

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

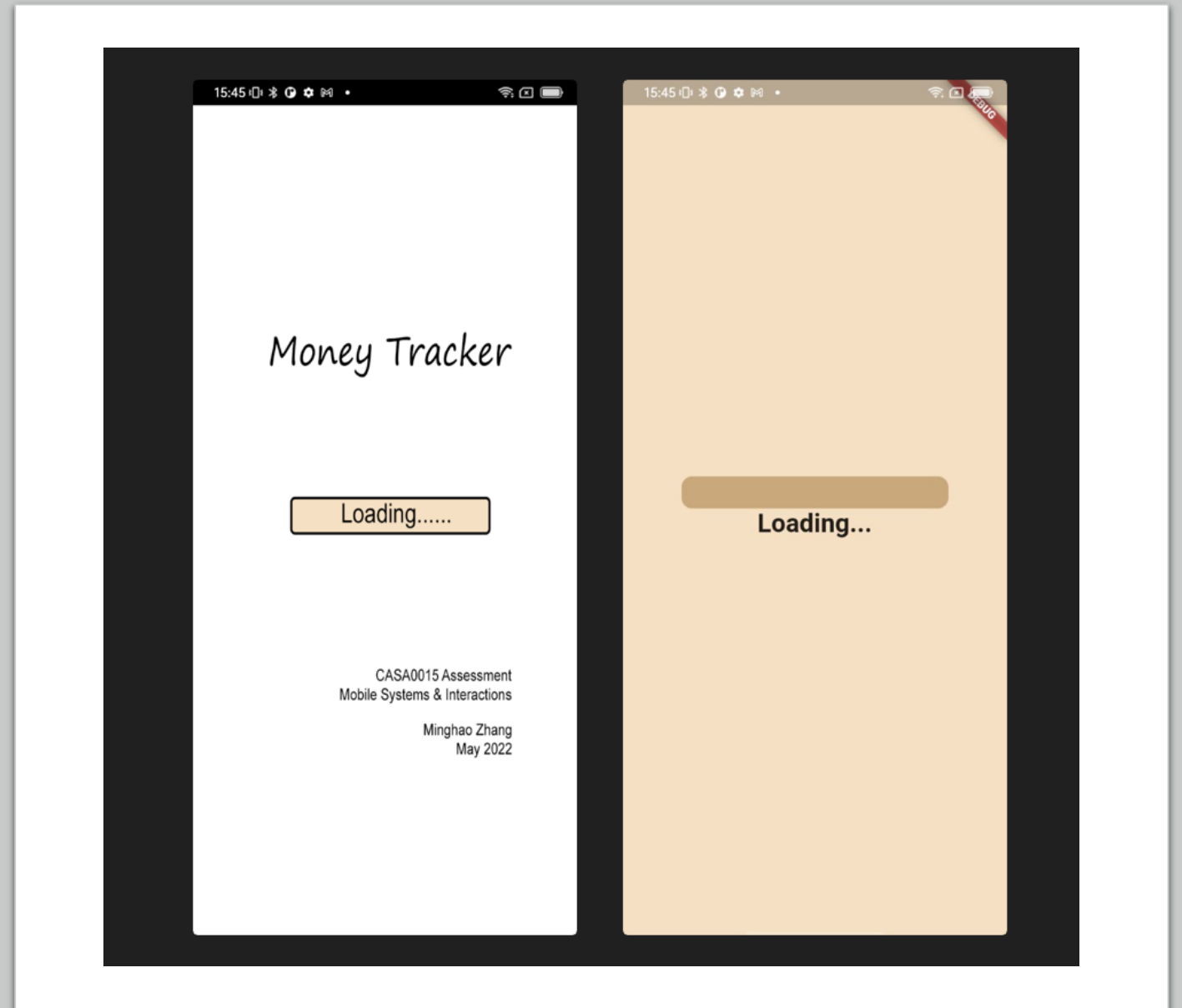
- If we do not pay by card, our bank apps won't help us record our expenses.
- If we pay by cash or do not pay by ourselves (by friends, families etc.)
- For me, I often cannot remember clearly that,
 - What did I buy?
 - How much did I pay?
 - Where did I buy it?
- And it is hard to remember again

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.

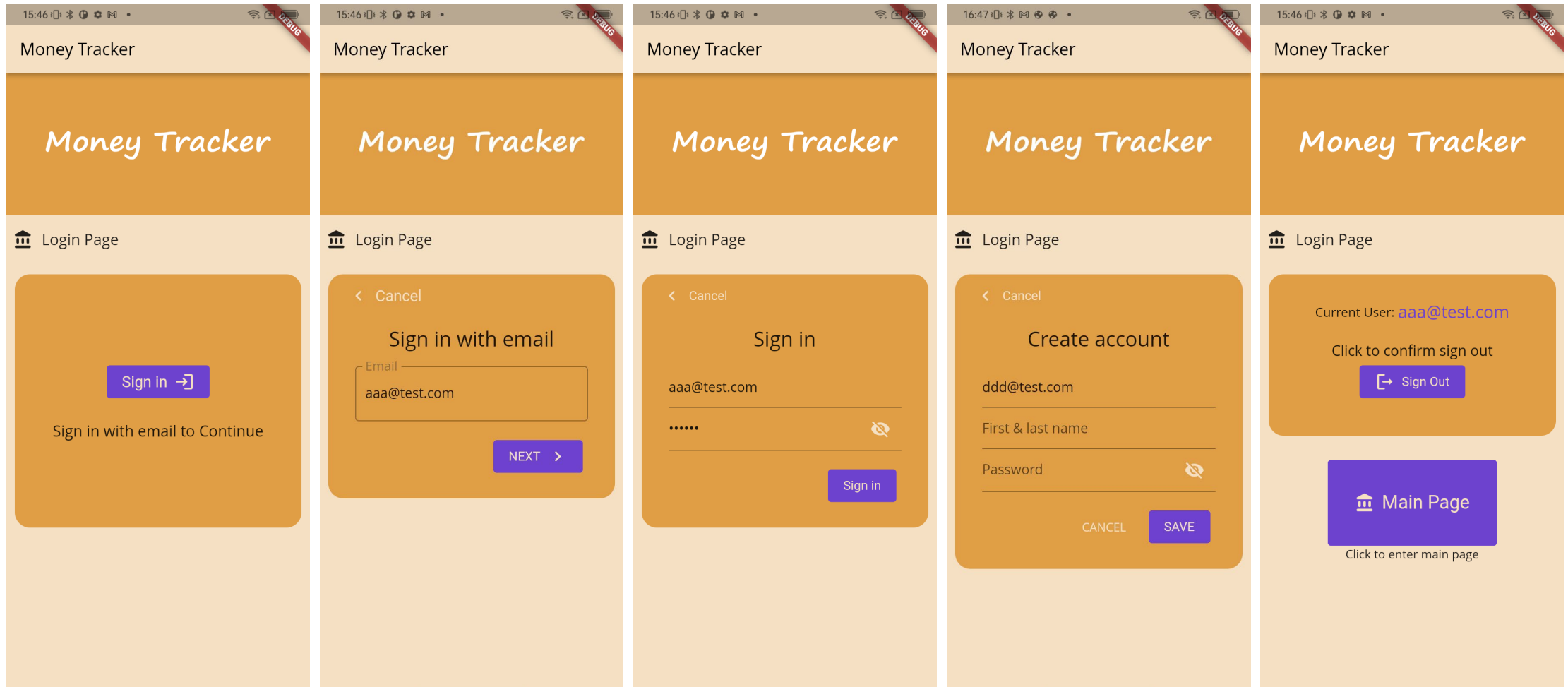
Design

- Splash Page
- Now is static
- Could add animation as improvement.



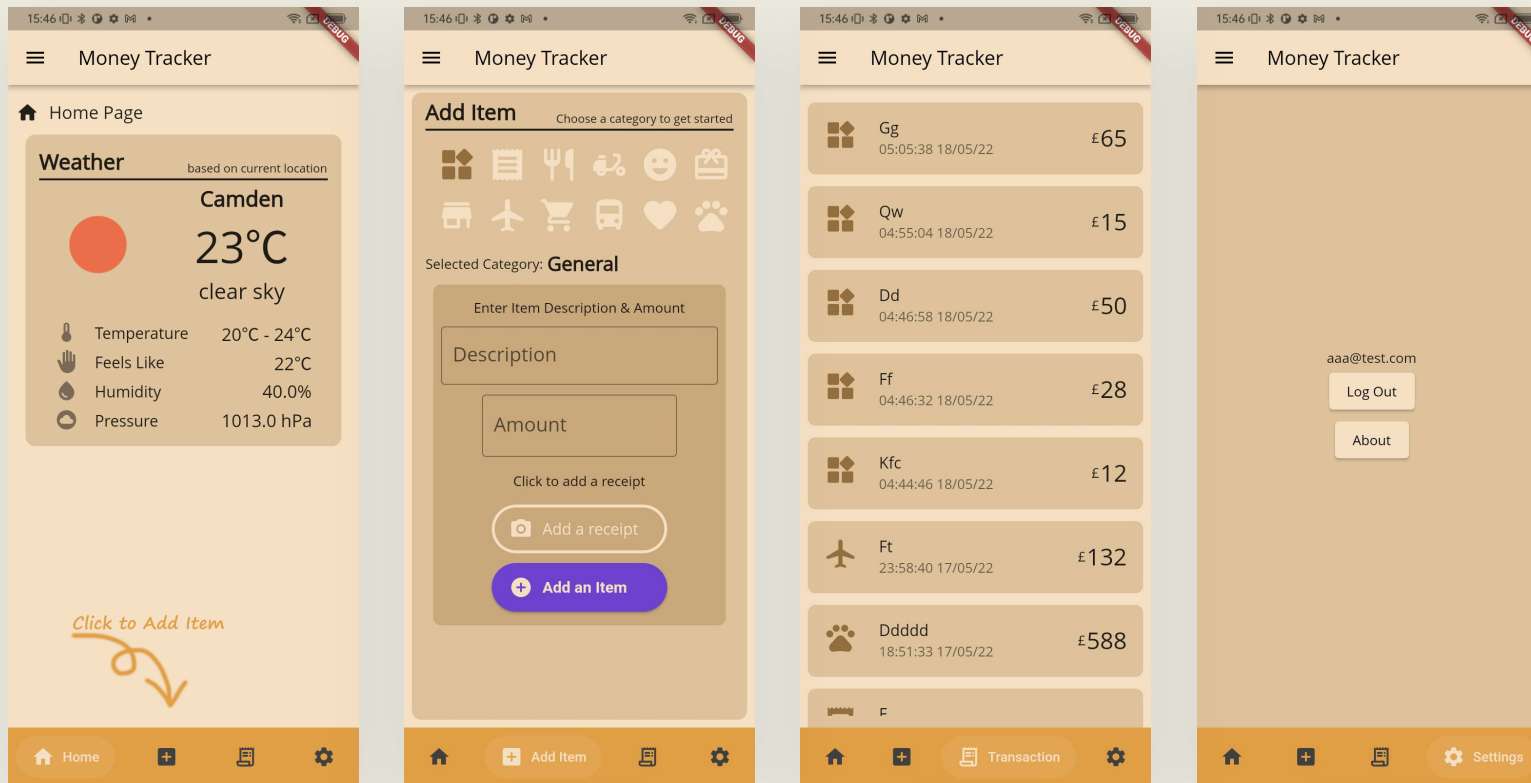
Design

Login page



Design

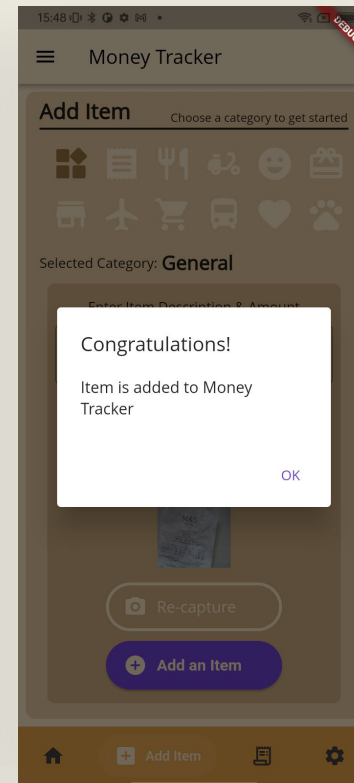
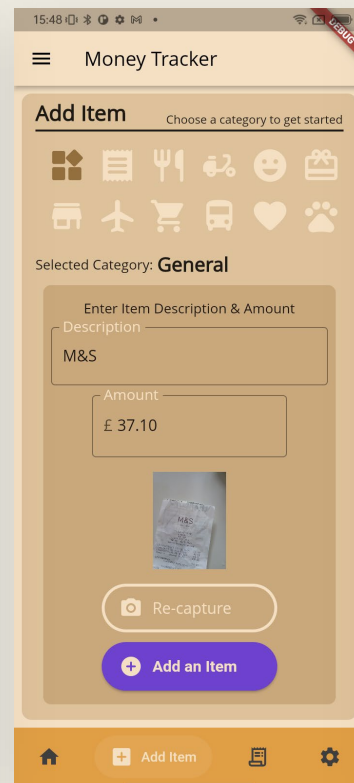
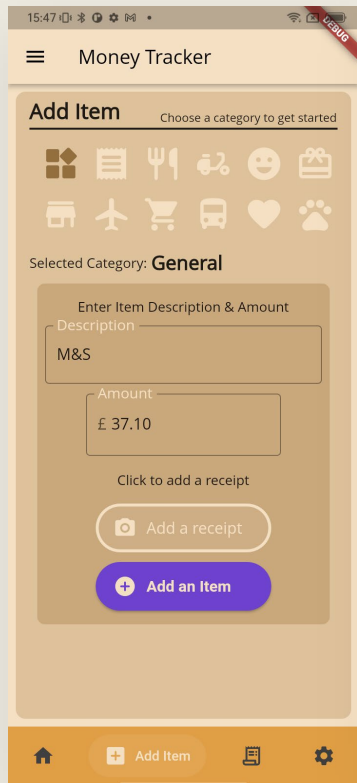
Main Pages



- 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

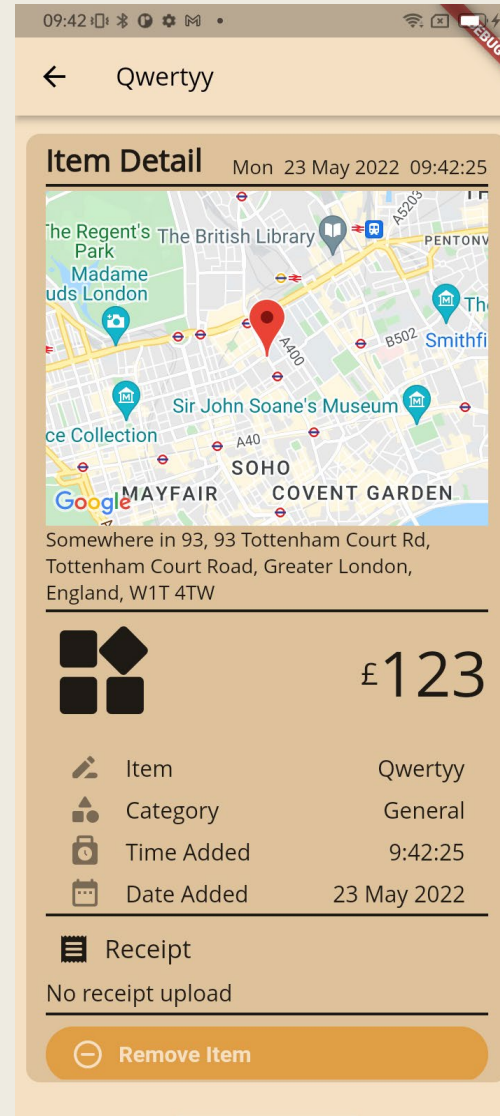
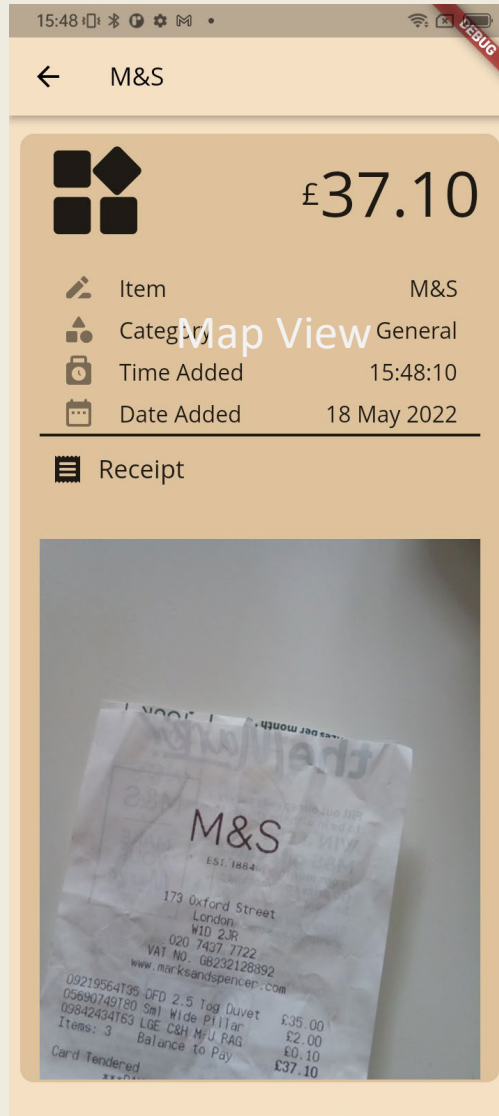
Add item



- 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

gs://fir-casa0015-app.appspot.com > images > spendingReport > H731NtAnbnPrh...

<input type="checkbox"/>	Name	Size	Type	Last modified
<input type="checkbox"/>	CAP1176468803476938755.jpg	115.94 KB	image/jpeg	17 May 2022
<input type="checkbox"/>	CAP1962713853304438747.jpg	141.34 KB	image/jpeg	17 May 2022
<input type="checkbox"/>	CAP2183596732362265793.jpg	93.57 KB	image/jpeg	19 May 2022
<input type="checkbox"/>	CAP2475845677231178750.jpg	144.54 KB	image/jpeg	18 May 2022
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<input type="checkbox"/>	CAP3415277005536376349.jpg	142.65 KB	image/jpeg	18 May 2022
<input type="checkbox"/>	CAP3461781679692335228.jpg	144.36 KB	image/jpeg	17 May 2022
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Upload file

CAP728059749954... X

Name
CAP7280597499548680208.jpg

Size
123,443 bytes

Type
image/jpeg

Created
18 May 2022, 15:48:42

Updated
18 May 2022, 15:48:42

File location

Other metadata

H731NtAnbnPrhB02ZDj585bb9Ma2	4ADXjBdUCnzGtobR53ig
+ Add document	+ Start collection
4ADXjBdUCnzGtobR53ig	+ Add field
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A0bZ7kzPTR7JxIMcxwAc	iconIndex: 7
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UBpUVkJYnJddpIPd9Me5	lat: 51.5261908
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cnGgNeR0DU6WSiAUgyHK	name: "Tester2"
duknJdW7bUkWcRkSM1Md	price: "155"
eZ0czGThsDn1rPNvZhix	timestamp: 1652801999130
1e5cpE44Y9TwXPQ32K36	userId: "H731NtAnbnPrhB02ZDj585bb9Ma2"
u3RKdbh4DC16RdrIOYew	

Firestore

Firebase CASA0015 App

Spark plan

2 apps



flutter_casa0015_...



flutter_casa0015_...

+ Add app

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=YgiYVbg1oiA&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

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[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.

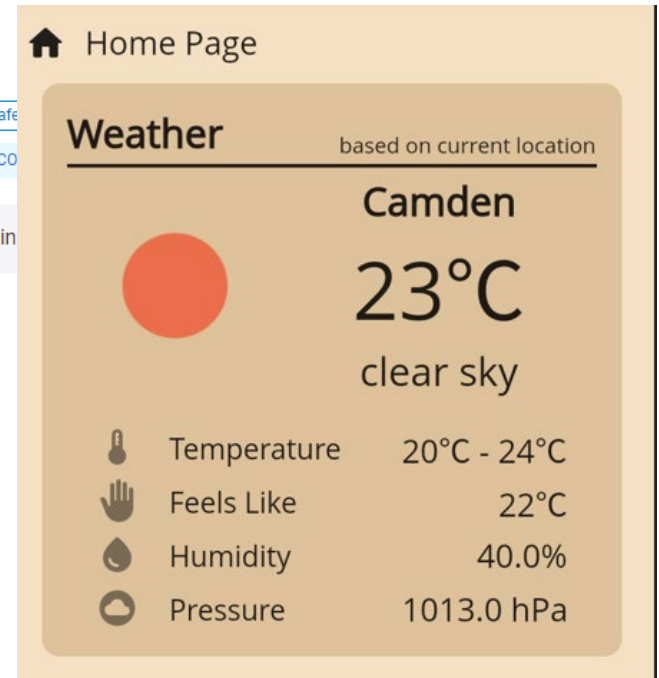
pub v2.0.1

geolocator 8.2.1

Published 17 days ago • © baseflow.com (Null safety)

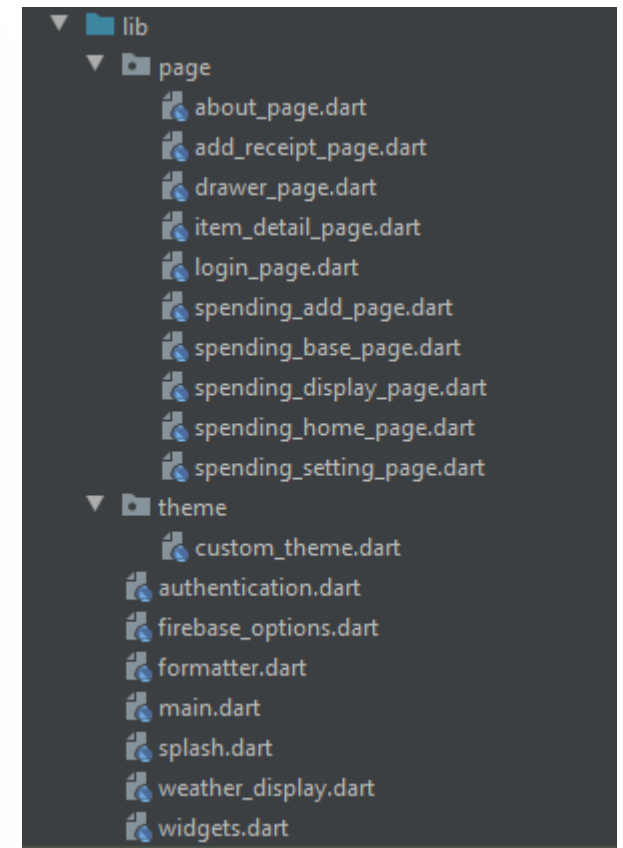
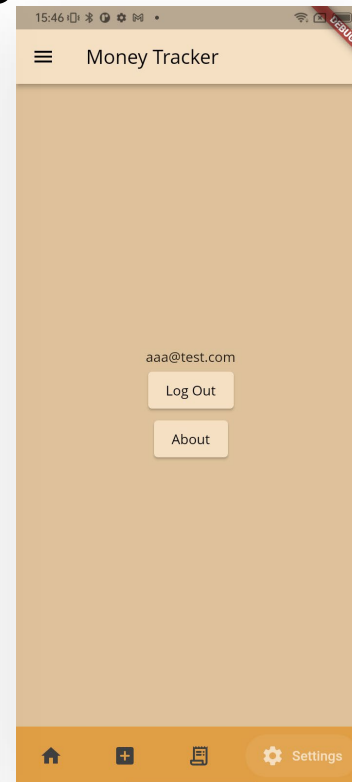
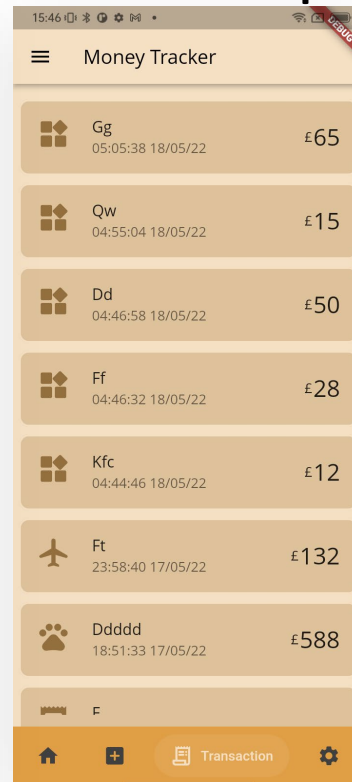
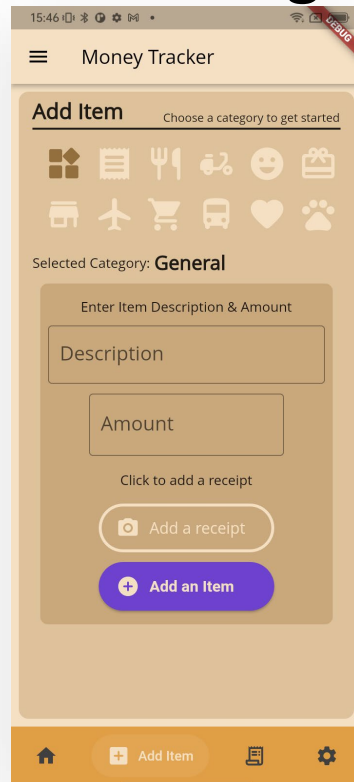
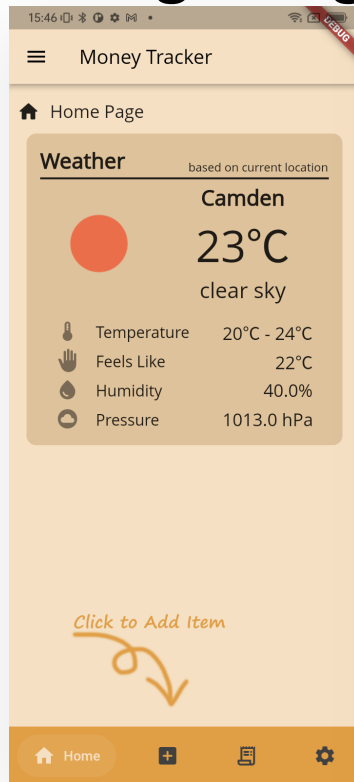
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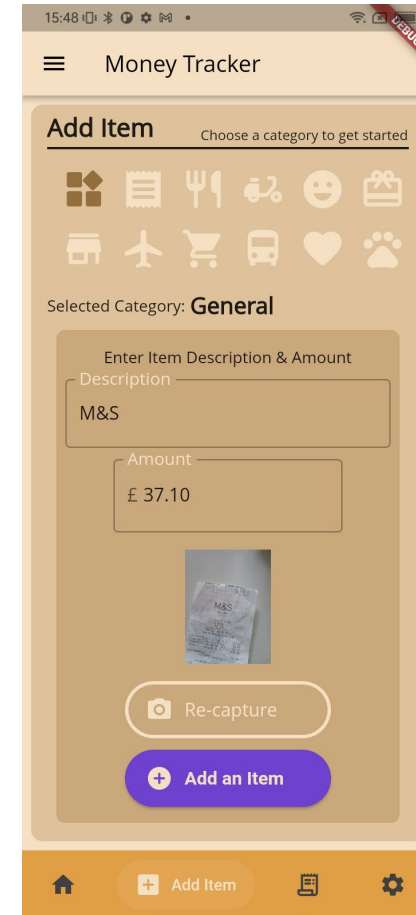
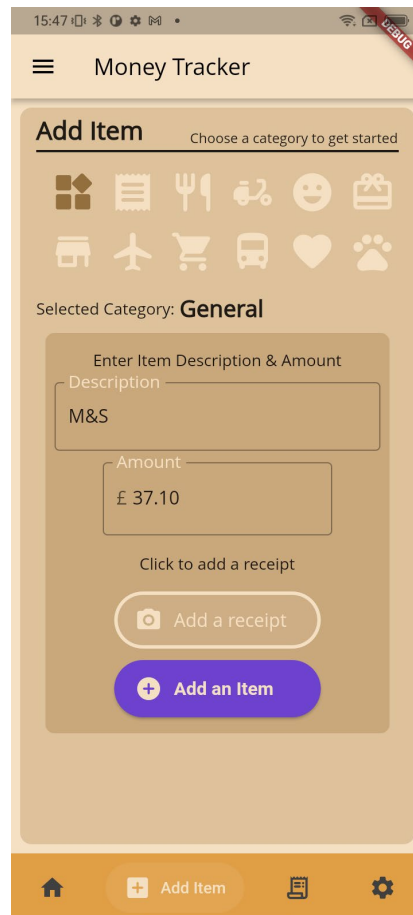
Bottom bar

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

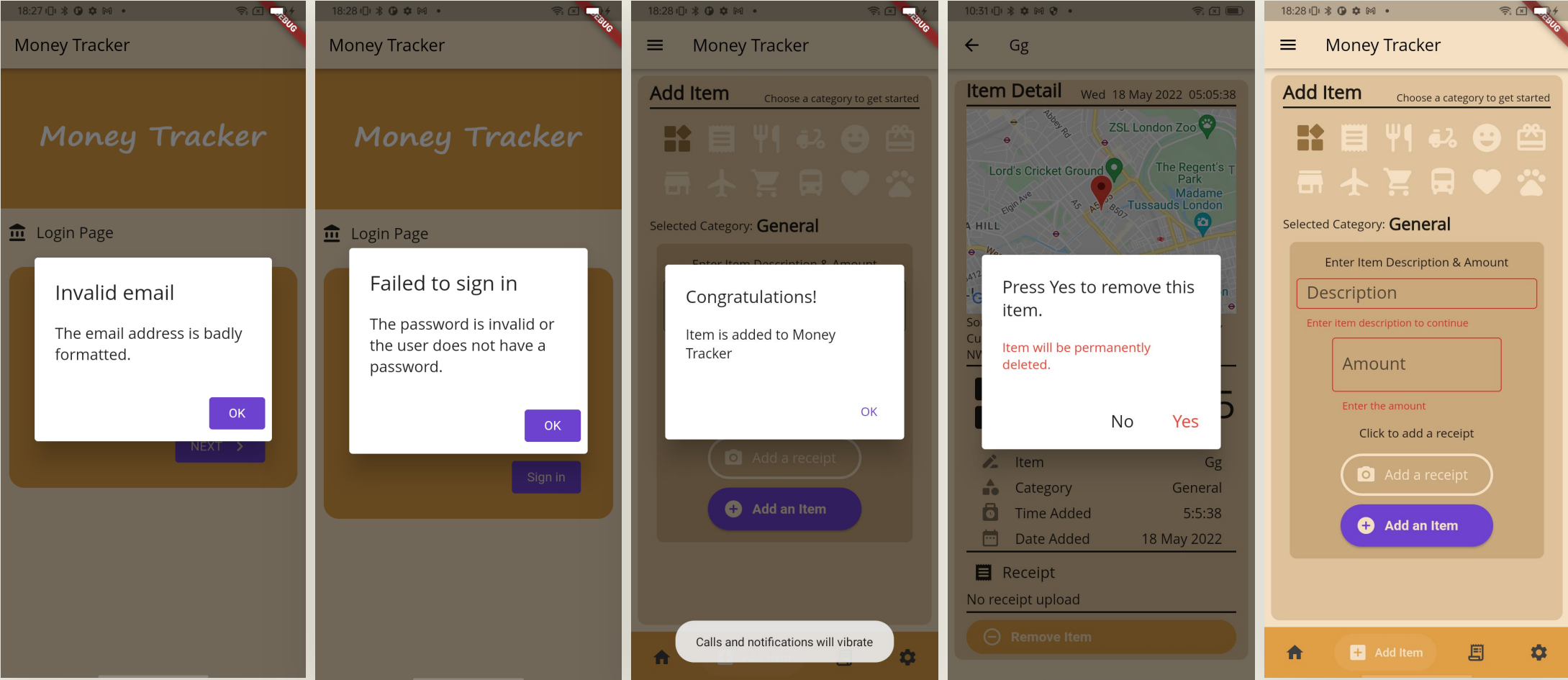


Camera

- 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