

Zuzu Mobile Engineer Take Home Project

For this project, we would like you to demonstrate your ability to code and design a small cross platform mobile application using Flutter while understanding and interpreting requirements. A big part of this exercise is to replicate pair programming as much as possible so asking questions and having a back and forth conversation is highly encouraged.

The Problem

Design and implement a simple cross platform mobile application (including the UI elements) that requires you to register/ login and take your current location from your current device (or) by input at the point of registration and displays the current weather using an external API.

The Solution

As part of this solution, you will need to use Firebase for authentication and allow users to register via email. During the registration process, you will need to request for device location permission and get and store the location as a custom attribute for that particular user and later use that to query the weather API to receive the result.

Once you have the location and the user is logged in, please register and integrate with <https://weatherstack.com/> and query their API with the location that you just received (location need not be pinpoint accurate, a general location will do). This application will mainly have 2 main functions - one to show the current weather and one to show the future forecast for the next 2 days.

These two functions will be shown on the main page and are going to be represented in cards -

The first card showing the current temperature as well as using the logo returned by the weather stack api at the <https://api.weatherstack.com/current> endpoint

Display only the vital information on this card

- location
- localtime
- temperature
- weather_icons
- weather_descriptions
- humidity
- feelslike

The other showing the forecast for the next 4 days which will use information from the <https://api.weatherstack.com/forecast> endpoint

Display only the vital information on this card

- mintemp
- maxtemp
- avgtemp
- weather_icons
- weather_descriptions
- humidity
- feelslike

Display the user login information in the top right corner of the screen and allow them to logout if required. This can be simple and need not have complex logic.

Rules/ Assumptions:

- There is intentionally a good amount of open endedness in the question so we encourage you to get creative and try to display the information in a simple and understandable way
- Current weather need not be refreshed every minute, it can be the same for upto 30 minutes so it would be advisable to manage this state within the application if feasible
- Weather forecast need not have hourly information and the information displayed can be from any hour in the day (from 8am - 6pm)

What we're looking for:

- Clean and well thought out UI
- Usage of BLoC architecture
- Limit the number of times the API is called and keep it within the free tier for firebase and weather stack

Submission

To submit, please create a git repository on any popular website (Github, Gitlab, Bitbucket) and make it private (if possible) and email me the link - vishnu@zuzu.in

Also send me the apk via email so that I will be able to review the application

Please reach out to me if you have any questions and I will be happy to answer any questions