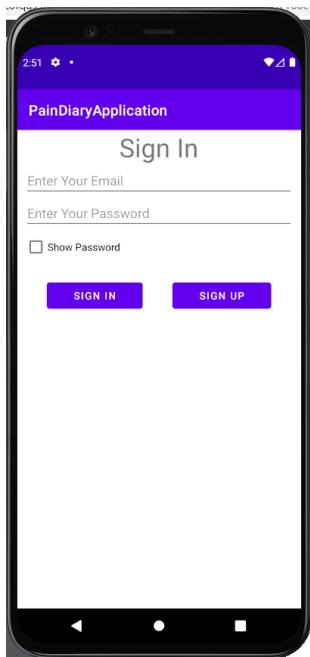


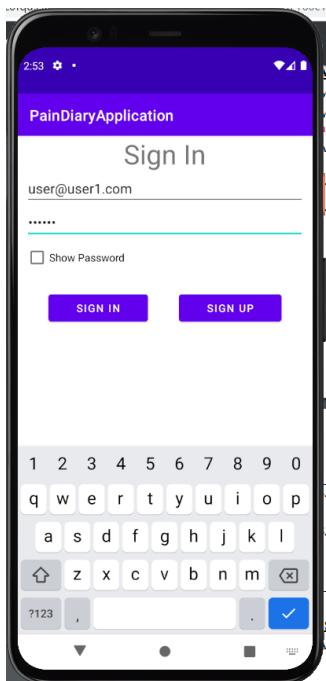
Task 1: Sign in/Sign up

The sign in and sign up screen keeps a consistent design (colour, text size, layout, margin), and there is an option for user to choose hide/show password, the two screens are vertical form design. Those settings follow the two sign in/sign up and password form design.

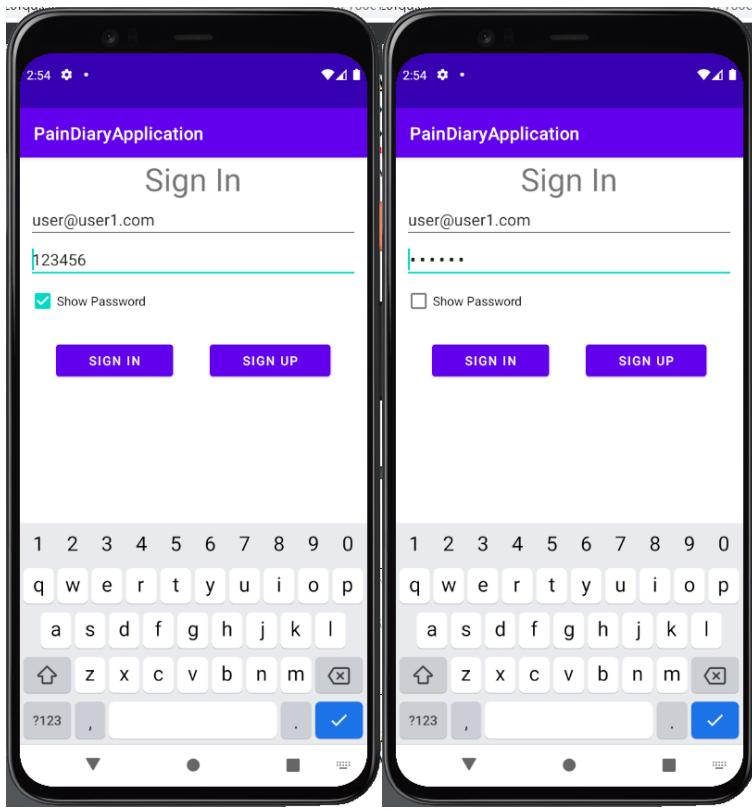
Sign in screen



When user input and sign in:

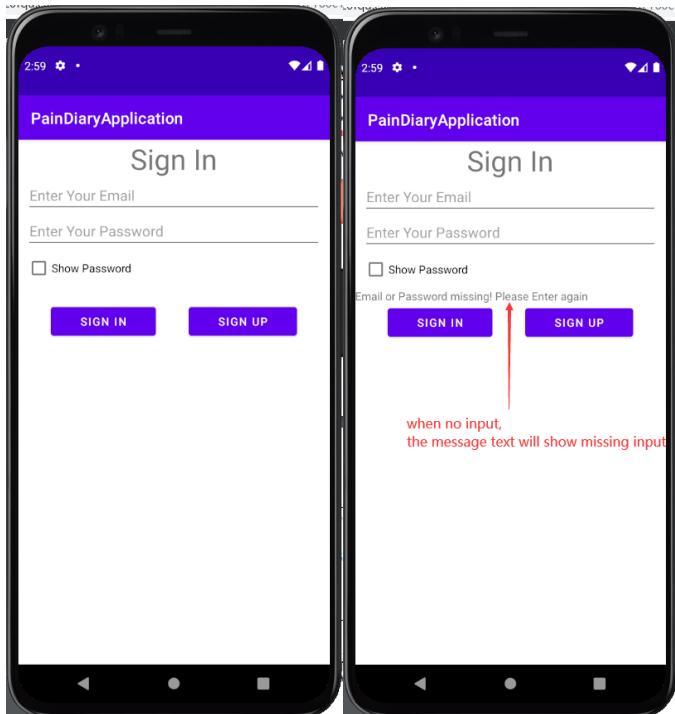


They can choose whether or not to show password by click on the 'show password' check box.

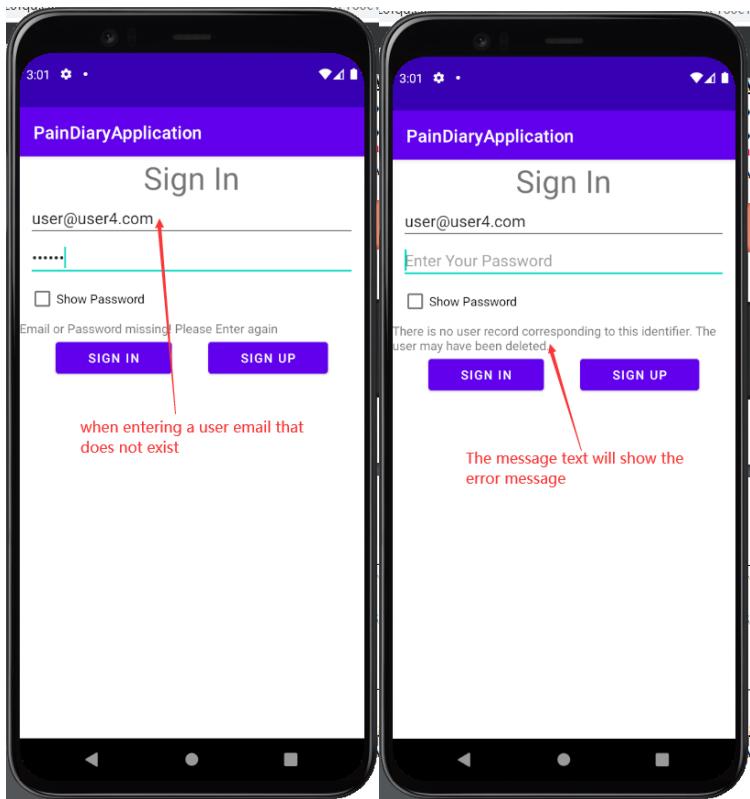


Error detection in sign in activity:

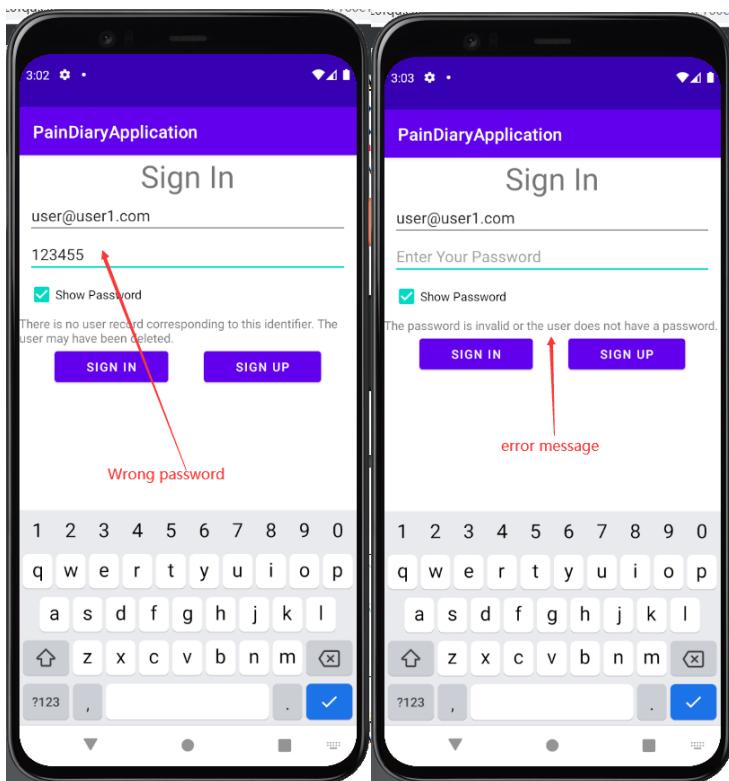
1. No input



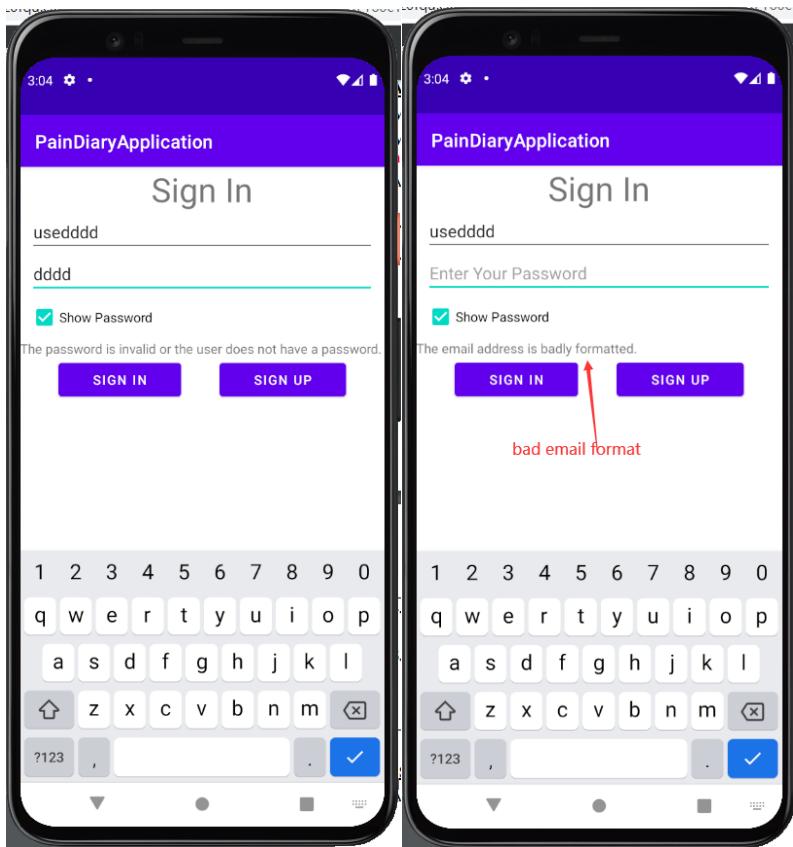
2. No matching user in the firebase



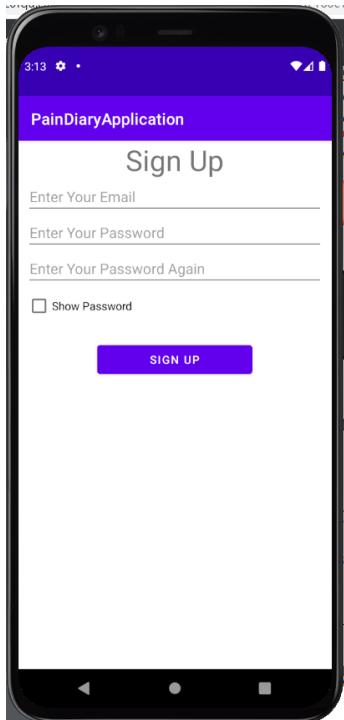
3. Wrong password



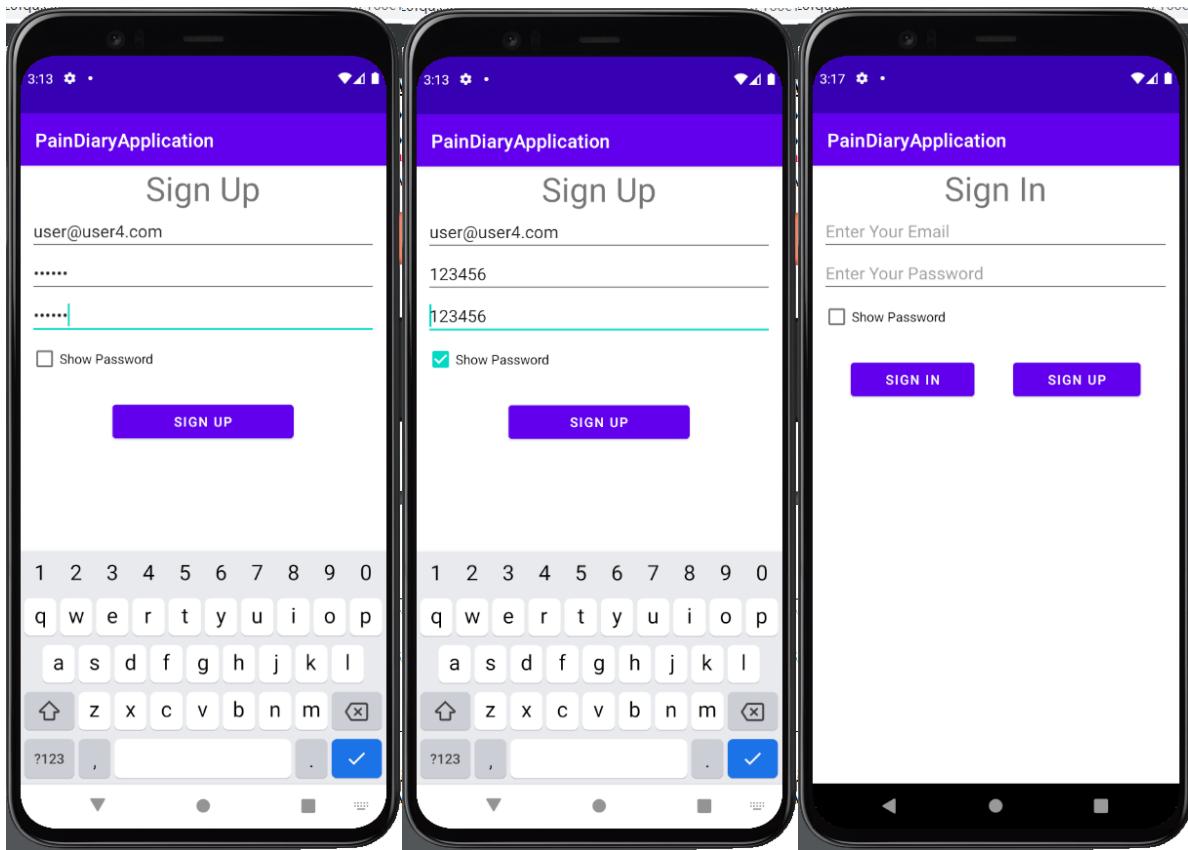
4. Bad email format



Sign up screen

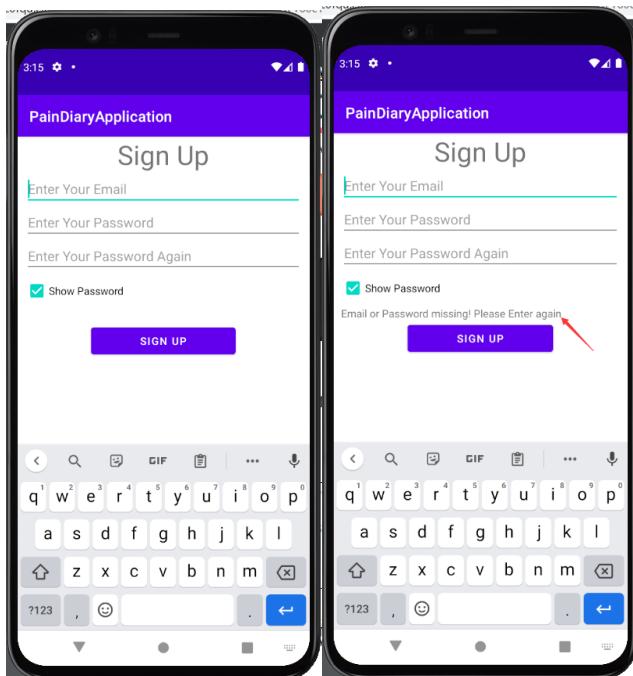


When user sign up (when they sign up successful, click sign up will return to sign in screen)

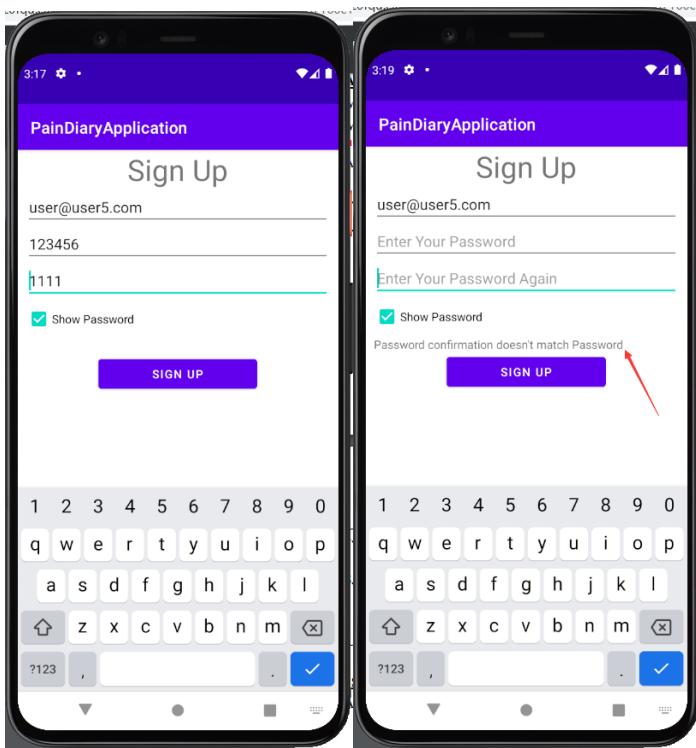


Error detection in sign up screen

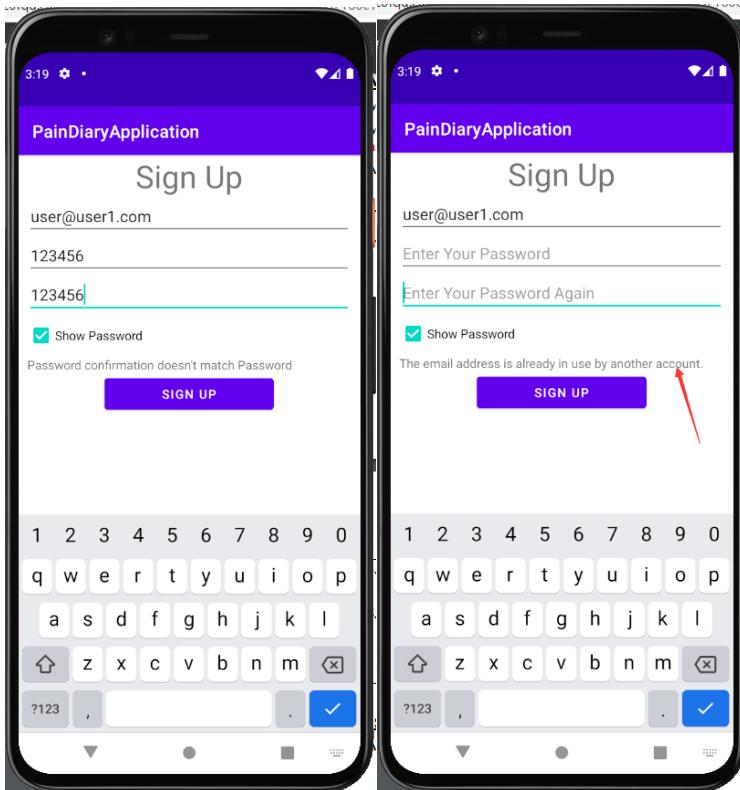
1. No input



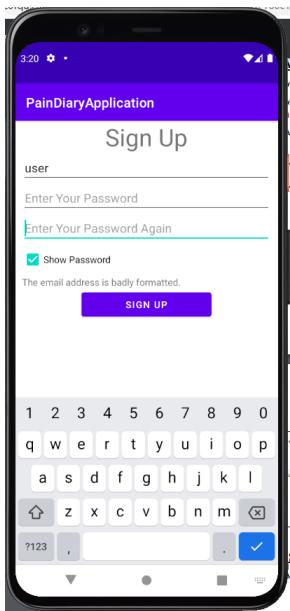
2. Two passwords not the same



3. Already exists user



4. Bad email format



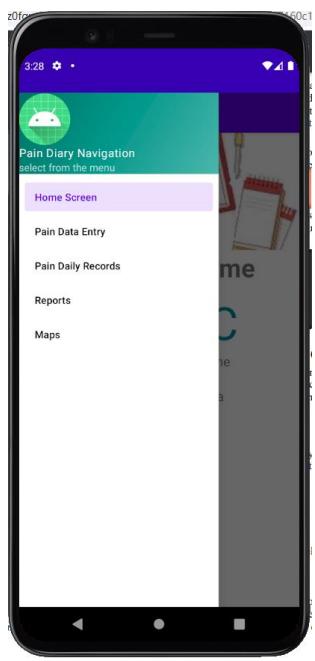
Task 2: Home screen & navigation component

Successfully sign in will lead user to home screen. Home screen display a related and meaningful title and picture, and the current temperature, humidity and pressure for the current location (in my situation, is Melbourne). The navigation side bar can guide the user to other main fragments screen in this application.

Home screen



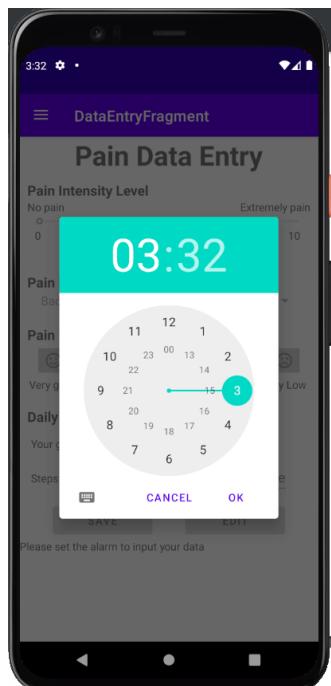
Navigation



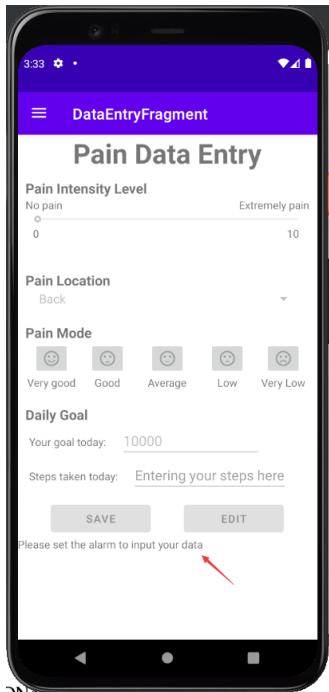
Task 3: Pain data entry fragment

When click 'Pain Data Entry' on the navigation, the screen will jump to pain data entry fragment, if the user have not set an alarm clock, the time picker will show, and the user will get reminded by toast before two minutes of their setting time and at that time the data entry will unblock and allow users to entry today's pain data.

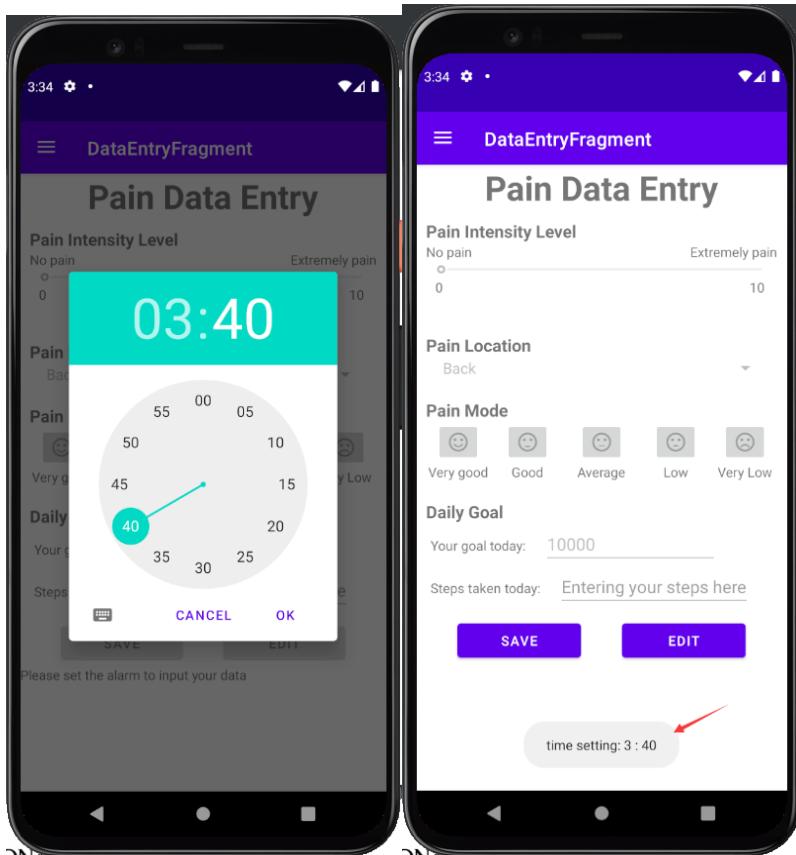
Pain Data Entry when no alarm is set today



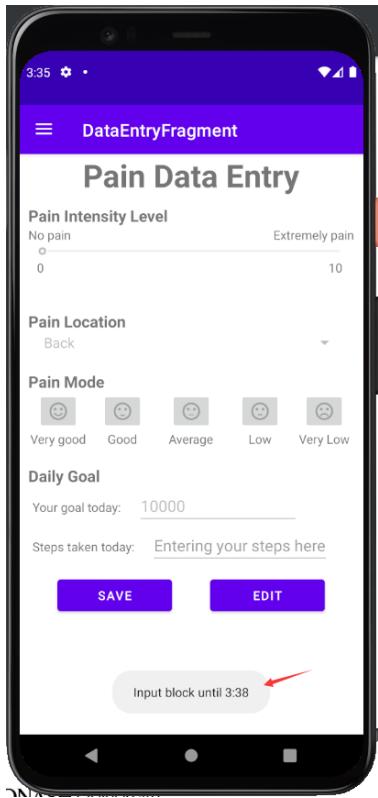
When user cancel to set the alarm, the message text will show to inform user set an alarm, all the buttons and inputs are blocked.



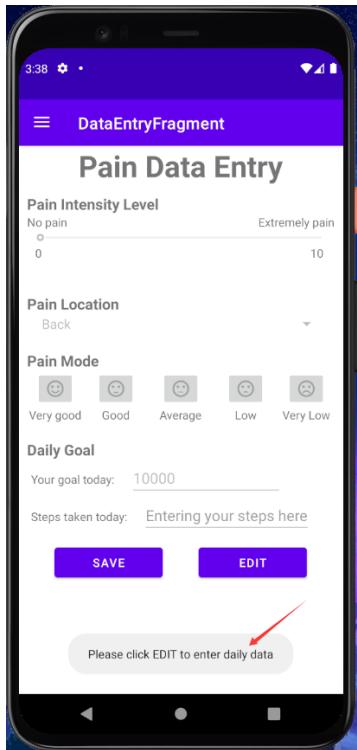
Set the alarm



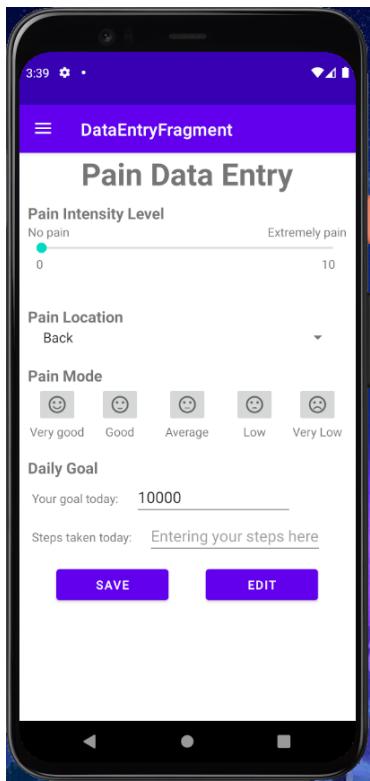
User cannot modify the data when the time is not reaching the time set by user, and when they click anything on this screen, a toast message will inform them.



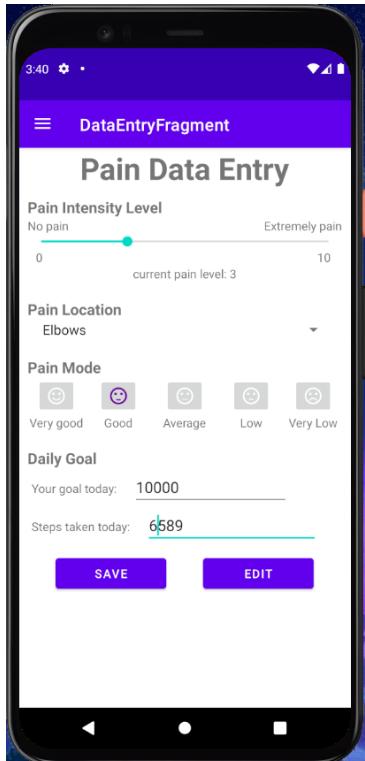
When time is reached



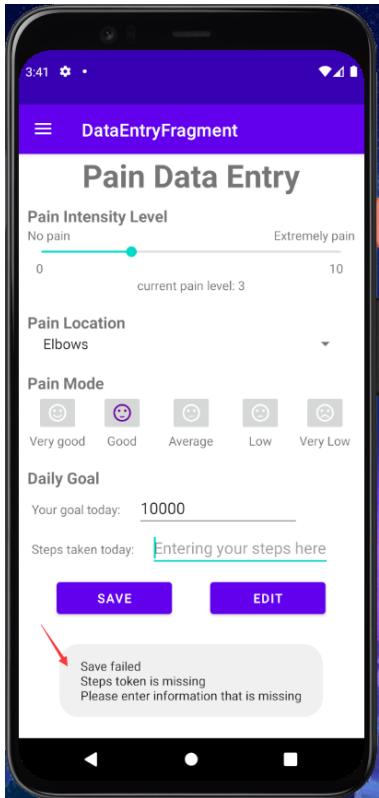
After time is reached, user can click edit to enter the data, when they click edit, the data inputs will unblock



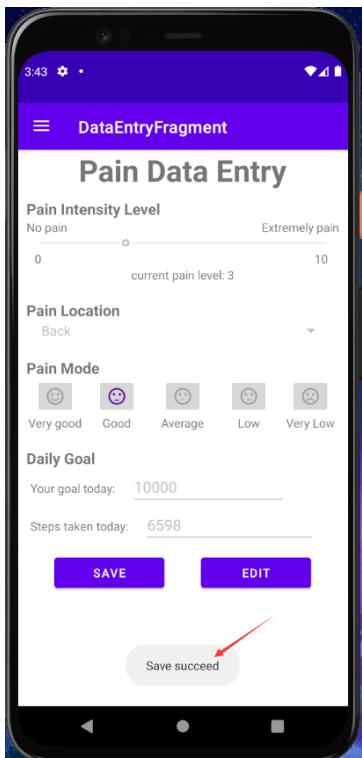
Input in pain data entry



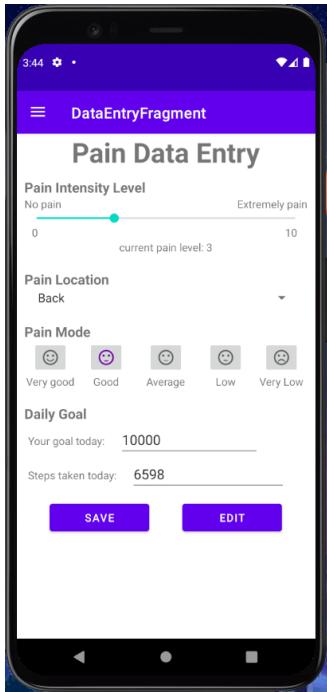
When they click save with some input missing, the toast message will show to inform user save failed



When save with all input entered, save success, data input will block

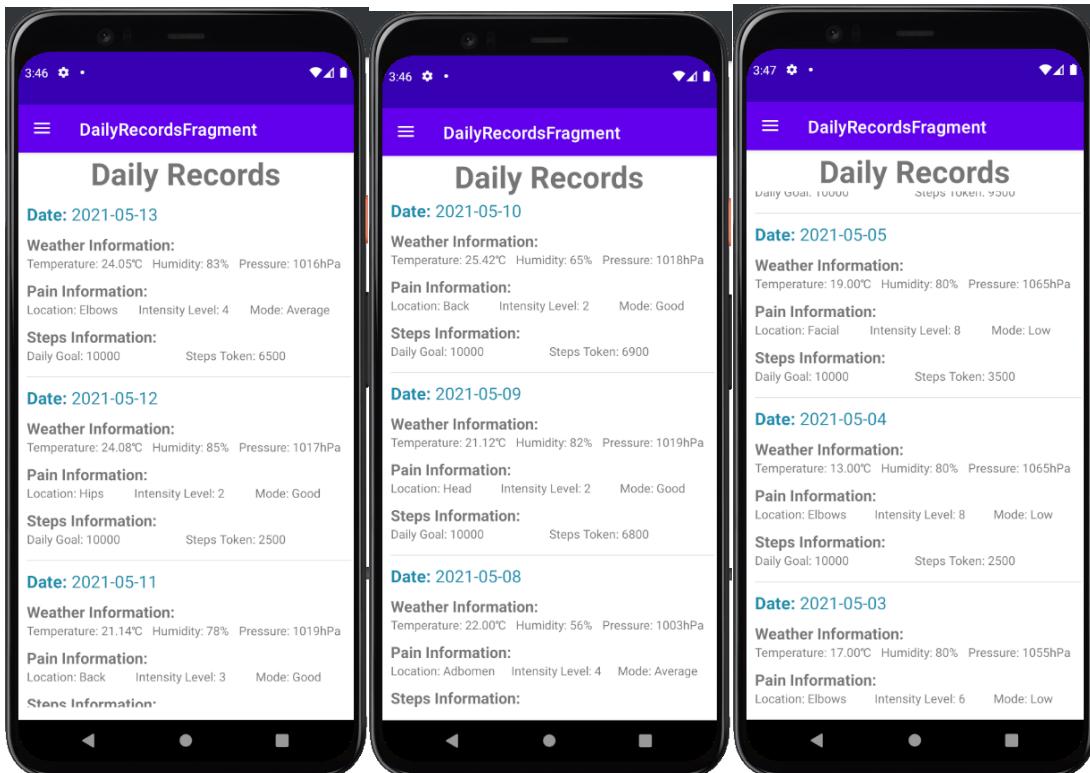


They can click edit to edit the data, when they click edit, the input will unblock



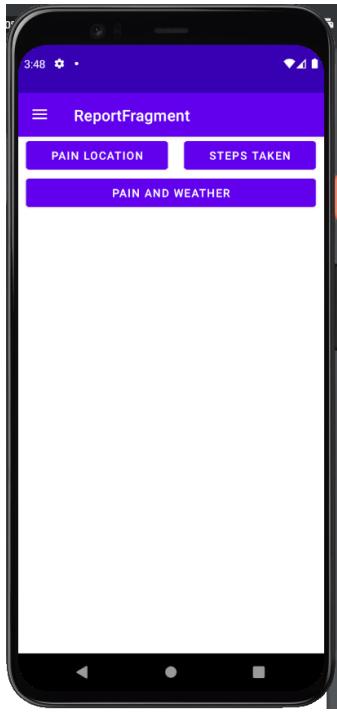
Task 4: Daily Record screen

The data entered by user is stored in Room, and the daily record screen will show all the current user's data.

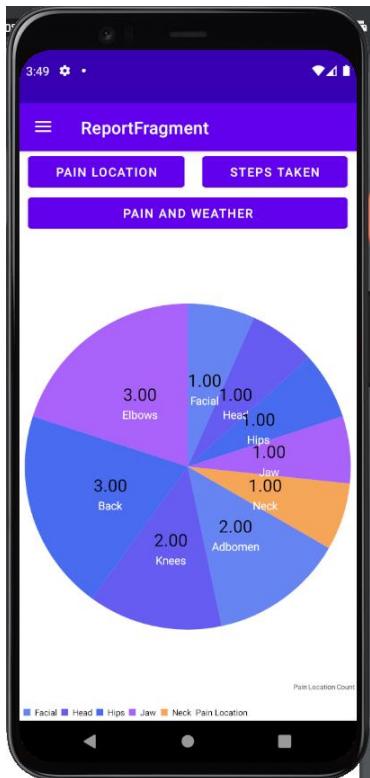


Task 5: Reports

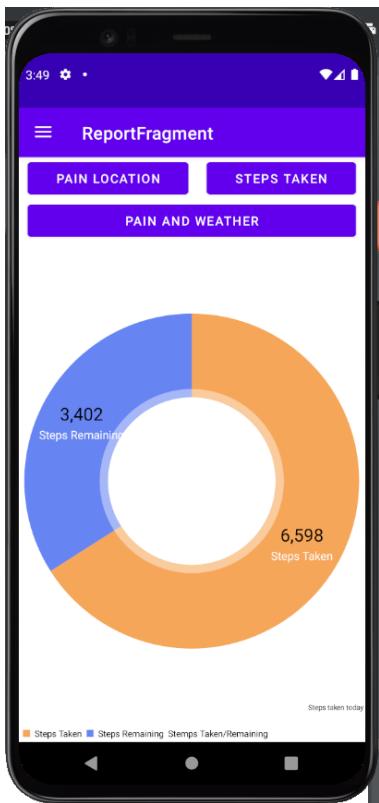
The report screen will display three report options for users to choose, pain location pie chart, steps taken donut pie chart and pain and weather line graph. User can click to browse them.



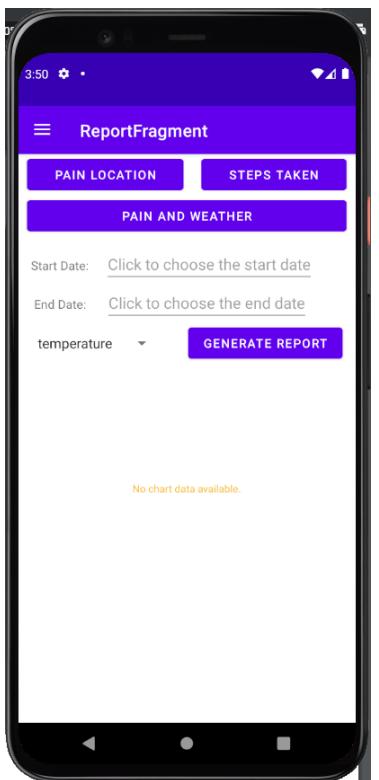
Pain location pie chart



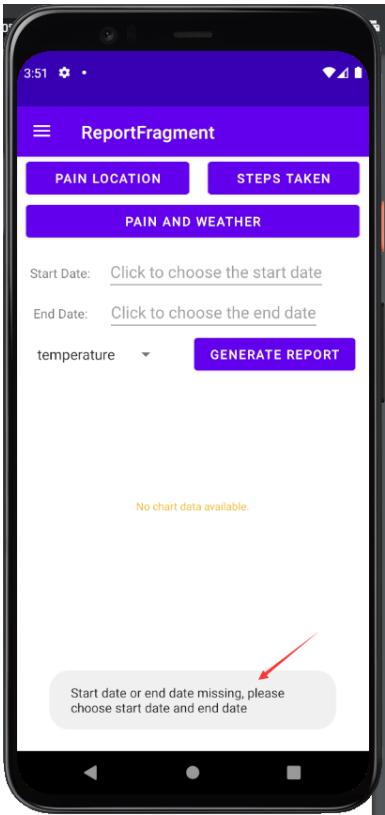
Steps taken donut pie chart



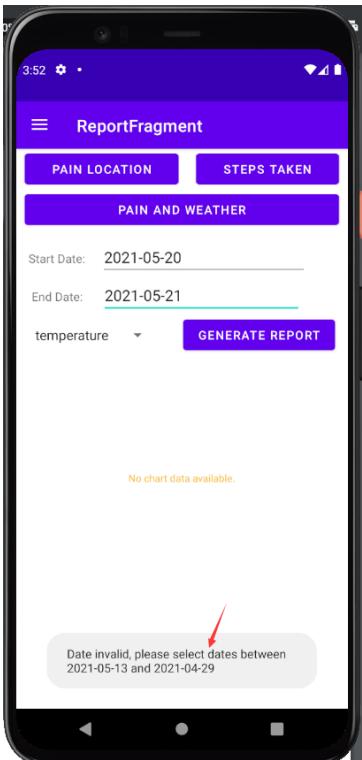
Pain and weather line graph will let user to pick the start date and end date to show the report.



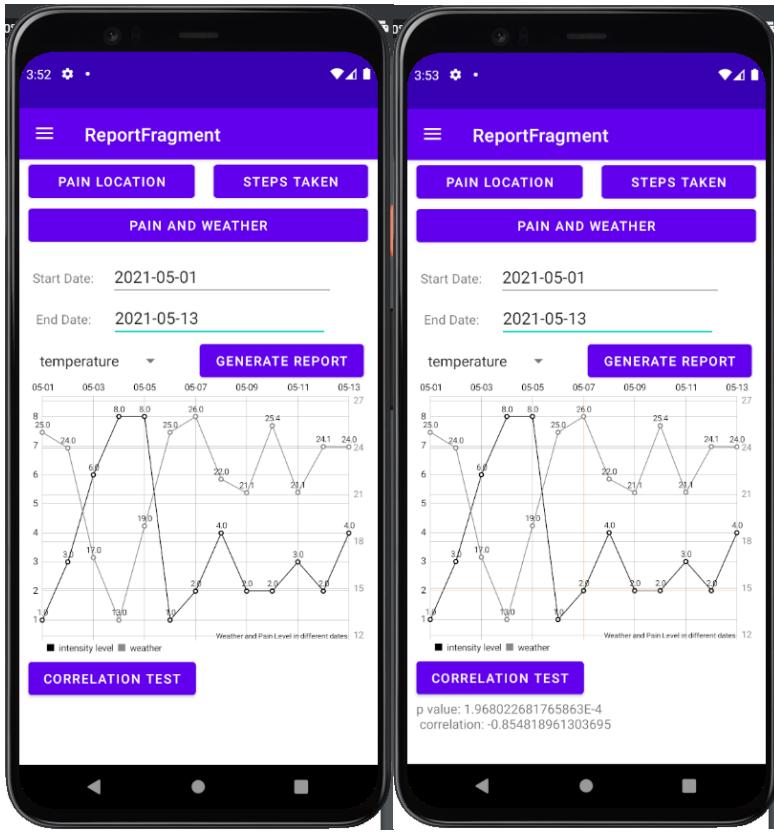
If user click generate report without choose any date



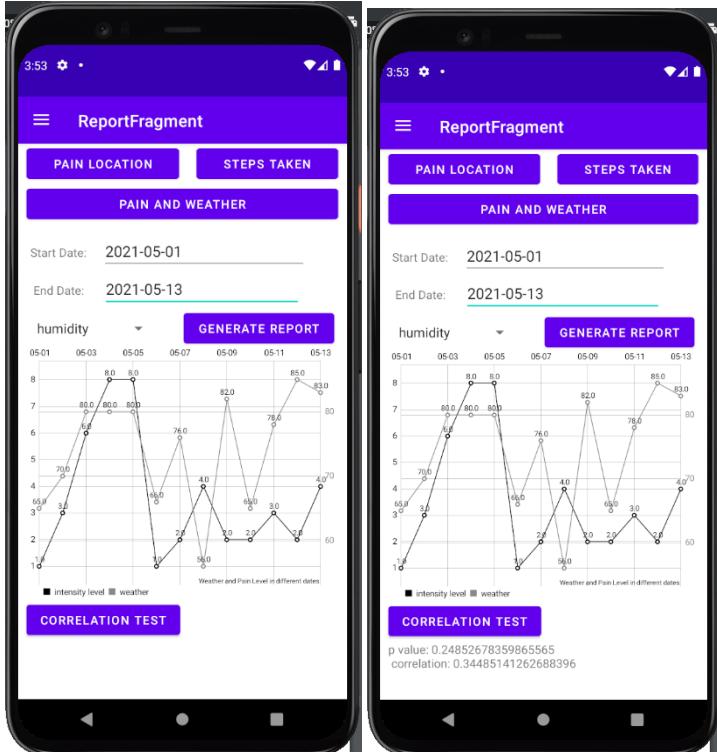
If the dates that user pick is not within the available report dates



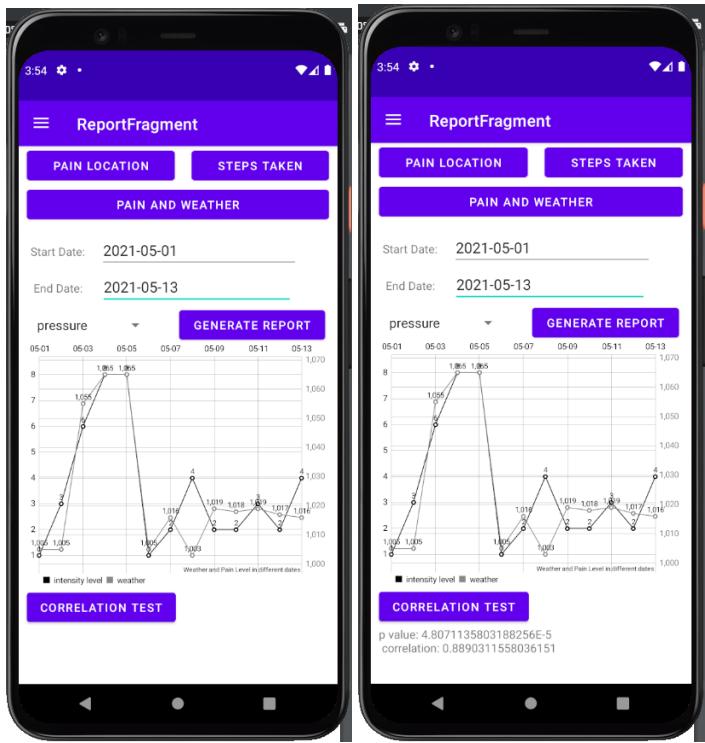
Temperature and pain report & correlation test



Humidity and pain report & correlation test



Pressure and pain report & correlation test



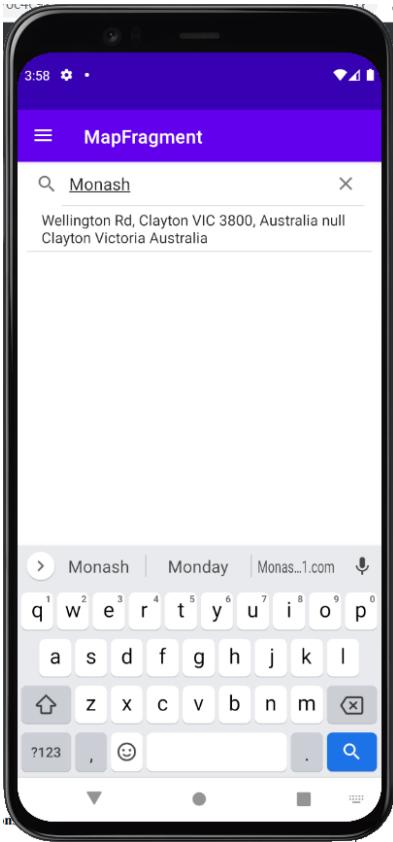
Task 6: Map

The map fragment screen contains one search input and one map, when the user search in the search input, a list view will show for the user of possible locations matched the input, user can either click the items provided by the list view to search or just search for the lines they input.

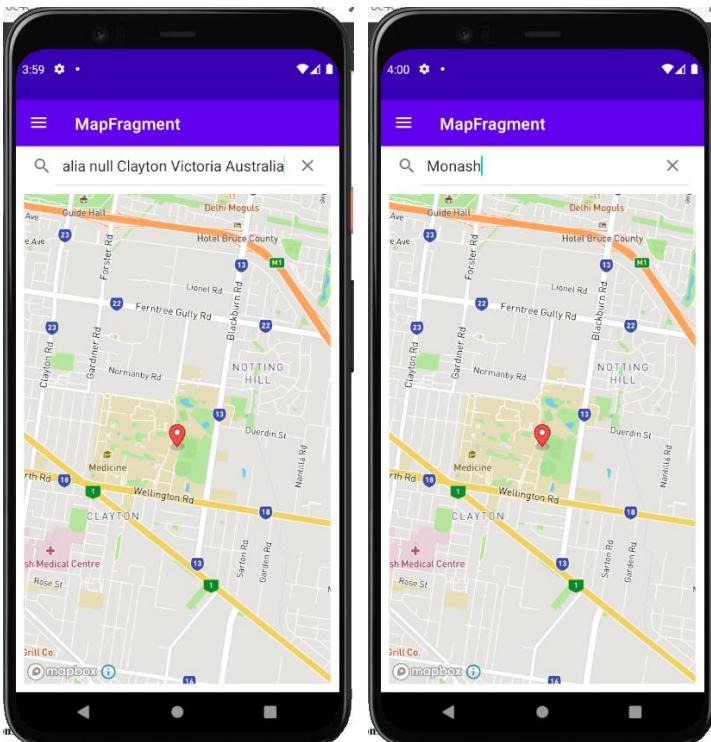
Map screen



When search on search input

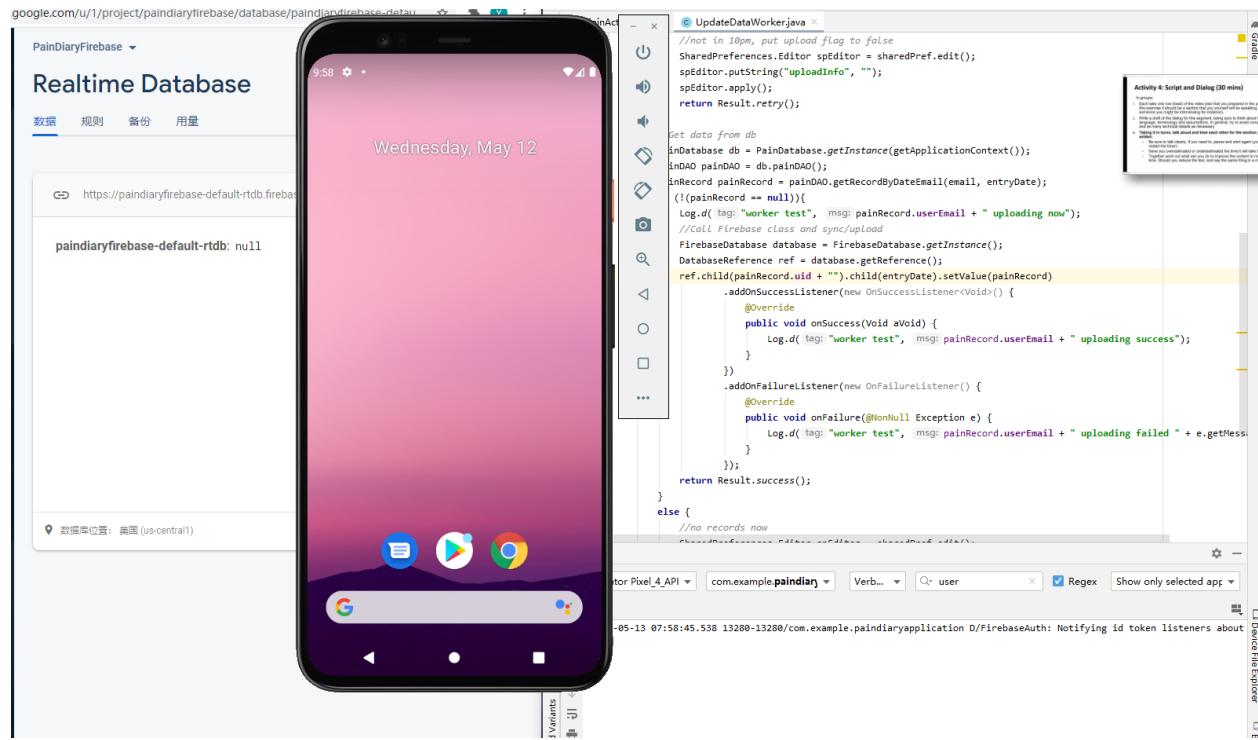


Click to search the location and show on map



Task 7: upload data to firebase at 10pm

In order to test this feature, I have manually change the system time to 9:58 pm, the first screen shows the time on phone (9.58 pm), and currently there is no record in firebase realtime database



When the time reaches 10.03 pm (you can observe it on the phone screen), the logcat shows the message for uploading, and the realtime database now has one record that has been uploaded.

