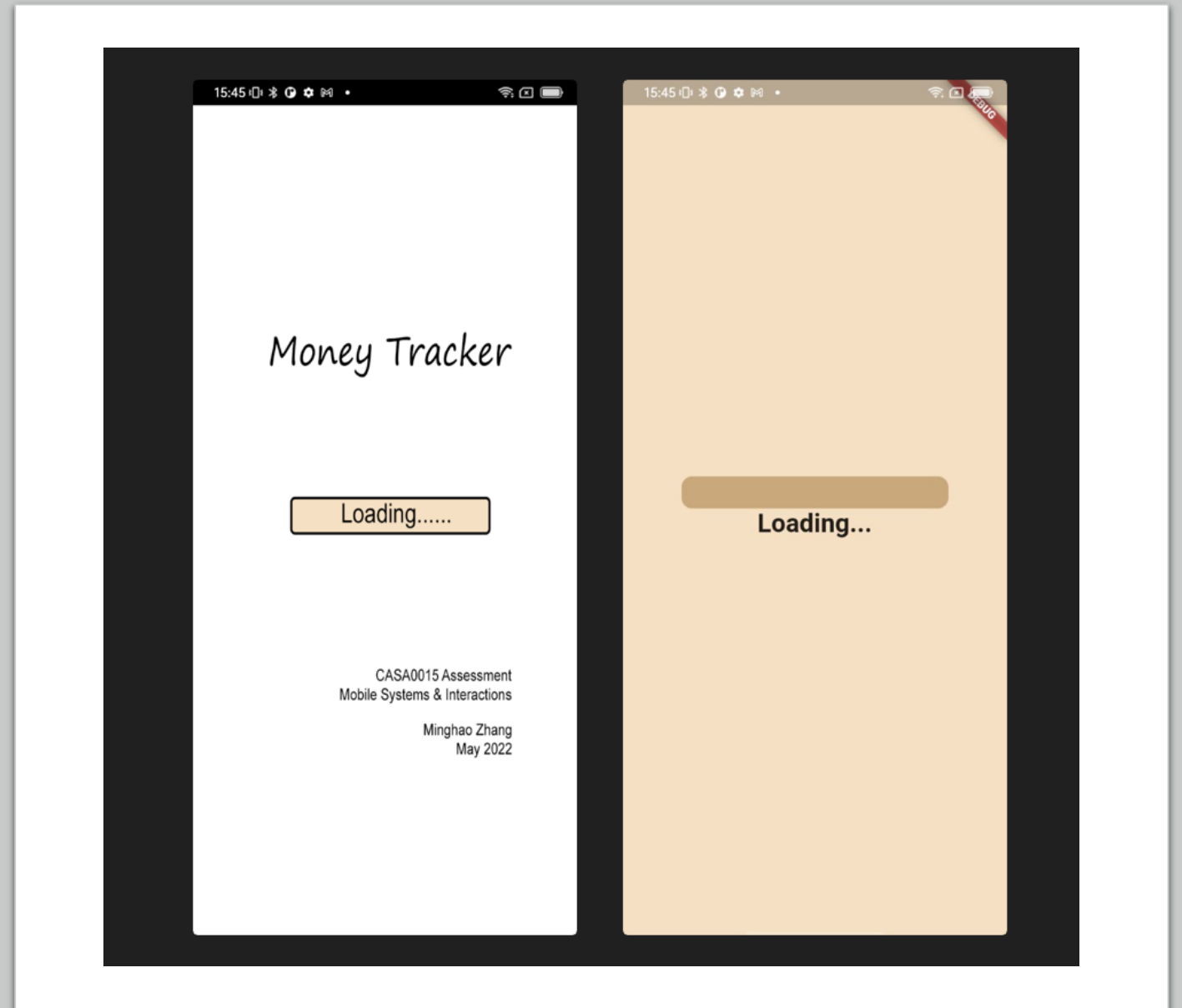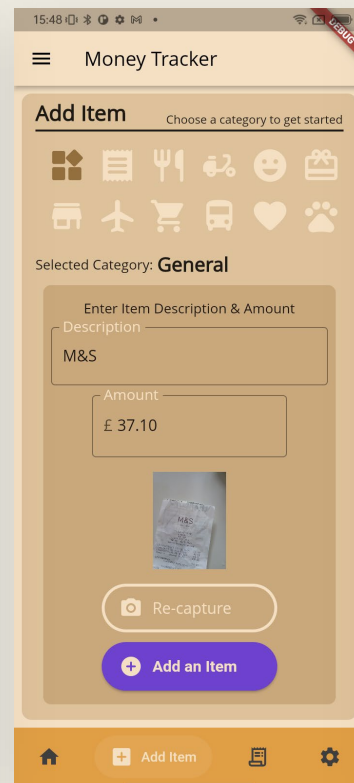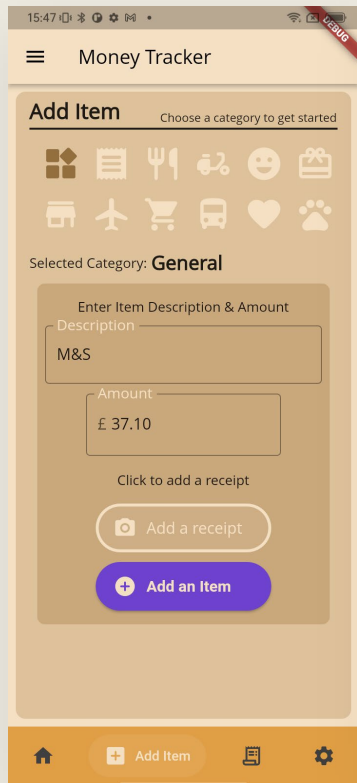
Design
Login page

Design

Main Pages

- **Home Page**
  - Current weather based on current location.

- **Add Item**
  - User can set the category, add description and amount. Optional enable camera to capture and save a receipt.

- **Transaction**
  - Display each item that user added with basic info.

- **Settings**
  - Currently only contains log out and about page buttons.
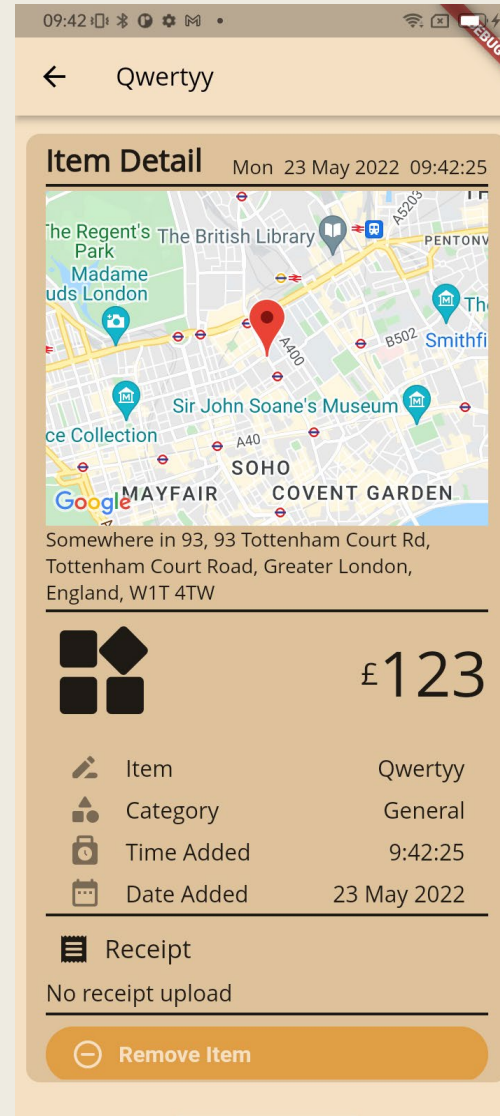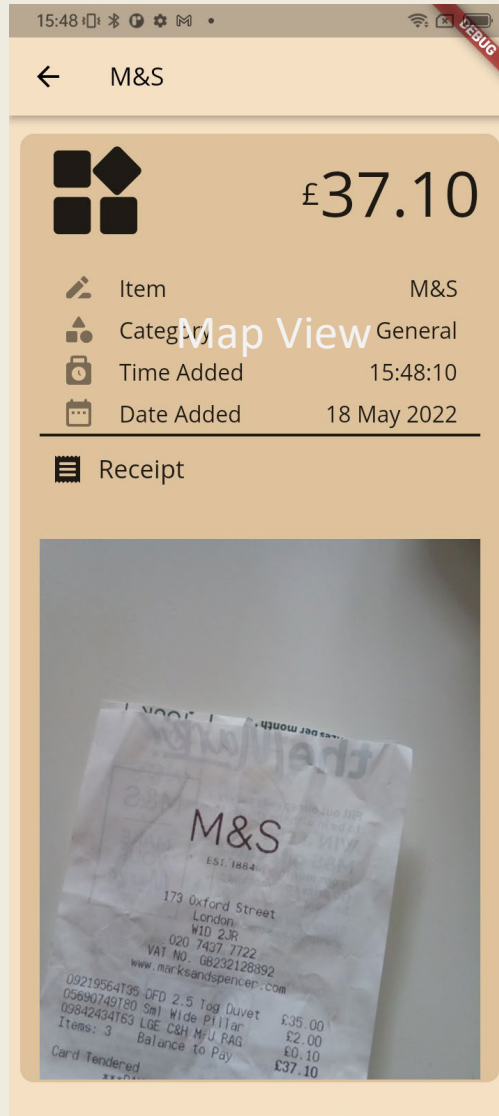
Design

Add item
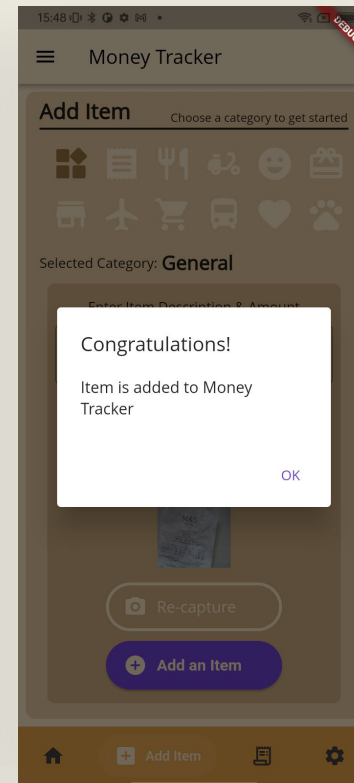
- Choose a category to get started
- Enter the descriptions
- Enter amount
- Click button to add a receipt
- Preview the captured receipt
- Add the item to Money Tracker

Design   Item Detailed Page

- A list of saved items
- Click an item to show detail page
- Date and time
- Map with location
- Item price and description
- View uploaded receipt
- Can remove the item from database

Firebase

- Based on Colab tutorial https://firebase.google.com/codelabs/firebase-get-to-know-flutter#0

- Firebase online tutorial on Youtube https://www.youtube.com/watch?v=wUSkeTaBonA&feature=emb_imp_woyt

- Uploading image to Firebase Storage online tutorial on Youtube https://www.youtube.com/watch?v=YgjYVbg1oiA&t=927s

- A Firebase project is created to store the account info and user data.

- Cloud database is used to store item data

- Firebase storage stores uploaded images.

Dependencies

- google_maps_flutter: ^2.1.2
- permission_handler: ^9.2.0
- location: ^4.3.0
- geolocator: ^8.2.0
- weather: ^2.0.1
- camera: ^0.9.4+21
- path_provider: ^2.0.9
- path: ^1.8.0
- cloud_firestore: ^3.1.14

- firebase_auth: ^3.3.17
- google_fonts: ^2.3.2
- provider: ^6.0.2
- firebase_core: ^1.12.0
- sticky_grouped_list: ^2.1.0
- bottom_bar: ^1.3.0+1
- geocoding: ^2.0.4
- intl: ^0.17.0
- firebase_storage: ^10.2.16

Weather

- Based on OpenWeather API https://openweathermap.org/api
- Fetch weather is based on the example of weather 2.0.1 flutter package. https://pub.dev/packages/weather
- Flutter package geolocator 8.2.1 is used to fetch user's current location https://pub.dev/packages/geolocator

weather 2.0.1

Published 12 months ago • cachet.dk (Null safety)

| SDK | FLUTTER | PLATFORM | ANDROID | IOS | LINUX | MACOS | WEB | WINDOWS | | 👍 121 |

Readme   Changelog   Example   Installing   Versions   Scores

weather

This package uses the OpenWeatherMAP API to get the current weather status as well as weather forecasts.

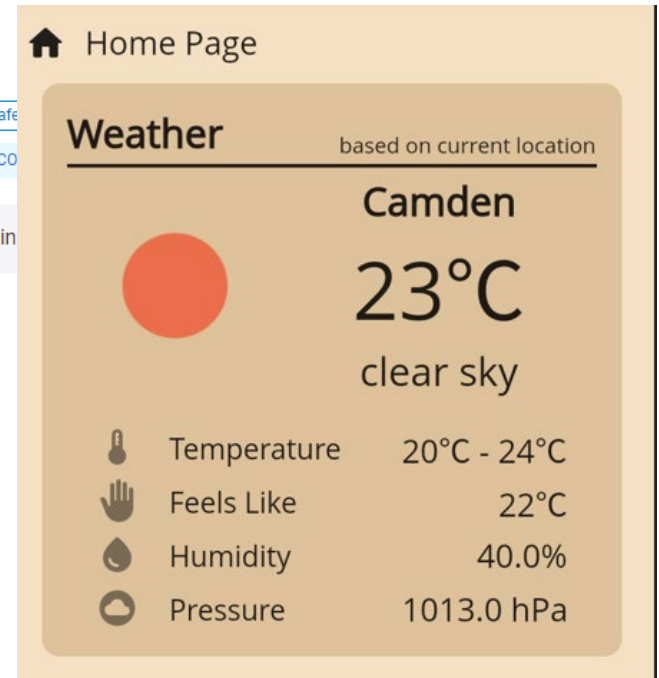The weather can currently be fetched by providing a geolocation or a city name.

pub v2.0.1

## geolocator 8.2.1

Published 17 days ago • baseflow.com (Null safe...)

| SDK | FLUTTER | PLATFORM | ANDROID | IOS | MACO... |

Readme   Changelog   Example   Installin...

🏠 Home Page

Weather   based on current location

Weather

Camden

23°C

clear sky

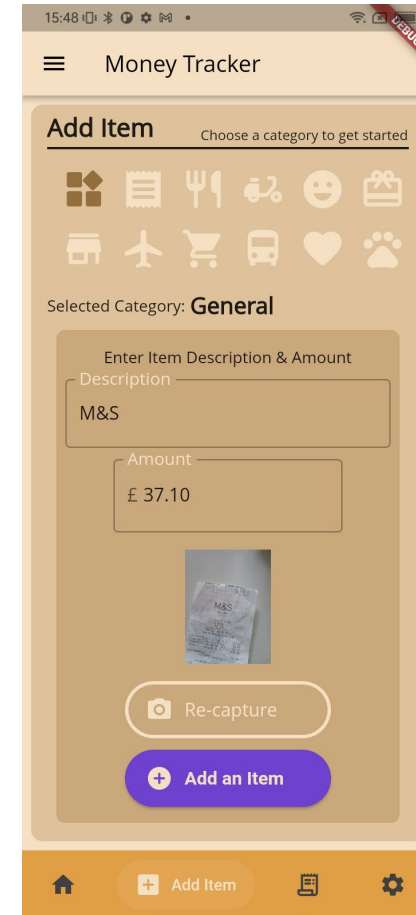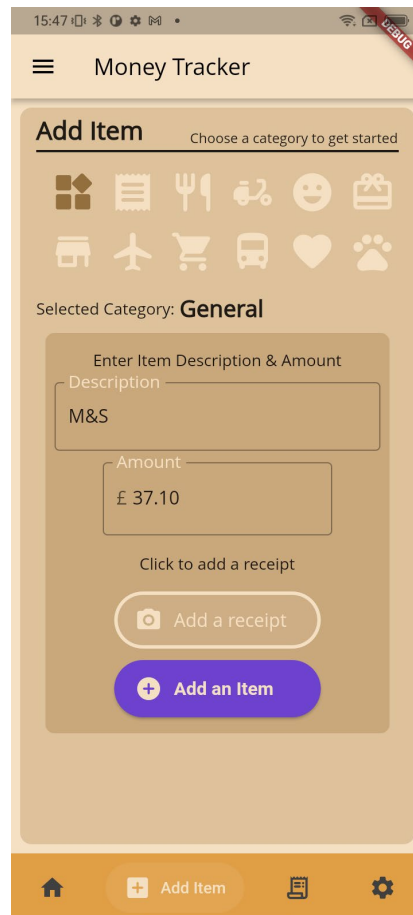| 🌡️ | Temperature | 20°C - 24°C |
✋	Feels Like	22°C
💧	Humidity	40.0%
☁️	Pressure	1013.0 hPa

Bottom bar

- bottom_bar: ^1.3.0+1 https://pub.dev/packages/bottom_bar
- Using a PageView widget to switch pages

Camera

- camera: ^0.9.4+21 https://pub.dev/packages/camera
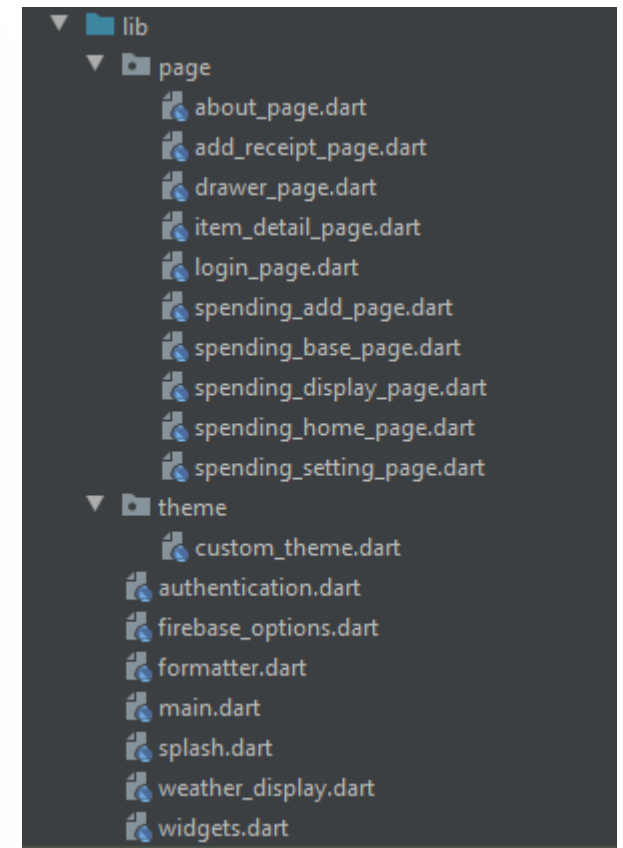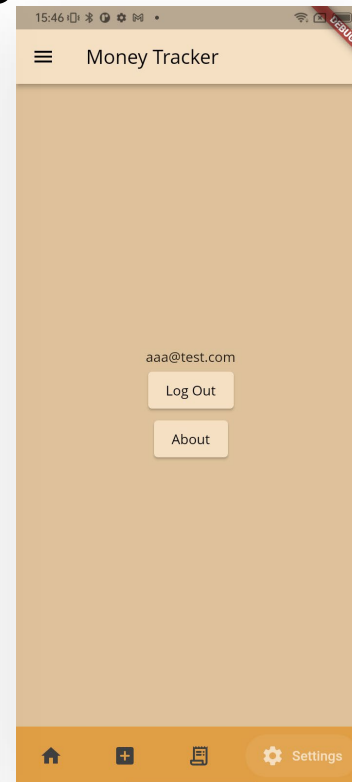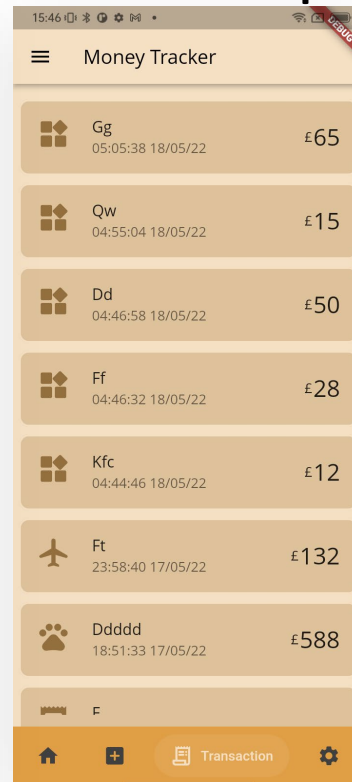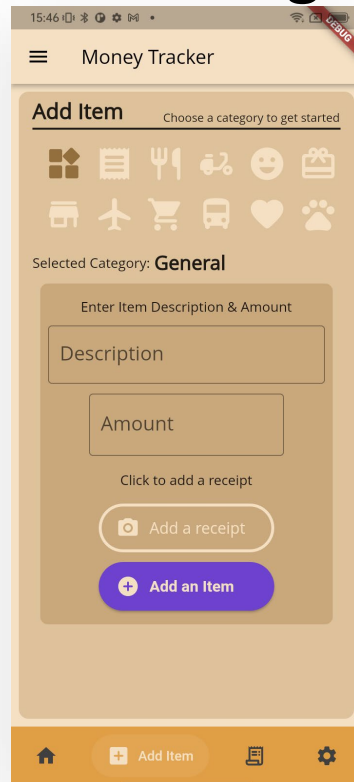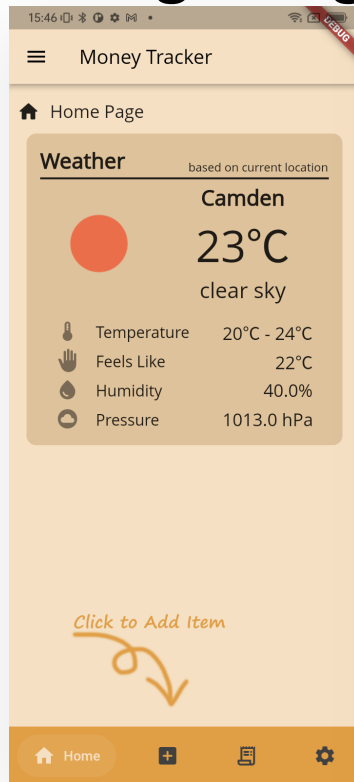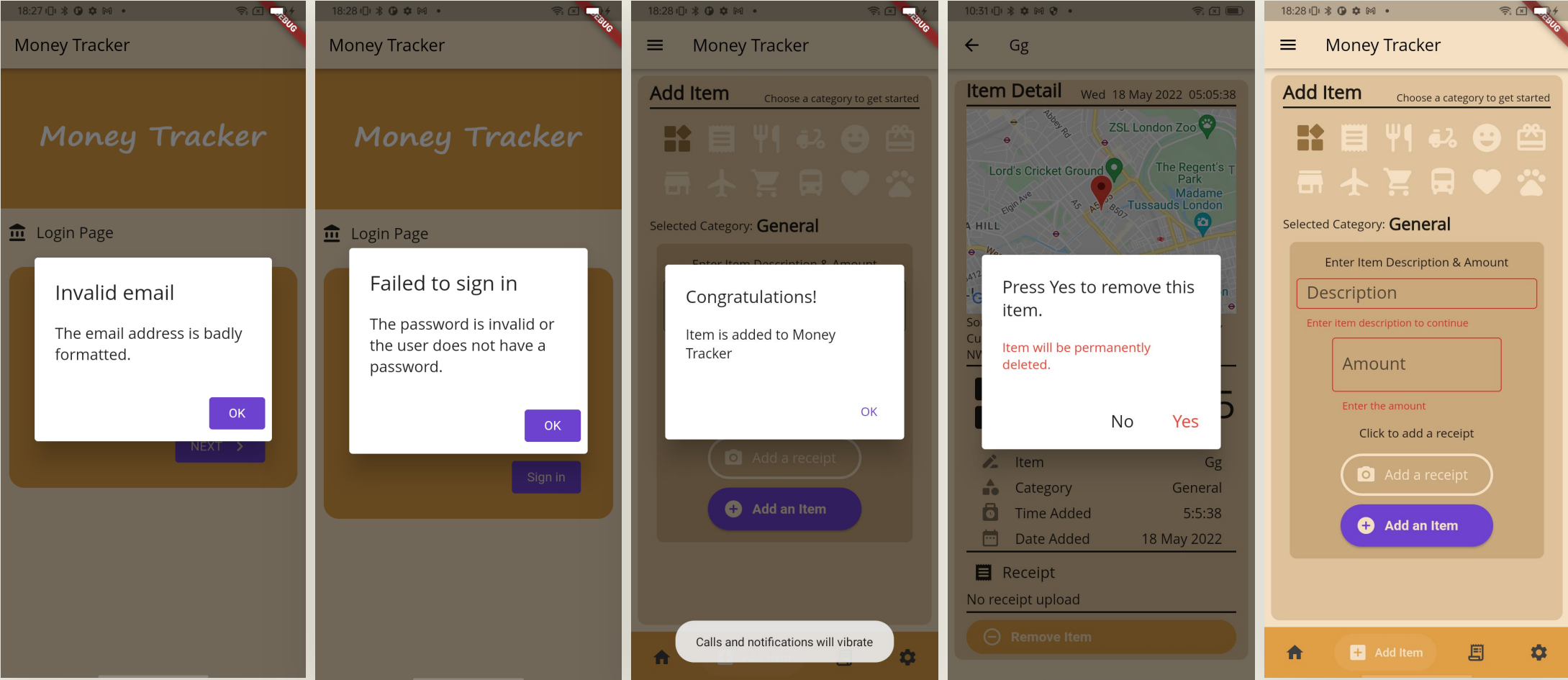
Dialog & Input verification

Features

Current Features

- Support user account create and login
- Account Info and User data are stored based on Firebase Platform
- Support get and store user's current location based on Google Map
- Support real-time weather fetching based on user's current location
- Store item detailed information (Description, amount, date, time, location, and captured receipt)
- Item category
- View all stored items
- Support item delete from the database
- Support account switch, data for different accounts are independent

Upcoming Features

- Classification items in display page by category etc
- Sort items in display page by time, amount etc.
- Filter items in display page by time, amount etc.
- Add statistic features (total amount, category amount etc.)
- Support optional location added.
- Store weather when the item is created.
- Add a budget feature.

Q & A