

Predicting weather changes for user safety and comfort

Description About Apps

Weather Guardian App is a comprehensive weather application that provides live weather data, weather warnings, and trip planning information to help users stay safe and comfortable during their journeys.

Install Now



casa0015-mobile-assessment
Yuxi Zheng



How Does This App Work?

Current Function Point:

User login registration function

Display of current city weather data

Provide real-time map function including temperature heat map

Search for weather conditions in other areas

Provide extreme weather warning notifications

Trip planning page, where users can select the departure location, destination, travel dates and number of days

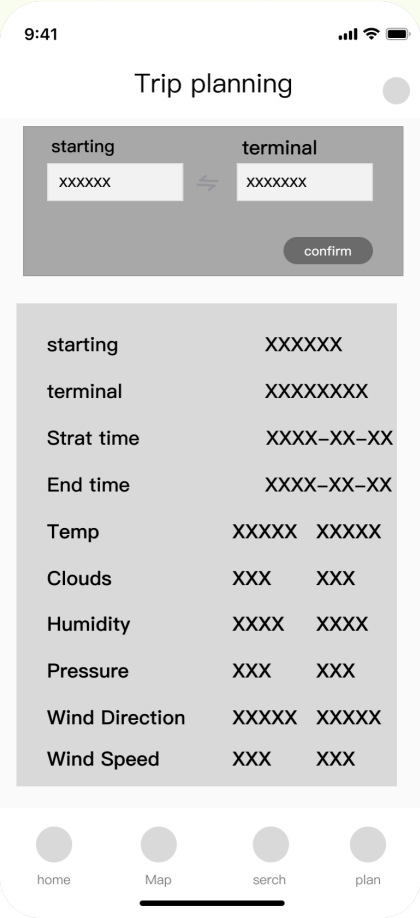
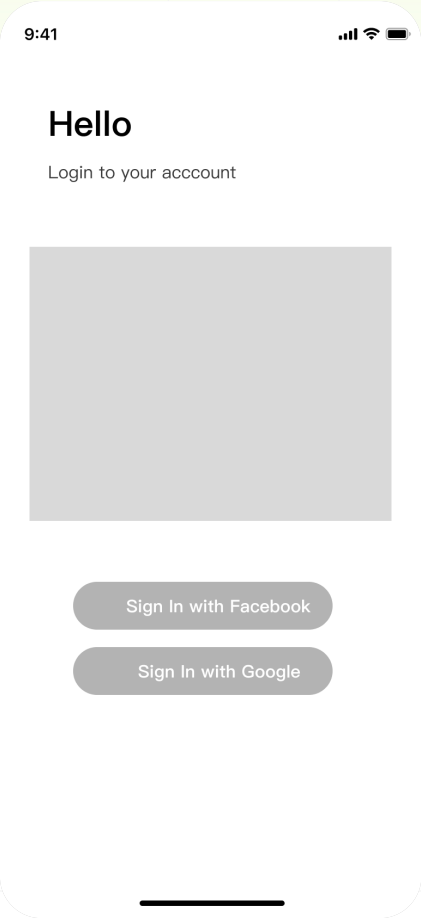
Further functional points for the future:

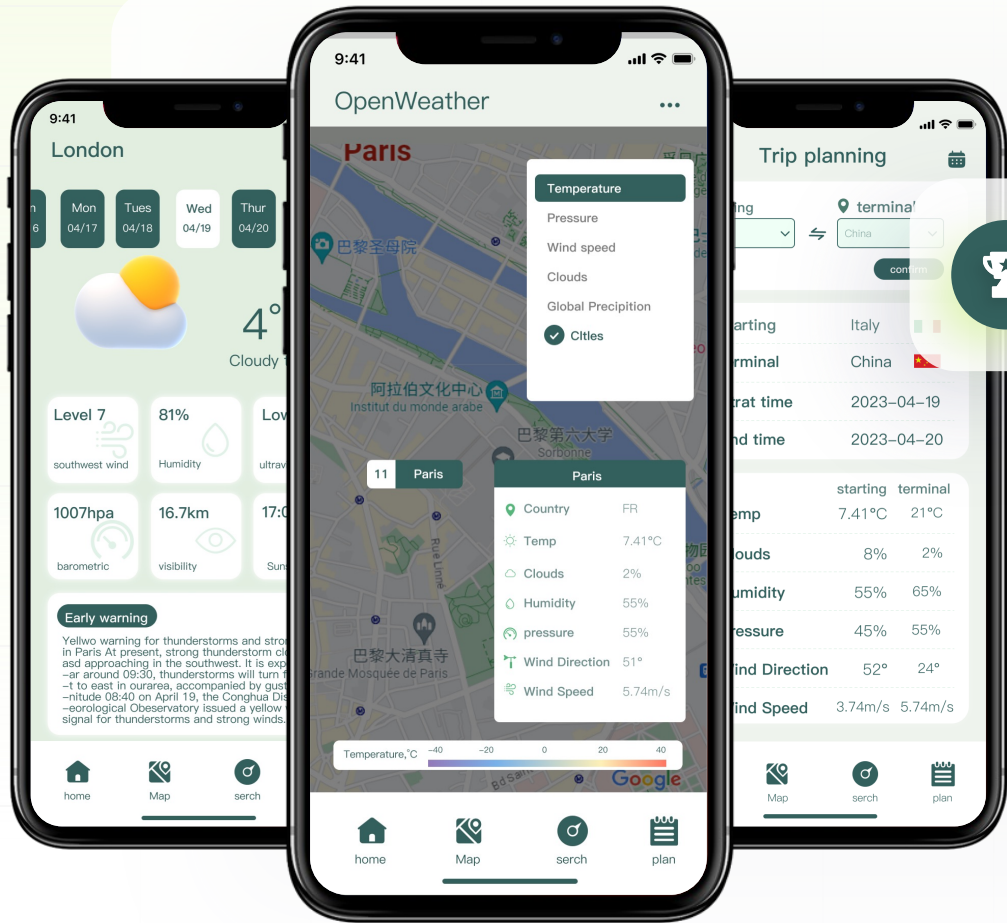
Automatically retrieves and displays weather data for departure and destination based on user input

Automatically generated trip details page, including each day's itinerary, including weather conditions, transport advice and suggestions for places to visit

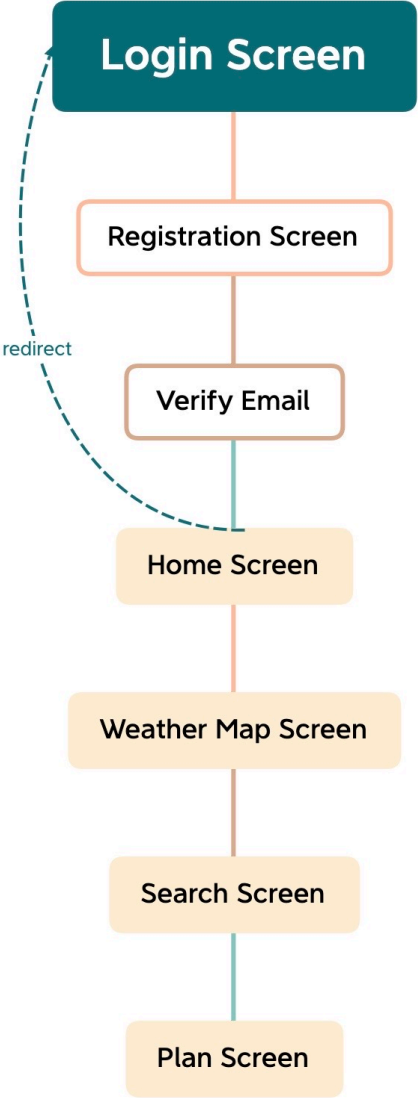


Wireframe Design



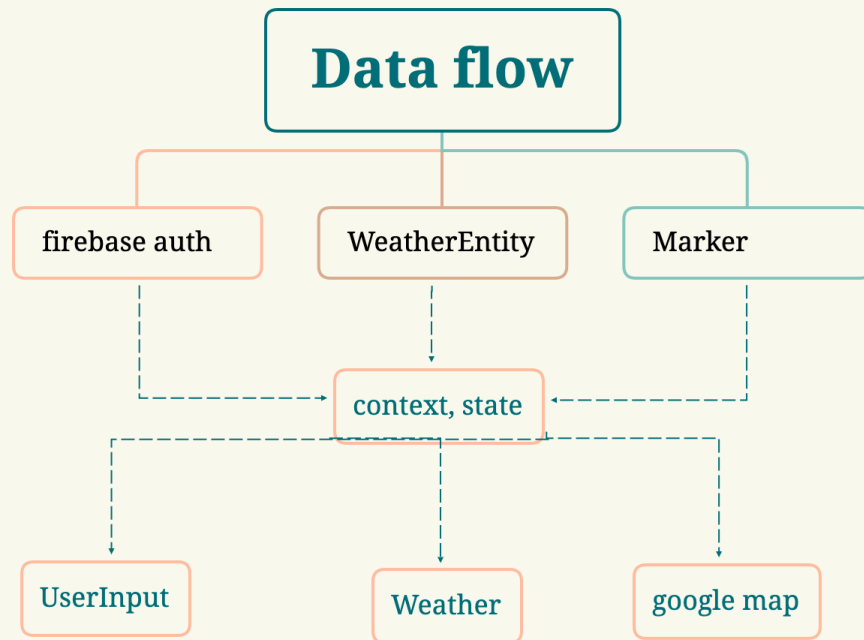


User Interface & Hierarchy And Navigation





Data Flow

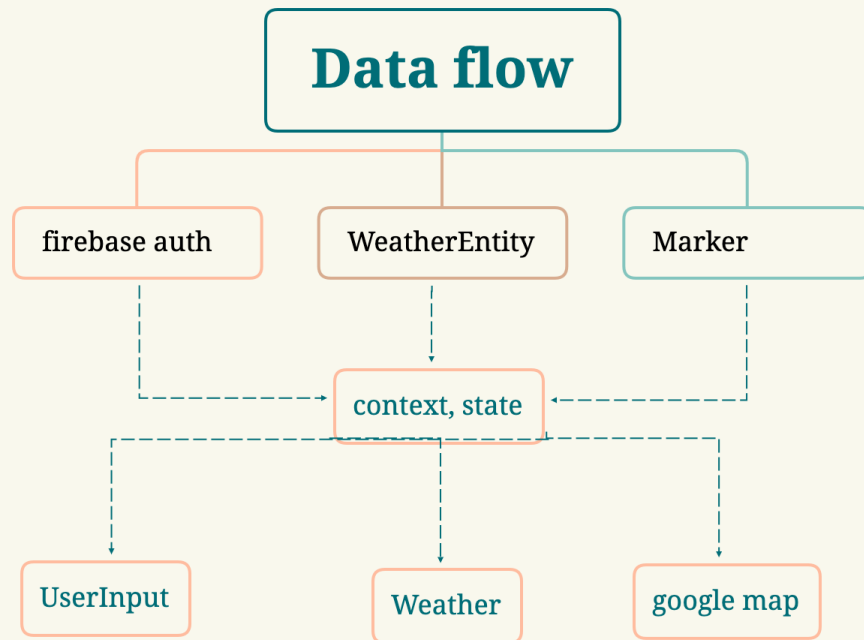


1

Firebase Authentication

Firebase Authentication is a feature of Firebase that provides an easy way to authenticate users. In Flutter, you can use the Firebase Authentication plugin to implement user login. To use the Firebase Authentication plugin you need to import it in the Dart code.

Data Flow



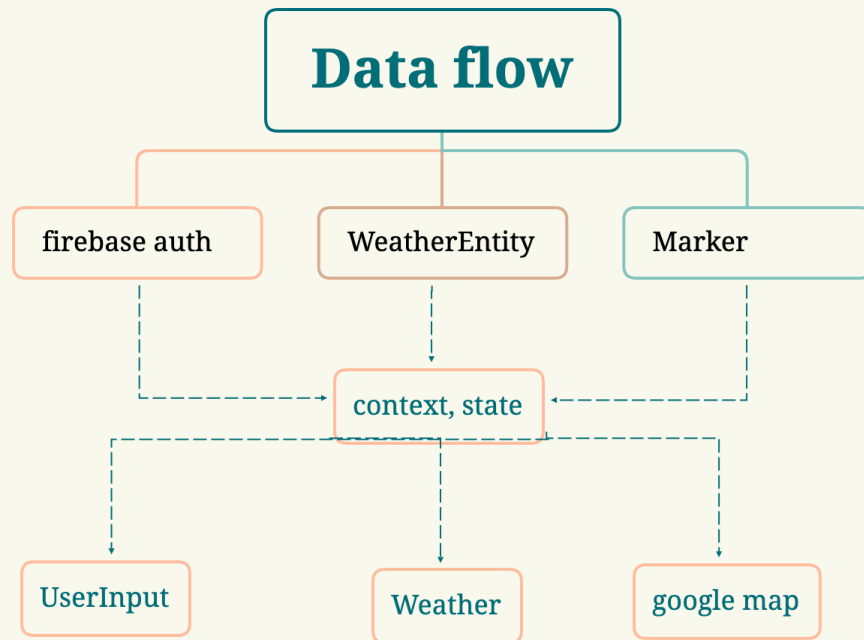
2

Open Weather Apl

OpenWeather is an API that provides weather data and can be used to obtain weather information from around the world. Flutter can use the OpenWeather API via HTTP requests. Here are the steps to use the OpenWeather API:

1. Register on the OpenWeather website and obtain an API key.
2. Add the http dependency to the Flutter project.
3. Add a Dart file to the Flutter project for handling API requests and responses.
4. Use the http package to send the API request and handle the response.

Data Flow



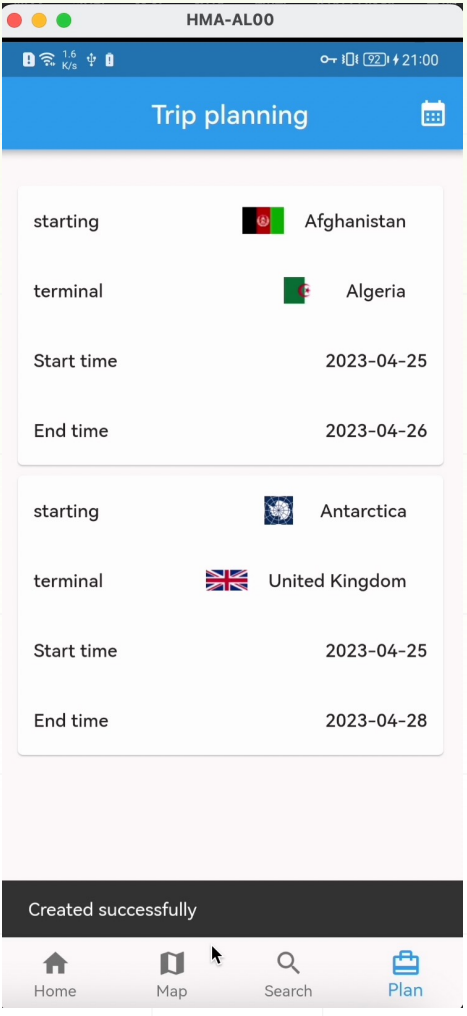
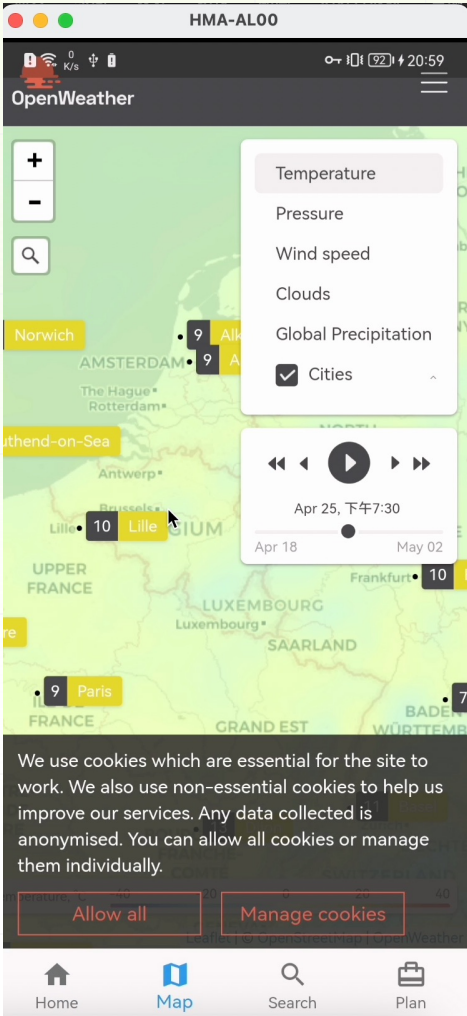
3

Gogoole maps Apl

In Flutter, you can use the `google_maps_flutter` plugin to integrate Google Maps. The plugin provides a `Map` class that you can use to display the map and customise it with various options and controls. To implement search functionality on Google Maps you need to use the Places API provided by the Google Maps API. the Places API allows you to search for locations, get details and display them on the map. You can call the Places API using the `google_maps_web` service plugin, which provides a `PlacesService` class that you can use to call the Places API and get results.



Interactivity





Mobile Apps

Thank You

For Your Listening

