



A(IR)WARENESS

by AreYouWorking
261361 Software Engineering

OUR TEAM MEMBER



TANADOL DEACHPRAPAKORN
DEVELOPER



THANAWAT BUMPENGPN
TESTER



PONGSAKORN RATTANAPAN
PROJECT MANAGER & SA



TANAT TANGUN
DEVELOPER



PURICH SEENUALLAE
**DEVELOPER, UX/UI
DESIGNER**

PROBLEM

คนเชียงใหม่และคนไทยส่วนใหญ่ไม่ทราบว่า
ฝุ่นควันและอากาศที่ไม่ดี
อยู่ใกล้ตัวกว่าที่คิด



SOCIAL MEDIA

สร้างการรับรู้ เพยแพร่ข้อมูล



AIR QUALITY FORECAST



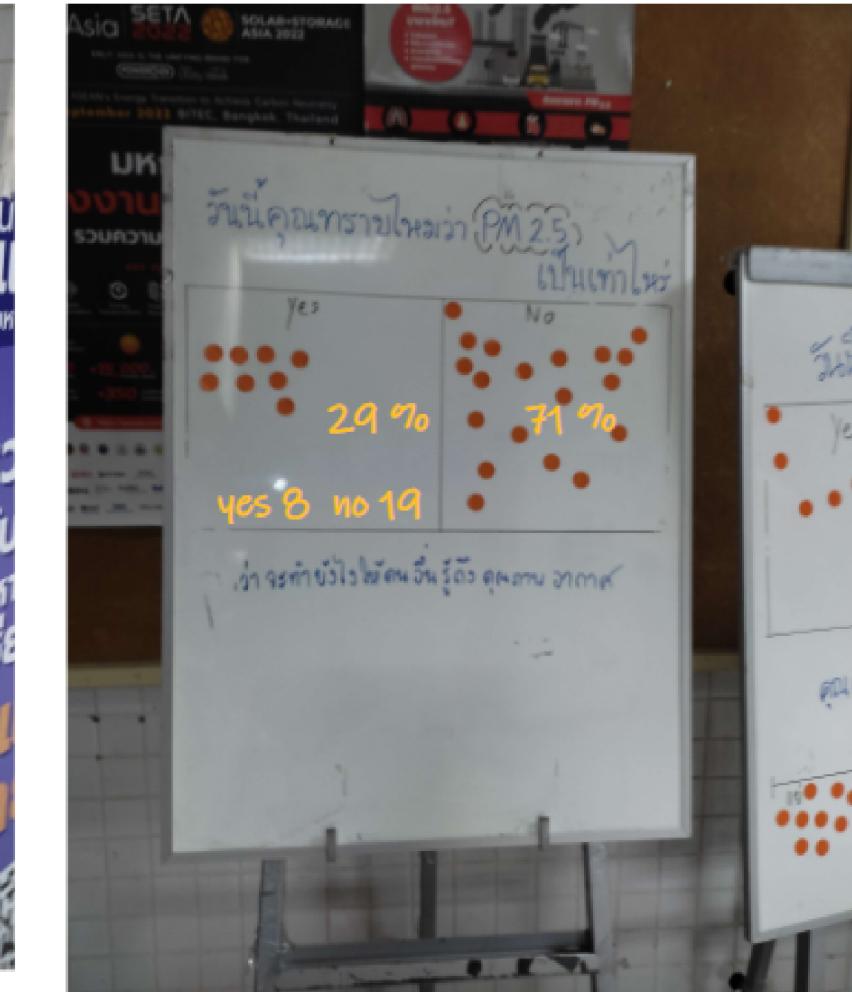


อ่างแก้ว 5 โมงเย็น - 6:30

yay 9
nay 10
tie 6



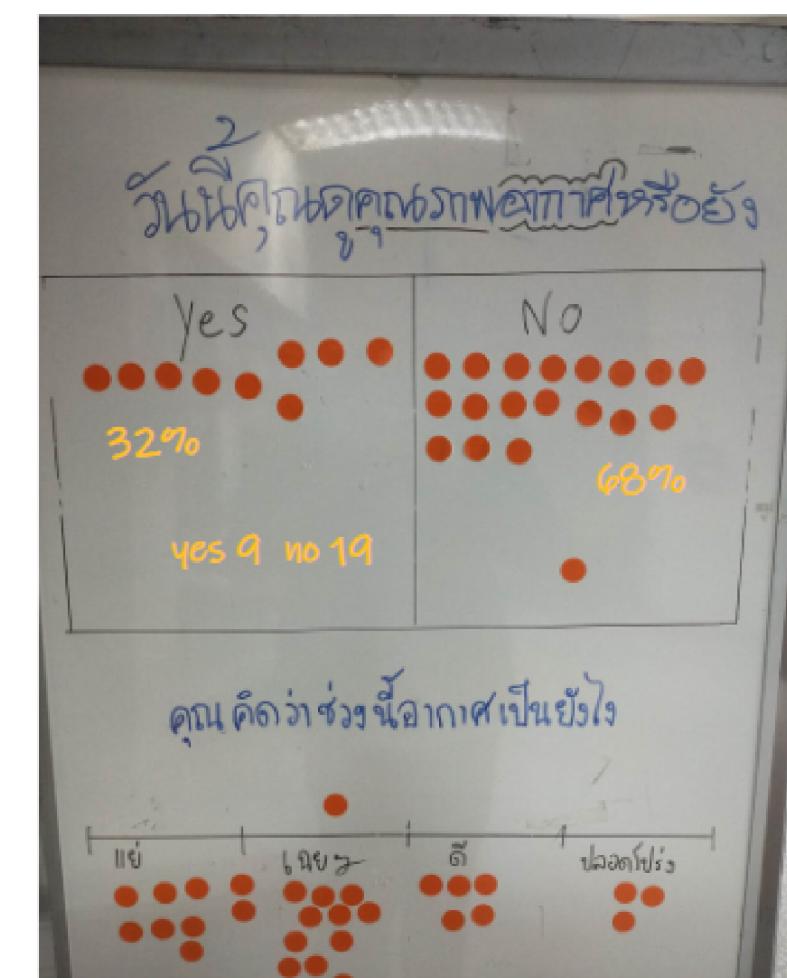
Yes 18
No 13



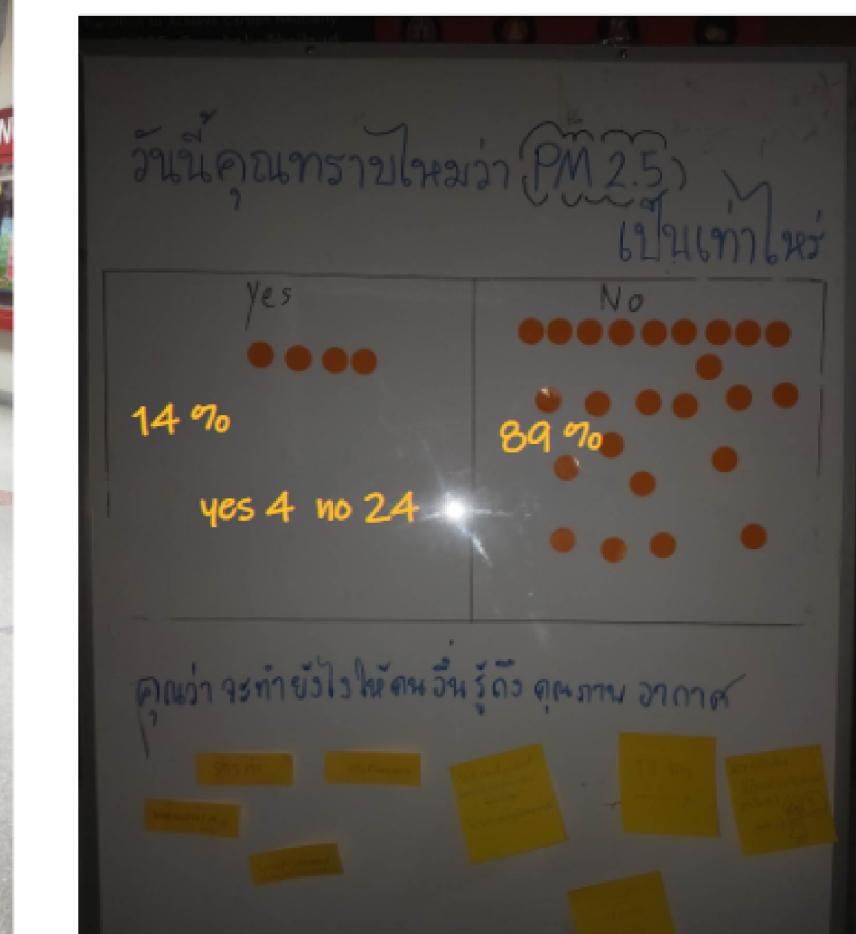
Yes 8
No 19

ตึก 30ปี วิศวฯ ทึ่งวัน

yay 9
nay 12
tie 5
plotted 3



Yes 9
No 19

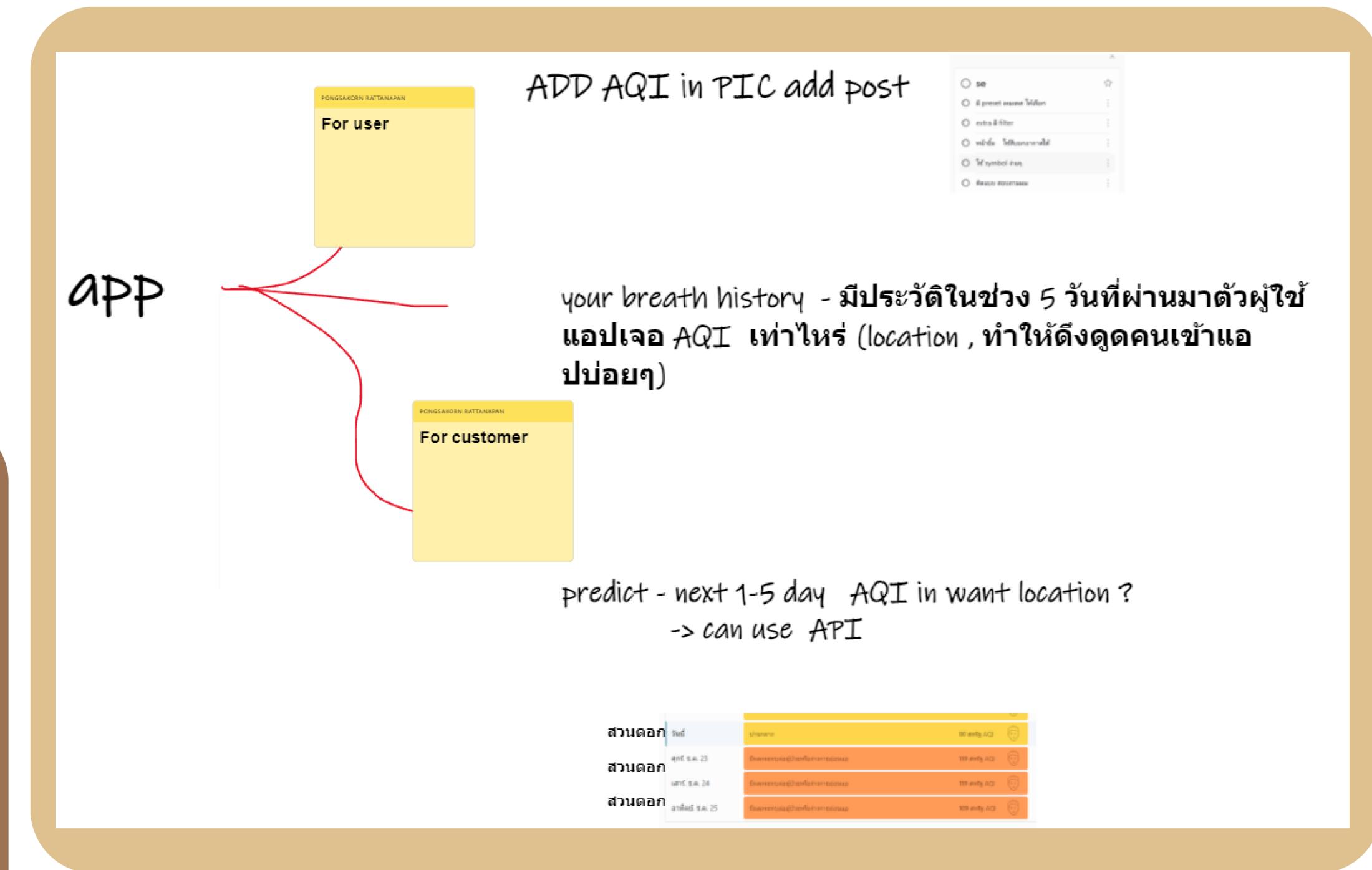
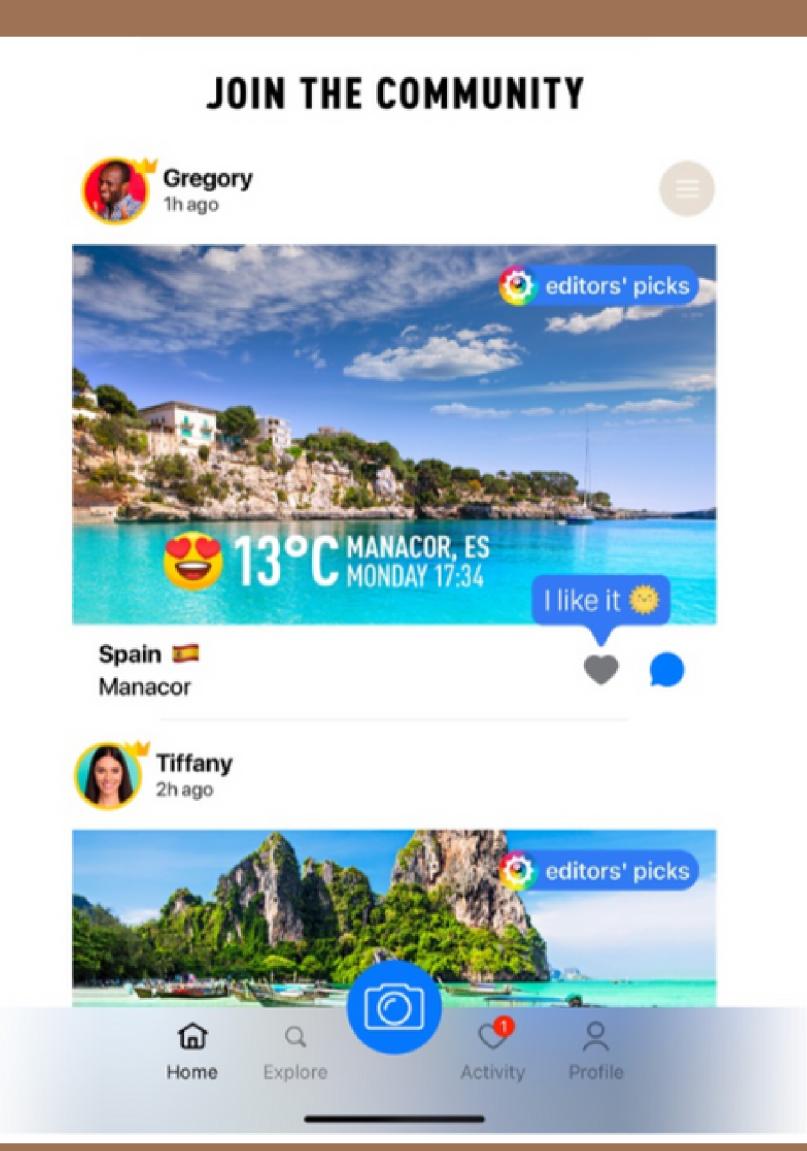


Yes 4
No 24

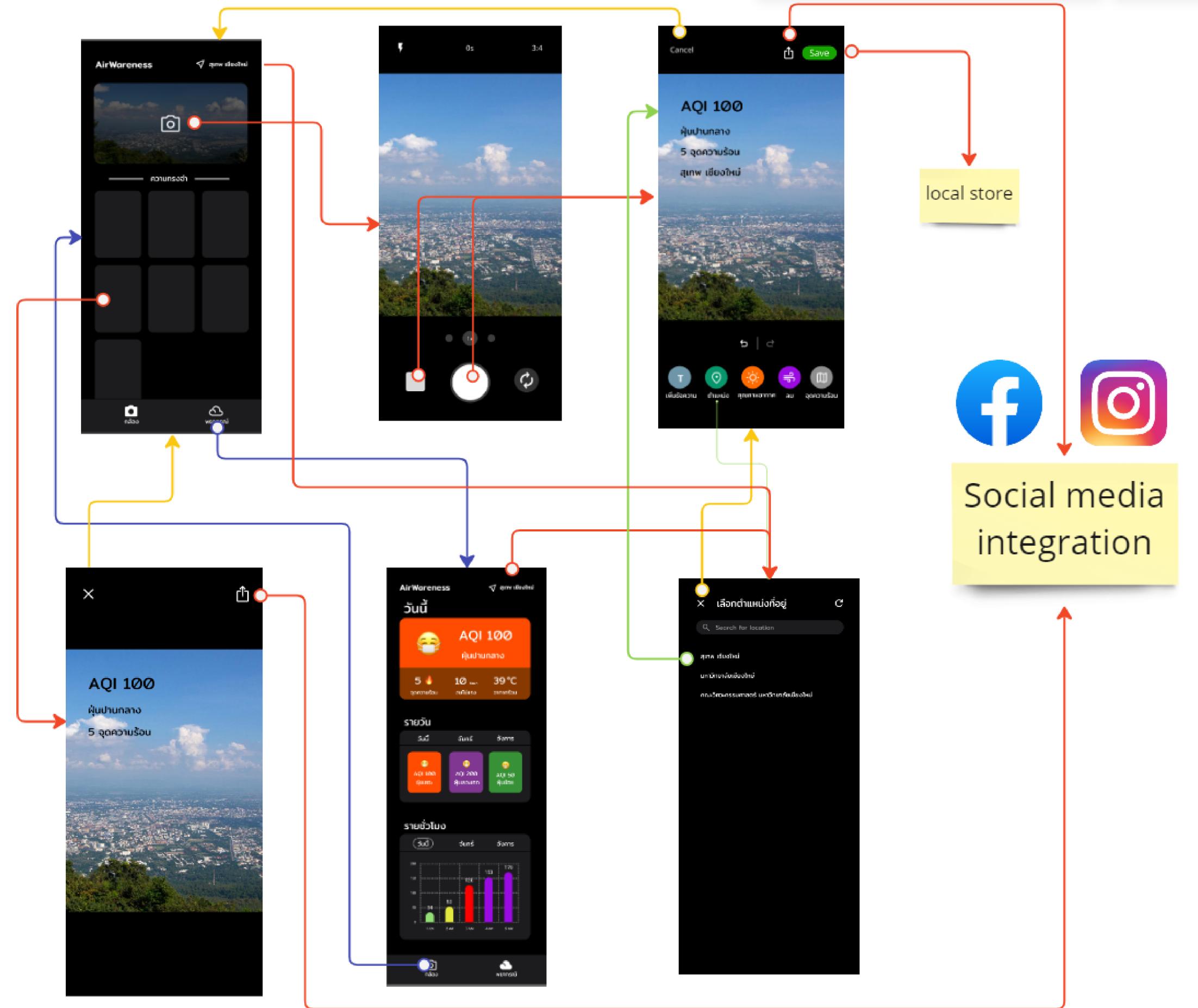
ค่าฯ จุกทำบ่ำไว้ให้คนว่ารู้ด้วยคุณงาน วากการ

ABOUT OUR PRODUCT

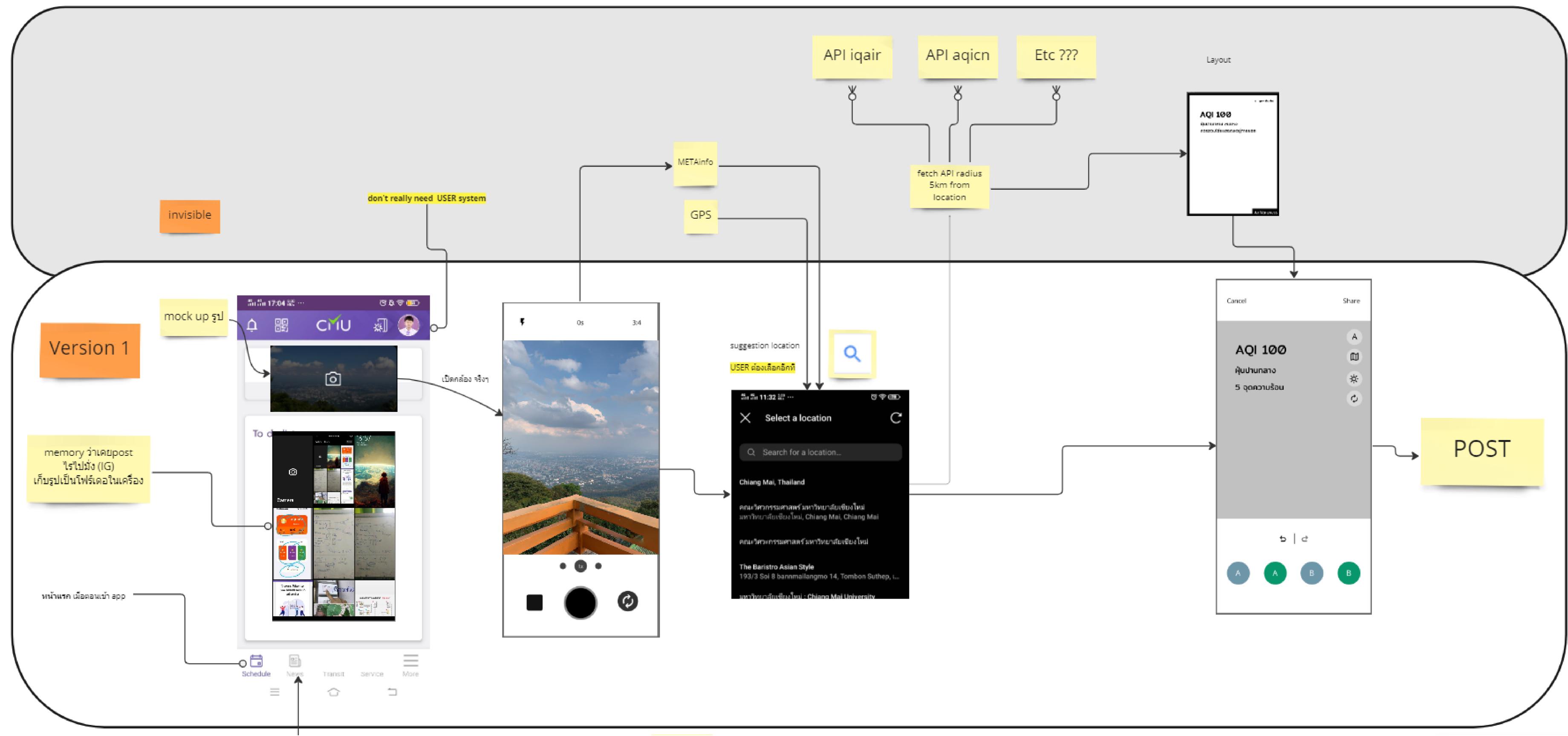
INSPIRATION



STAKEHOLDER REQUIREMENT



Social media
integration



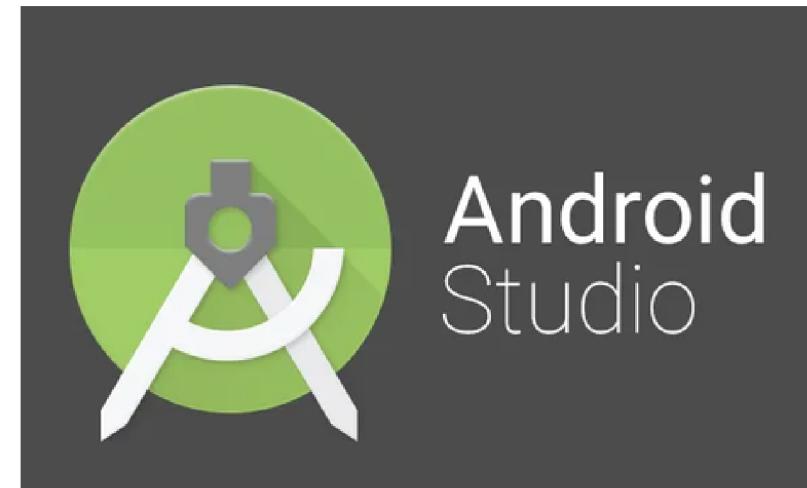
CODING



Flutter



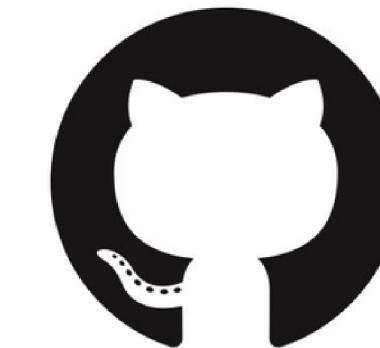
Dart



PROJECT MANAGEMENT

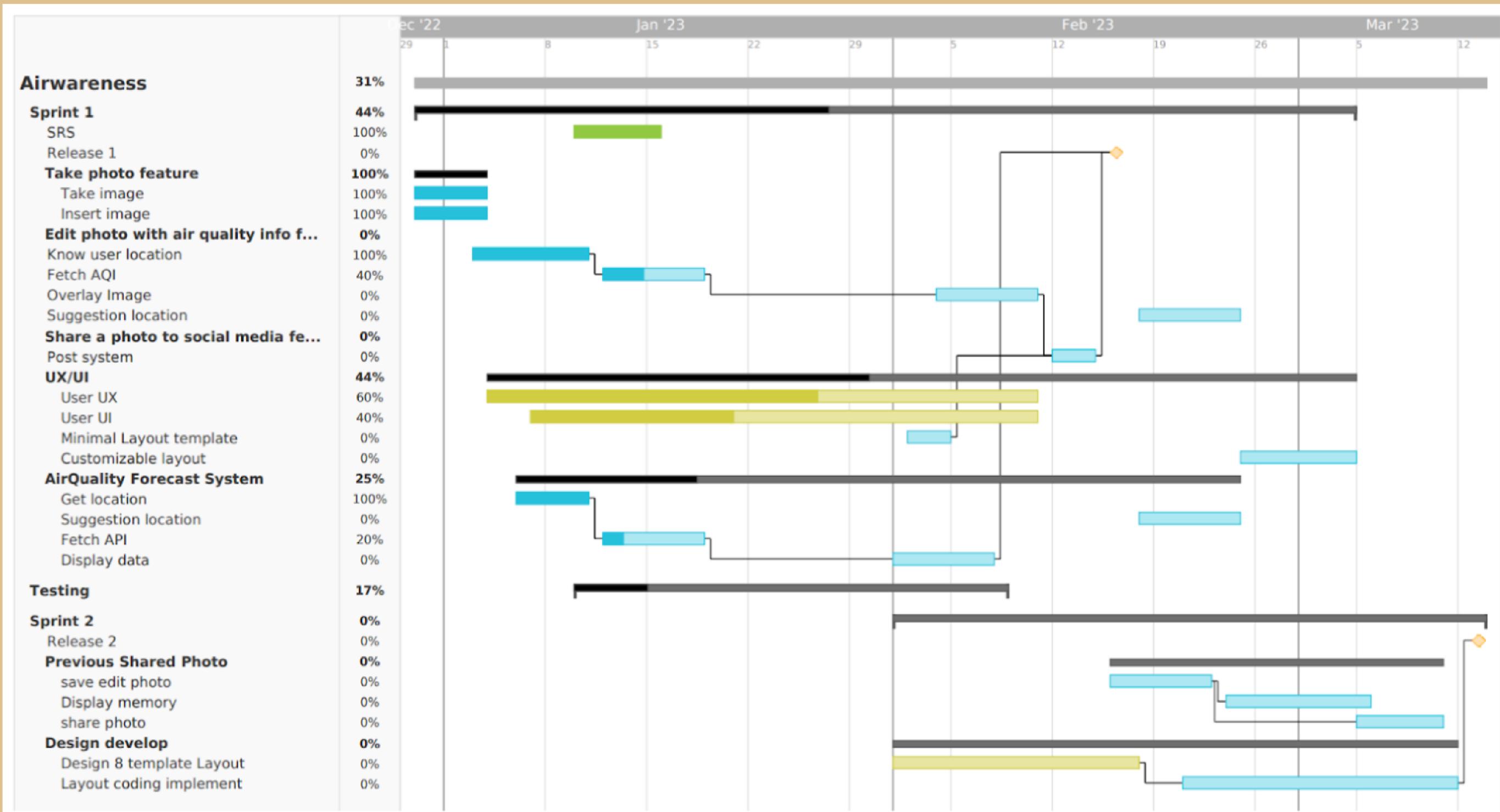


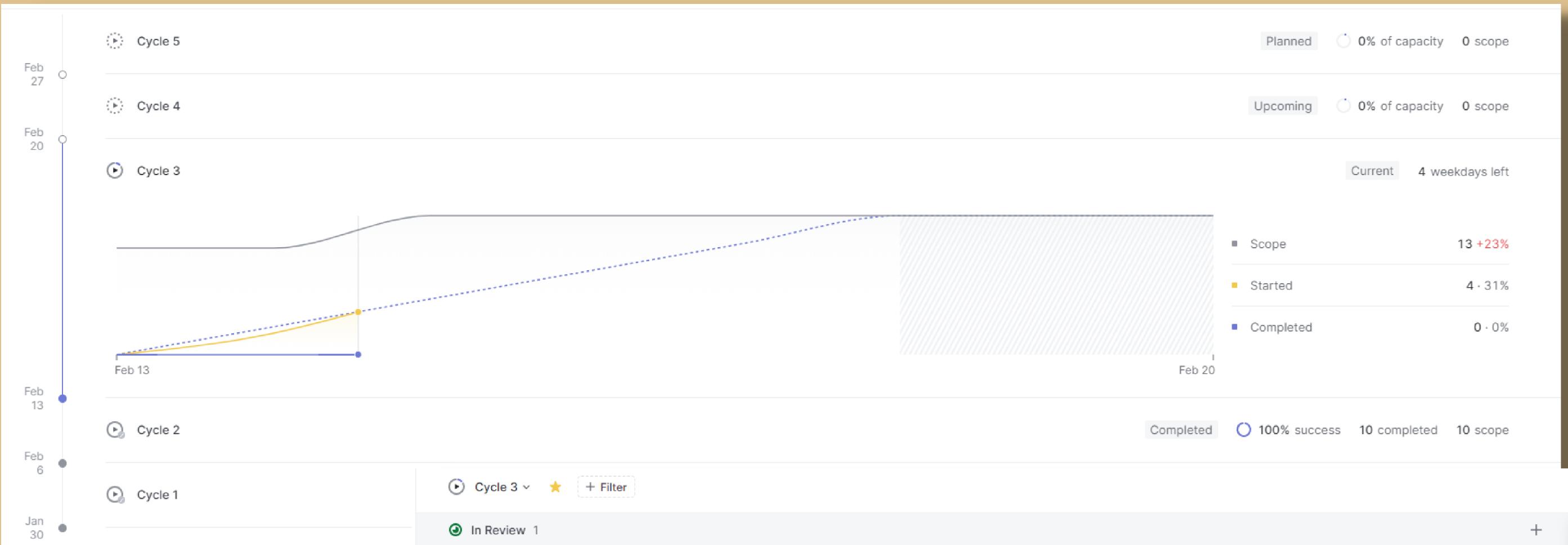
Linear



GitHub

SCOPE, AND FEATURE LISTS IN SPRINT#1 AND SPRINT#2.





LINEAR.APP

Cycle 3 ▾ ★ + Filter

In Review 1

- ARE-45 Camera UI > Camera UI and photo editor UI, Social Media Sharing → Photo feature Feb 14 PU

In Progress 3

- ARE-28 Make powerpoint presentation for 16 FEB → Overall - etc Feb 13 Feb 2 PS
- ARE-29 Forecast AQI chart display → Feature Forecast System Feb 2 W
- ARE-42 Camera UI and photo editor UI, Social Media Sharing → Feature Photo feature Feb 11 PU

Todo 8

- ARE-39 Post photo to social media → Feature Photo feature Feb 3 PU
- ARE-47 Social Media Sharing > Camera UI and photo editor UI, Social Media Sharing → Photo feature Feb 14 PU
- ARE-46 Photo Editor UI > Camera UI and photo editor UI, Social Media Sharing → Photo feature Feb 14 PU
- ARE-40 Save photo on local device → Feature Photo feature Feb 3 MI
- ARE-38 Overlay Air quality data on photo → Photo feature Feb 3 PU
- ARE-37 Air quality di... > Forecast aqi fetching (from API) using location. (re fetch on select new position) > forecast Air quality data fetching (from...) → Forecast System Feb 3 W
- ARE-15 UX design 8 preset template for sprint 2 → Improvement Overall - etc Feb 13 Feb 1 PS
- ARE-43 Location batch requests for suggestion → Improvement Overall - etc Feb 12 MI

Current Feb 13 → Feb 20

Cycle 3 ★

Progress

Scope: 12 +17% Started: 4 · 33% Completed: 0 · 0%

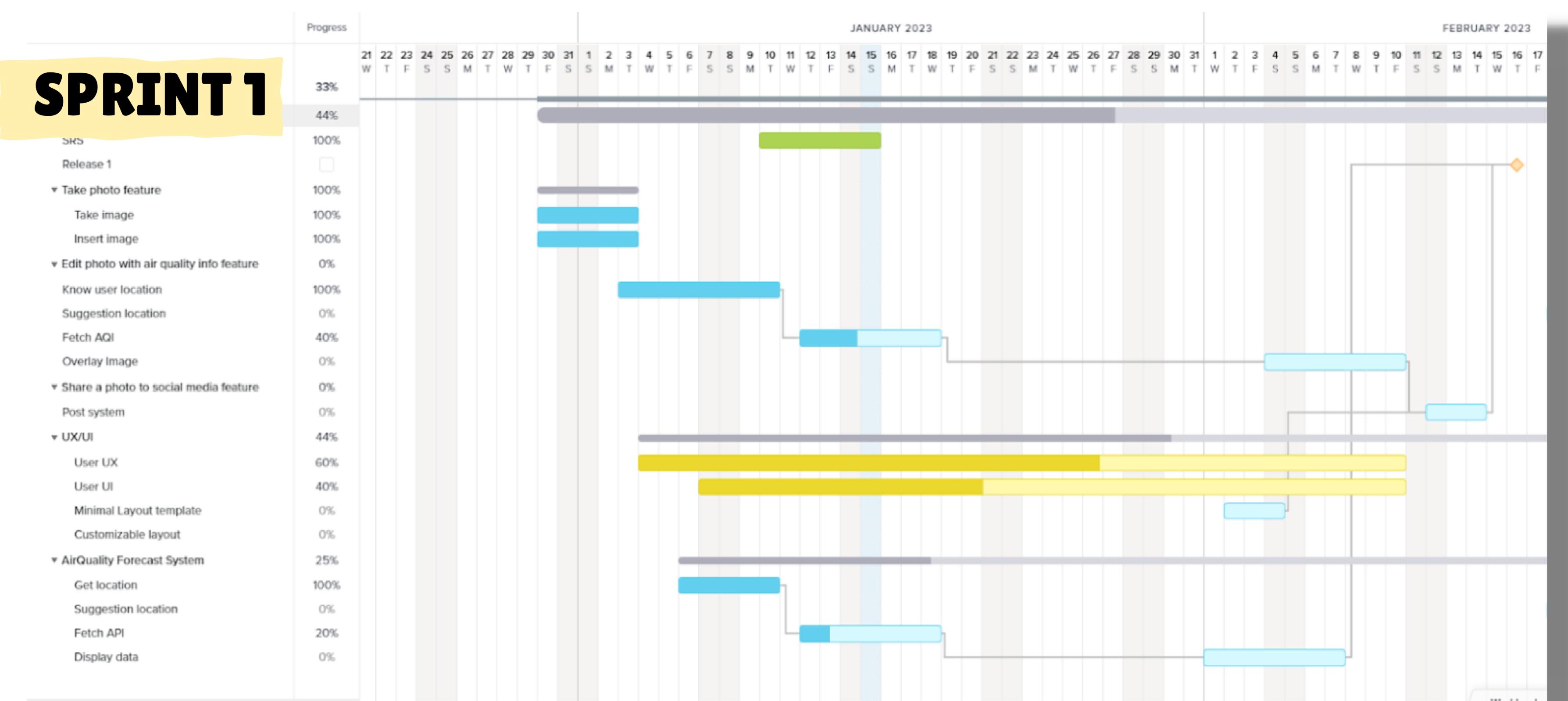
Feb 13 Feb 20

Assignees

- putawan-de 8% of 6
- ttangun1 12% of 2
- min23asdew 0% of 2
- purichseenuallae 12% of 2

Labels

Projects



- > Implement all of the requirements of the AirQuality Forecast System in the "System Features" section.
- > Should implement some of "Take photo feature" and "Edit photo feature" requirements.

SPRINT 1 – FEATURE LIST



Forecast

Choose Location

Take & import photo

AQI Overlay Data

Save Photo



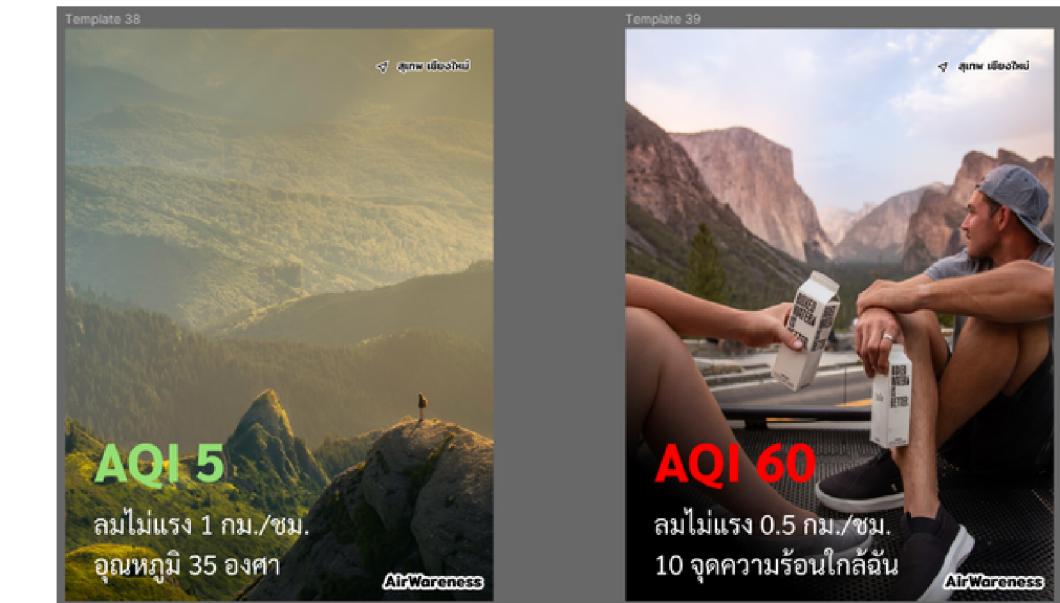
SPRINT 2 – FEATURE LIST



Photo Memory

Photo Editor

- Overlay Widget



Post Photo on Social Media



SPRINT 1 – TESTING

AUTOMATED TESTING & MANUAL TESTING

WHITE-BOX TESTING (AUTOMATED UNIT & WIDGET TEST)

- SUGGEST LOCATION
- AIR QUALITY
- FORECAST PAGE WIDGETS, CAMERA PAGE WIDGETS

BLACK-BOX TESTING (MANUAL TEST)

- USER'S CURRENT LOCATION
- FORECAST, MEMORY USER INTERACT
- SEARCH LOCATION & SUGGEST LOCATION
- TAKE A PHOTO & IMPORT PHOTO FROM GALLERY
- EDITING PHOTO WITH OVERLAY
- SAVING & VIEWING EDITED PHOTO

SPRINT 1 - TESTING

AUTOMATED UNIT & WIDGET TEST

RESULT

```
Running tests, 10/10 passed (100%)
✓ integration_test\app_test.dart 1/1 passed: 21ms
  ○ [Integration_Test]
  ○ (tearDownAll) 21ms
✓ test\unit_test.dart 5/5 passed: 1.6s
  ○ [Unit_Test] [AirQualityAPI] 3/3 passed: 1.6s
    ○ fetchAirQuality returns success response 966ms
    ○ getAirQuality5day returns success response 653ms
    ○ fromJson creates valid Airquality object 11ms
  ○ [Unit_Test] [Location] 2/2 passed: 18ms
    ○ fromJson() should return a Suggestlocation object with correct values 7.0ms
    ○ should return a list of Suggestlocation objects 11ms
✓ test\widget_test.dart 5/5 passed: 2.2s
  ○ [Widget_Test] [Page] 4/4 passed: 2.0s
    ○ should have application name, location 1.4s
    ○ should have Camera, Forecast button 122ms
    ○ forecast page must contains Today, Daily, Hourly 284ms
    ○ camera page must contains memory and camera button 183ms
  ○ [Widget_Test] [MainScreen -> Camera] 1/1 passed: 122ms
    ○ can open built in camera and close 122ms
```

MANUAL TEST

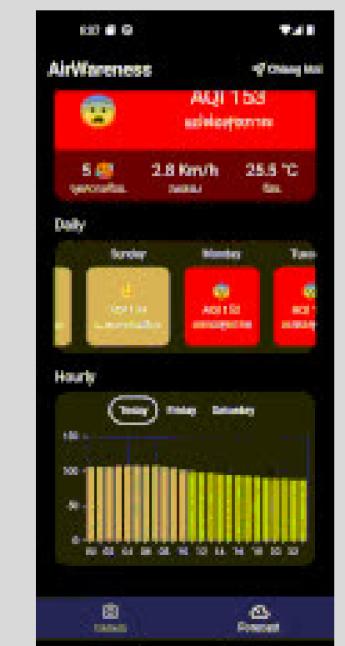
GET USER'S CURRENT LOCATION



AirAwareness

✓ Chiang Mai

QXQP+84M, Si Phum Sub-district,
Mueang Chiang Mai District, Chiang
Mai 50200, Thailand
18.7883, 98.9853



PAGE USER INTERACT

SEARCH AND SUGGEST LOCATION



เลือกตำแหน่งที่อยู่

ดอยสุเทพ



Doi Suthep (Ban Hmong Doi Pui)
Distance: 6.27 Km

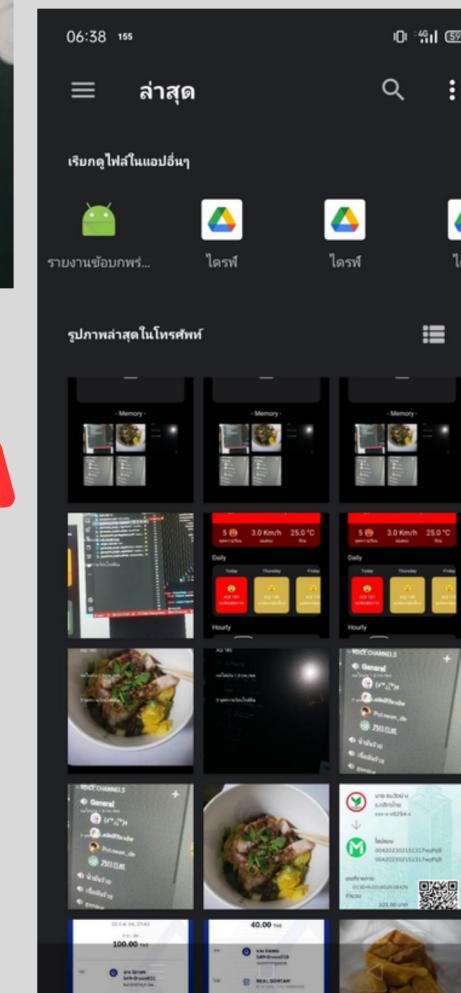
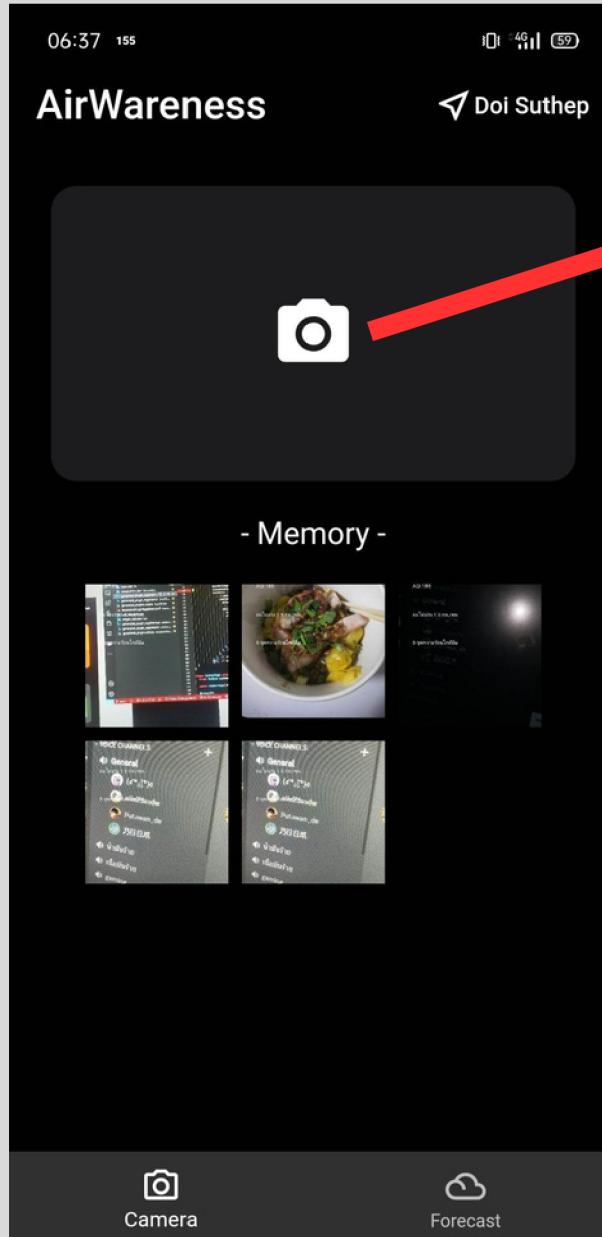
◀ Doi Suthep

AirAwareness

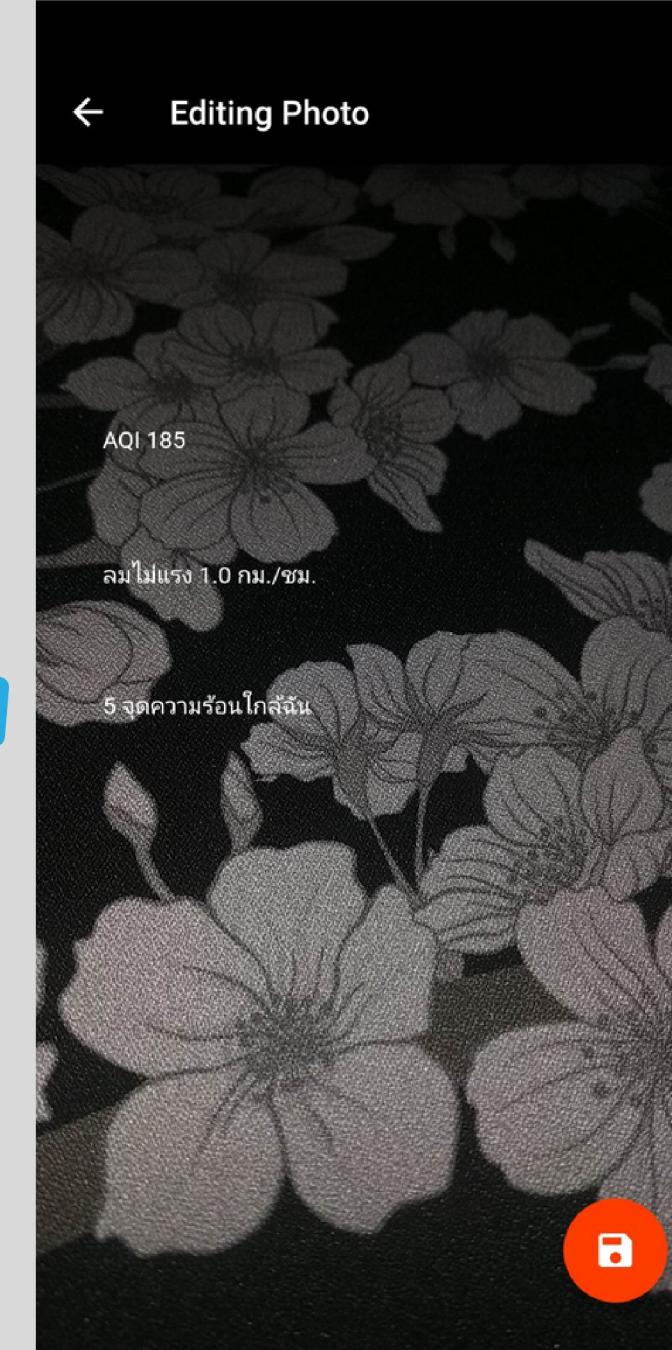


SPRINT 1 – TESTING

TAKE A PHOTO & IMPORT
PHOTO FROM GALLERY



EDITING PHOTO WITH OVERLAY

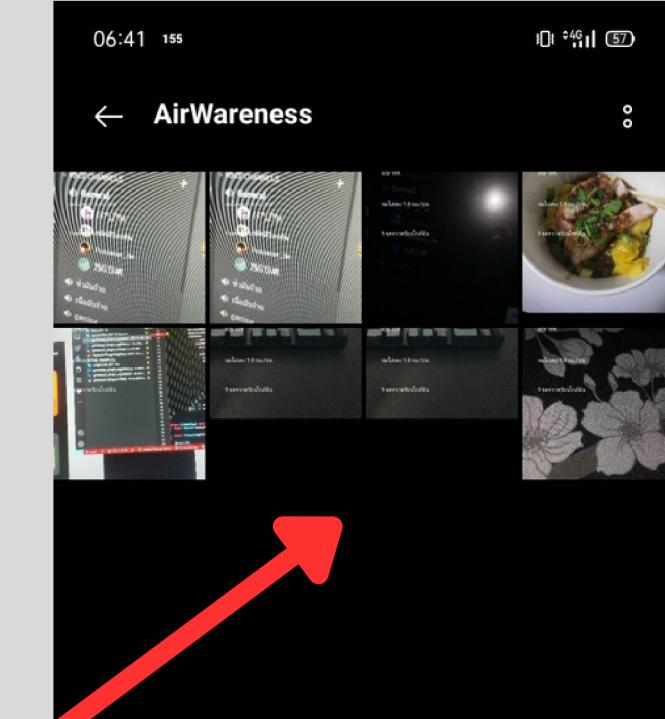


SPRINT 1 – TESTING

SAVING EDITED PHOTO

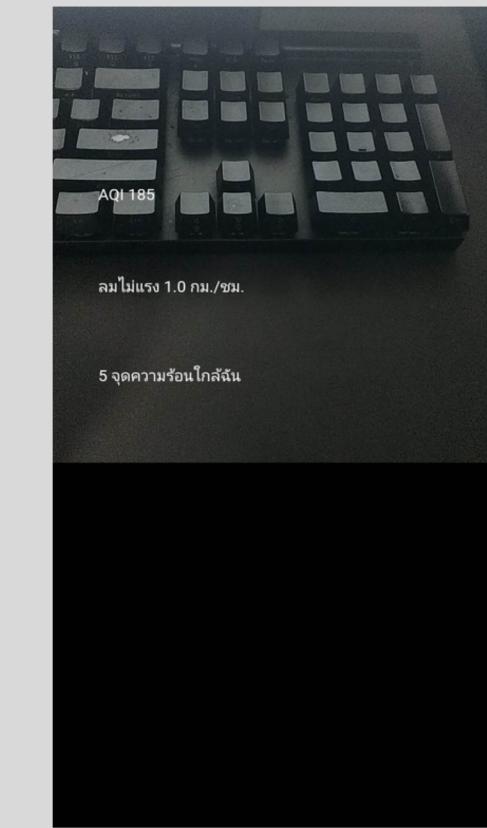


WITH 9:16
PHOTO SIZE RATIO



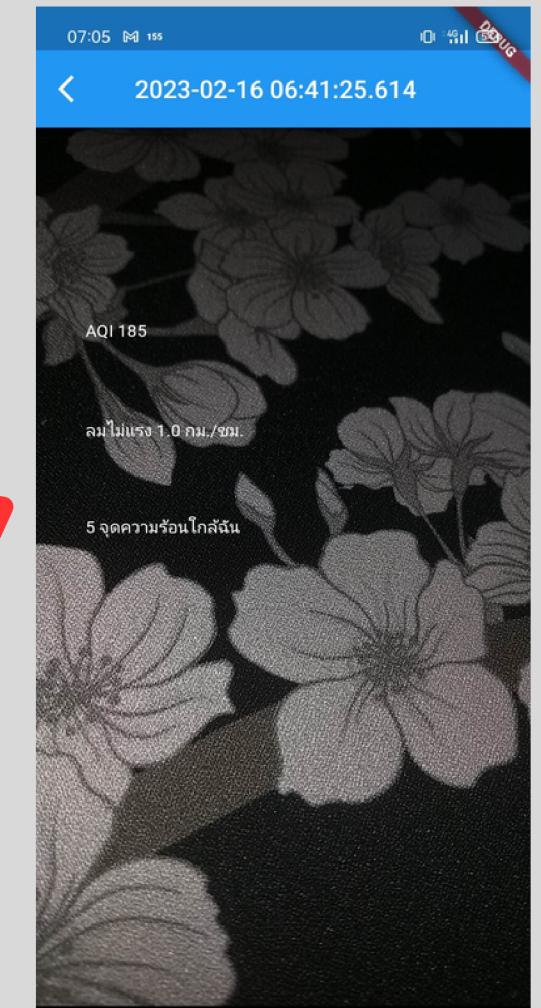
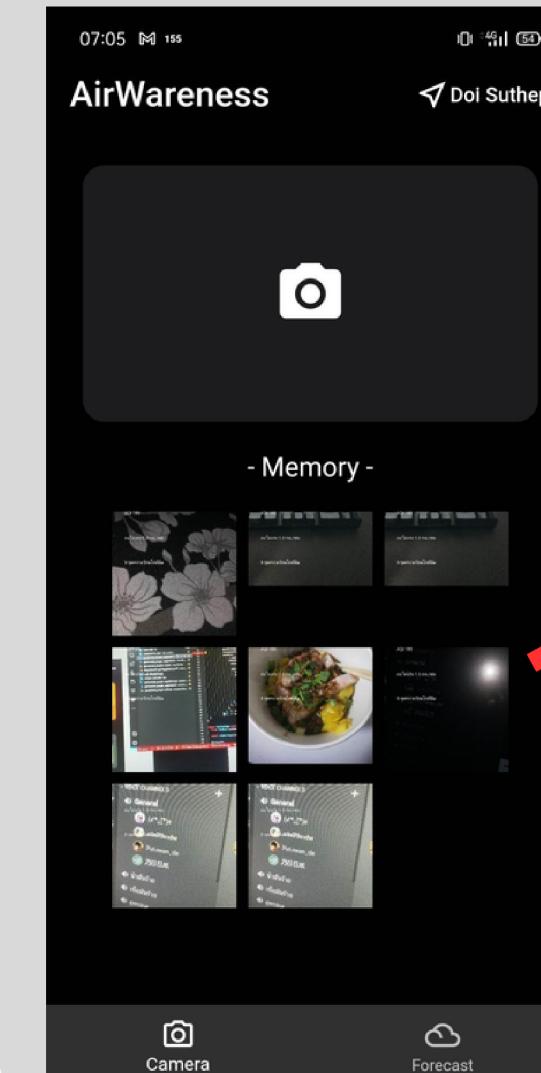
SAVED TO DCIM/AIRWARENESS

WITH OTHER
PHOTO SIZE RATIO

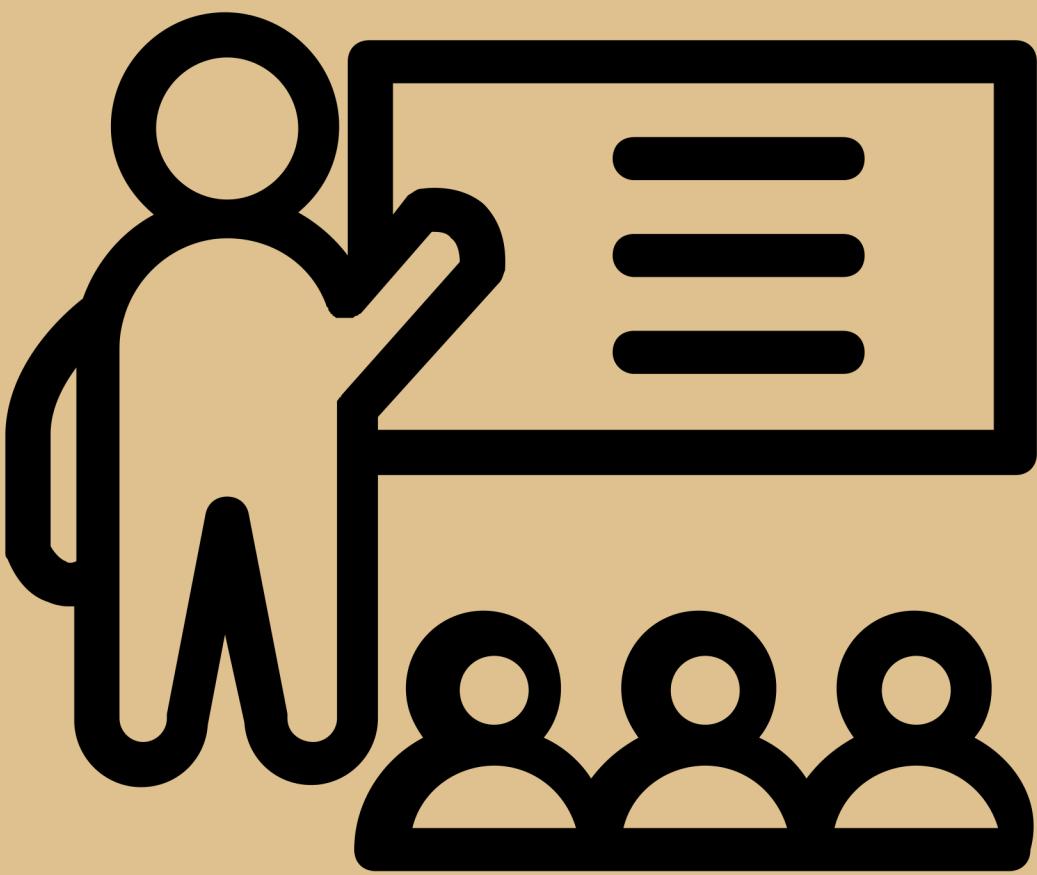


SWITCHED CAMERA TO OTHER RATIO EXAMPLE 1:1 RATIO
THE SAVED PHOTO WILL FAIL IT INCLUDED SOME UNWANT BLACK AREA

VIEWING EDITED PHOTO (MEMORY)



DEMONSTRATION



RETROSPECTIVE SPRINT 1

What was good

- Great team spirit
- Good pairing work

What was bad

- Time management
- Free-tier APIs have limits
- Hourly data (from API) have low accuracy

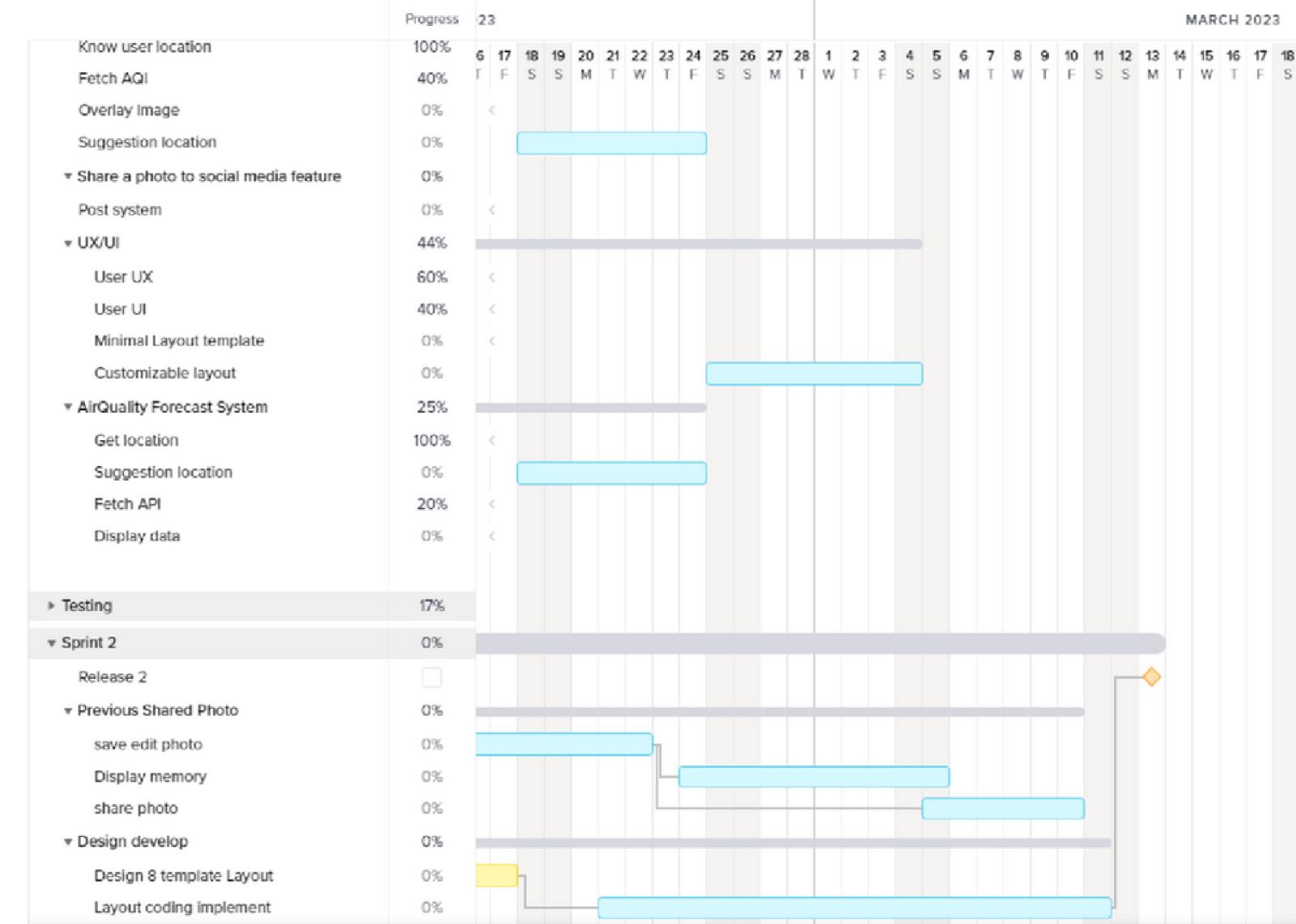
IDEAS

- Each backlog needs clear acceptance criteria

ACTIONS

- More necessary, short, and informative meetings

Sprint 2:



- > Implement the remaining requirements of “Take photo feature” and “Edit photo feature”.
- > Implement all of the requirements on “Previous Edited/Shared Photo (Photo Memory)” and “Share a photo to social media feature”
- > Improve UI/UX on all of the features implemented.



YUTHAPONG SOMCHIT, PH.D.



SANPAWAT KANTABUTRA, PH.D.

UNEXPECTED

5 Strongly Agree

1 Strongly Disagree

SUS SCORE: 70.0

B = Good

| | |
|--|---|
| I think that I would like to use this application frequently. | 5 |
| I found this application unnecessarily complex. | 4 |
| I thought this application was easy to use. | 5 |
| I think that I would need assistance to be able to use this application. | 2 |
| I found the various functions in this application were well integrated. | 4 |
| I thought there was too much inconsistency in this application. | 2 |
| I would imagine that most people would learn to use this application very quickly. | 4 |
| I found this website very cumbersome/awkward to use. | 2 |
| I felt very confident using this application. | 4 |
| I needed to learn a lot of things before I could get going with this application. | 4 |



A(ir)Wareness by AreYouWorking

Air pollution awareness via Photo sharing Users can take or upload photos and customize whether to add PM2.5, AQI, heat map or other air pollution data to the photos before saving or sharing.

"ชาวเชียงใหม่มอยใกล้กับฟุนคั่วนมากกว่าที่คิด จึงอยากเพิ่มความตระหนักร่องฟุนคั่วนที่ใกล้ตัว โดยเฉพาะบน Social Media"



123 Anywhere St., any city



Areyouworking.github.io