Footprinter

Record and Share Your Memories

Lee HyunSung
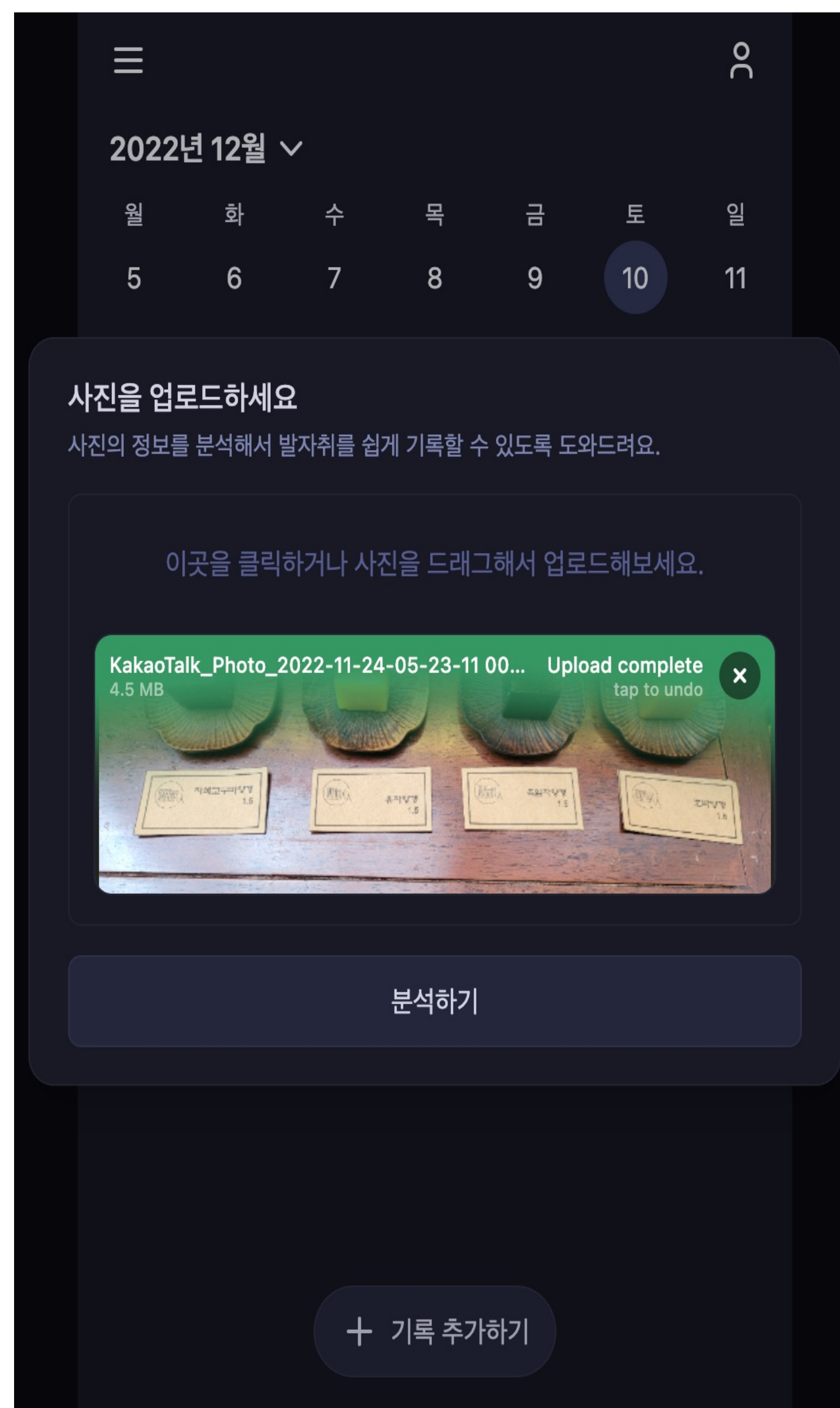Park ShinHong
Woo HyeokJoon
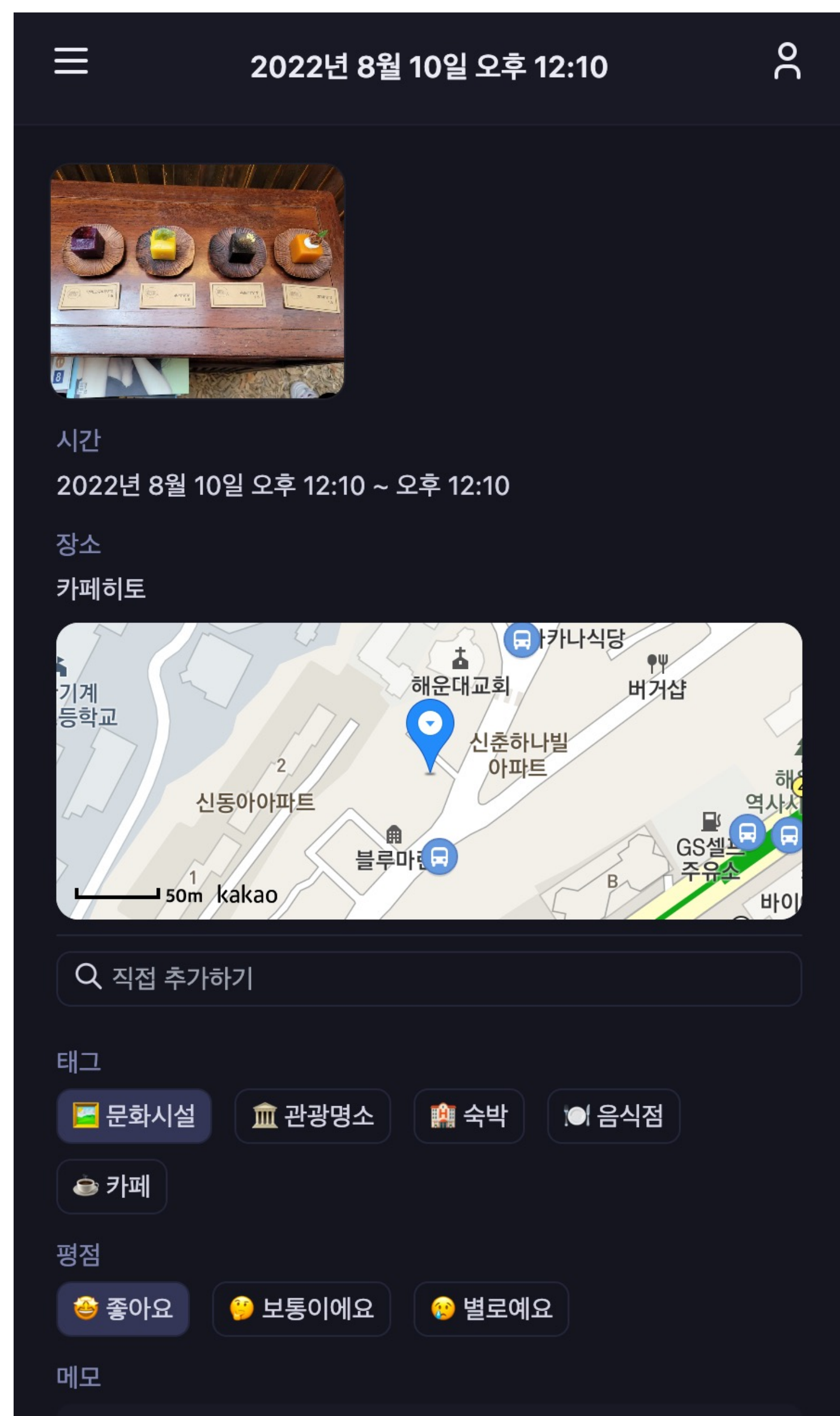Yang Joohyeon

SWPP2022 team 5

Introduction

Footprinter automatically categorizes your photos by using their EXIF metadata. Just upload your photos from your gallery, and our service will analyze photos by time and location and those will be stored in database.
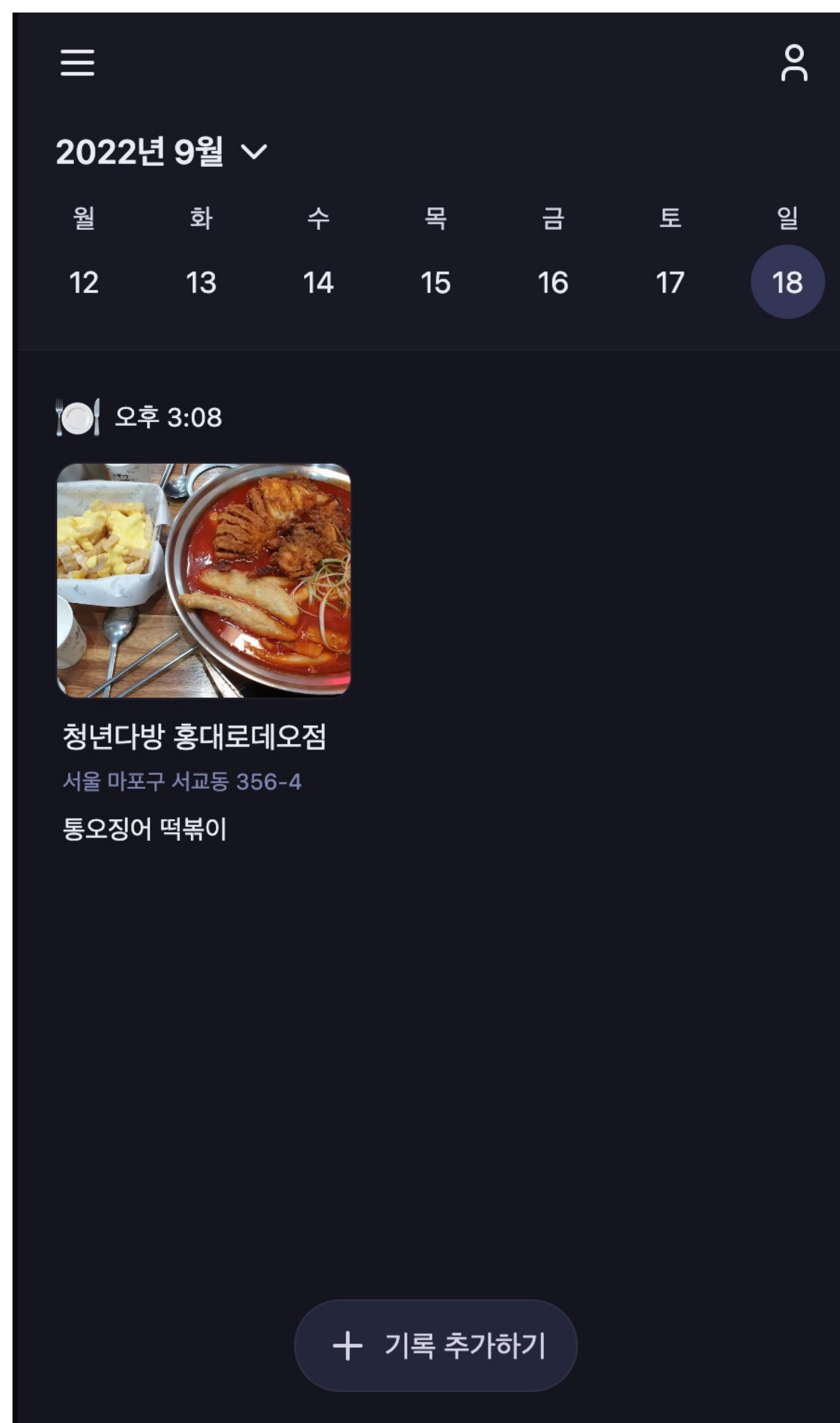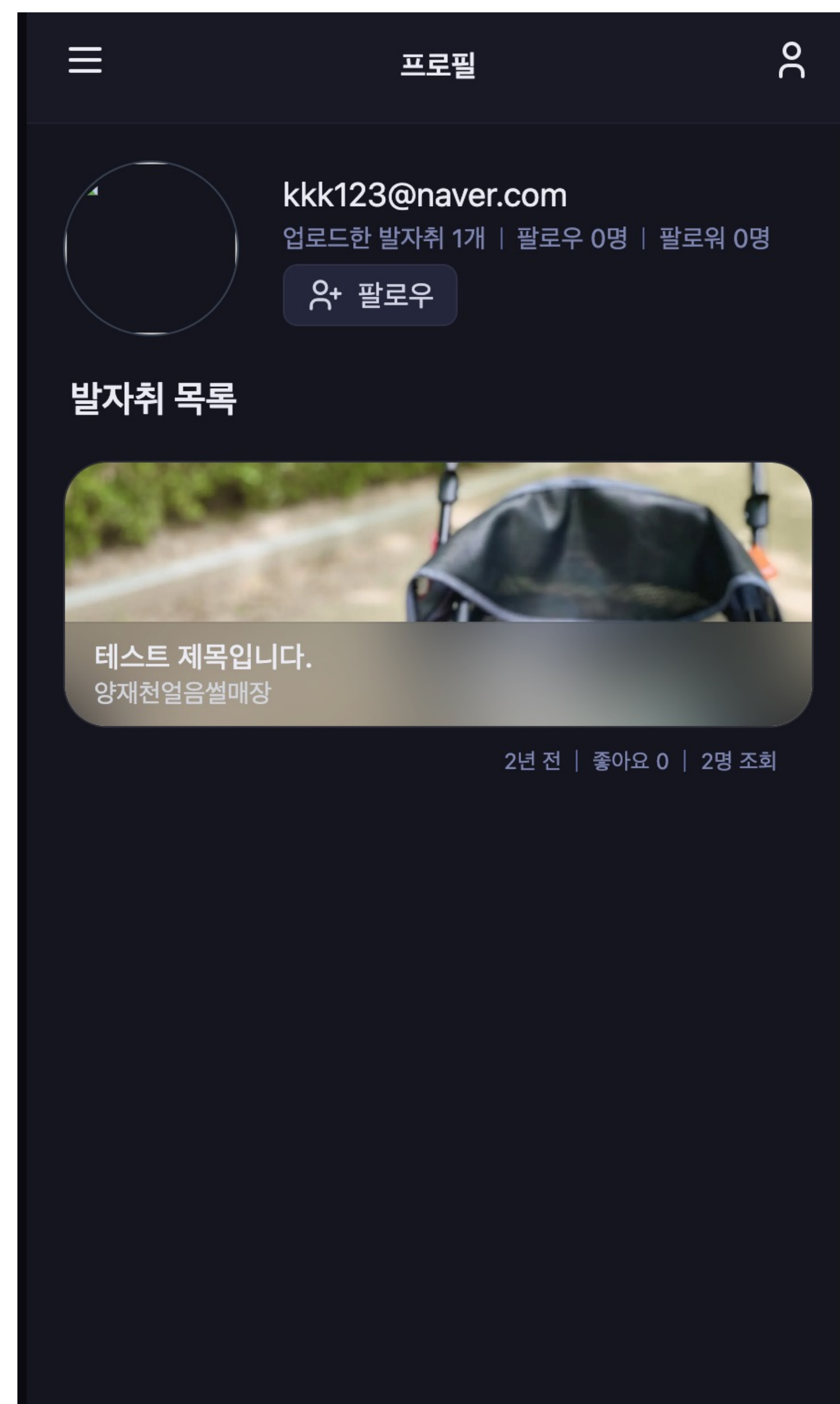
User Story / UI

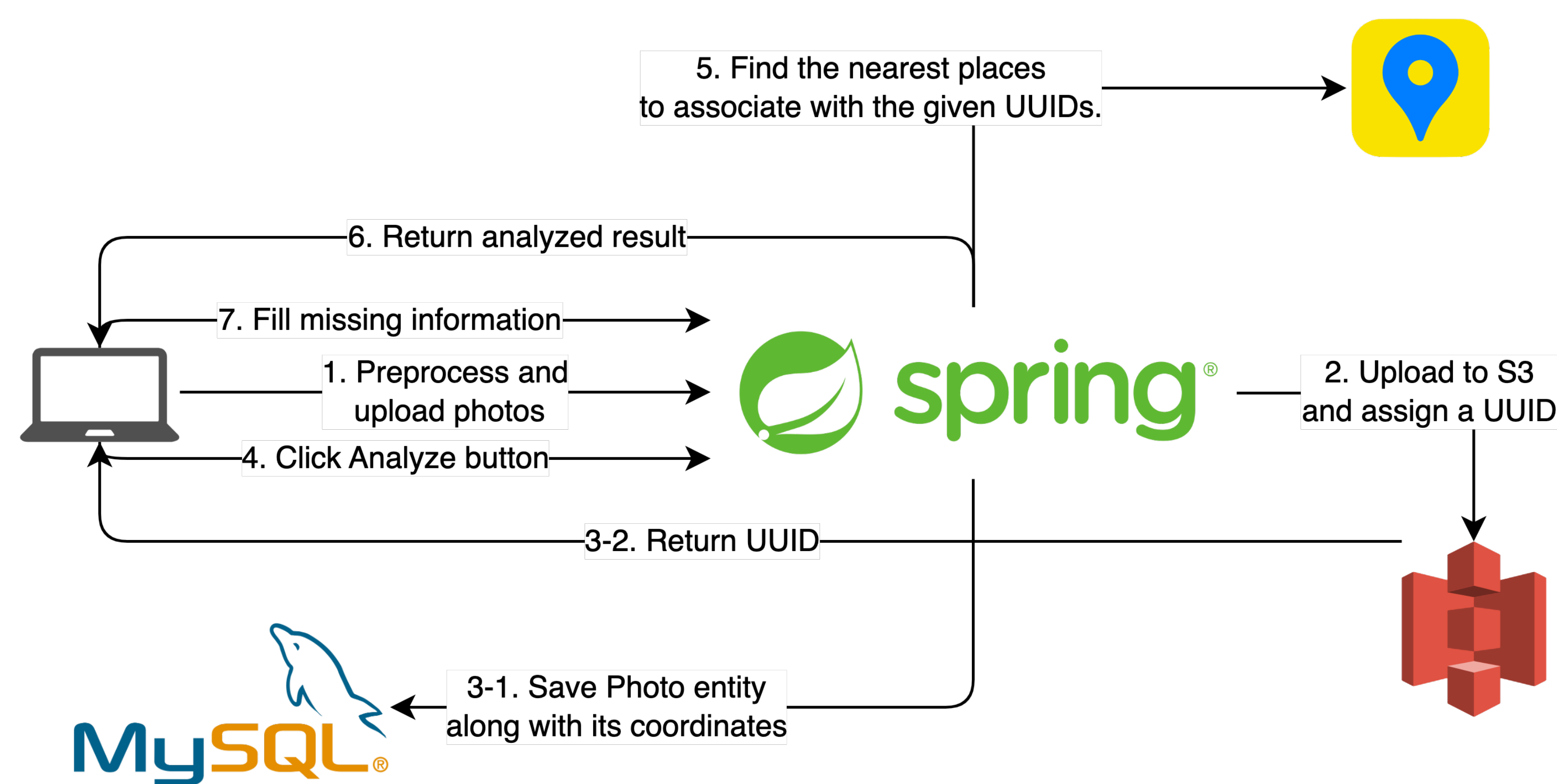**Upload multiple photos at once.**
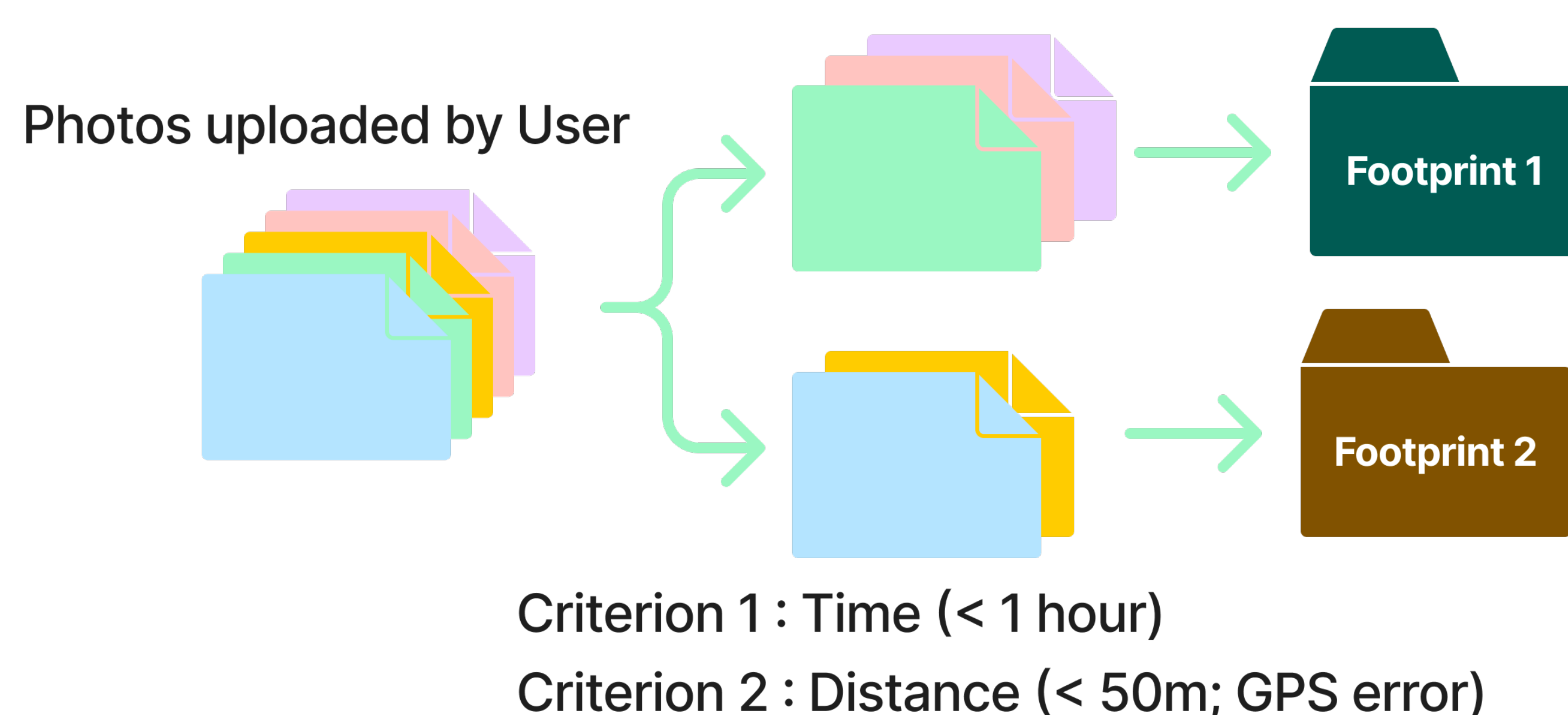
Create / Edit Footprints

Calendar View
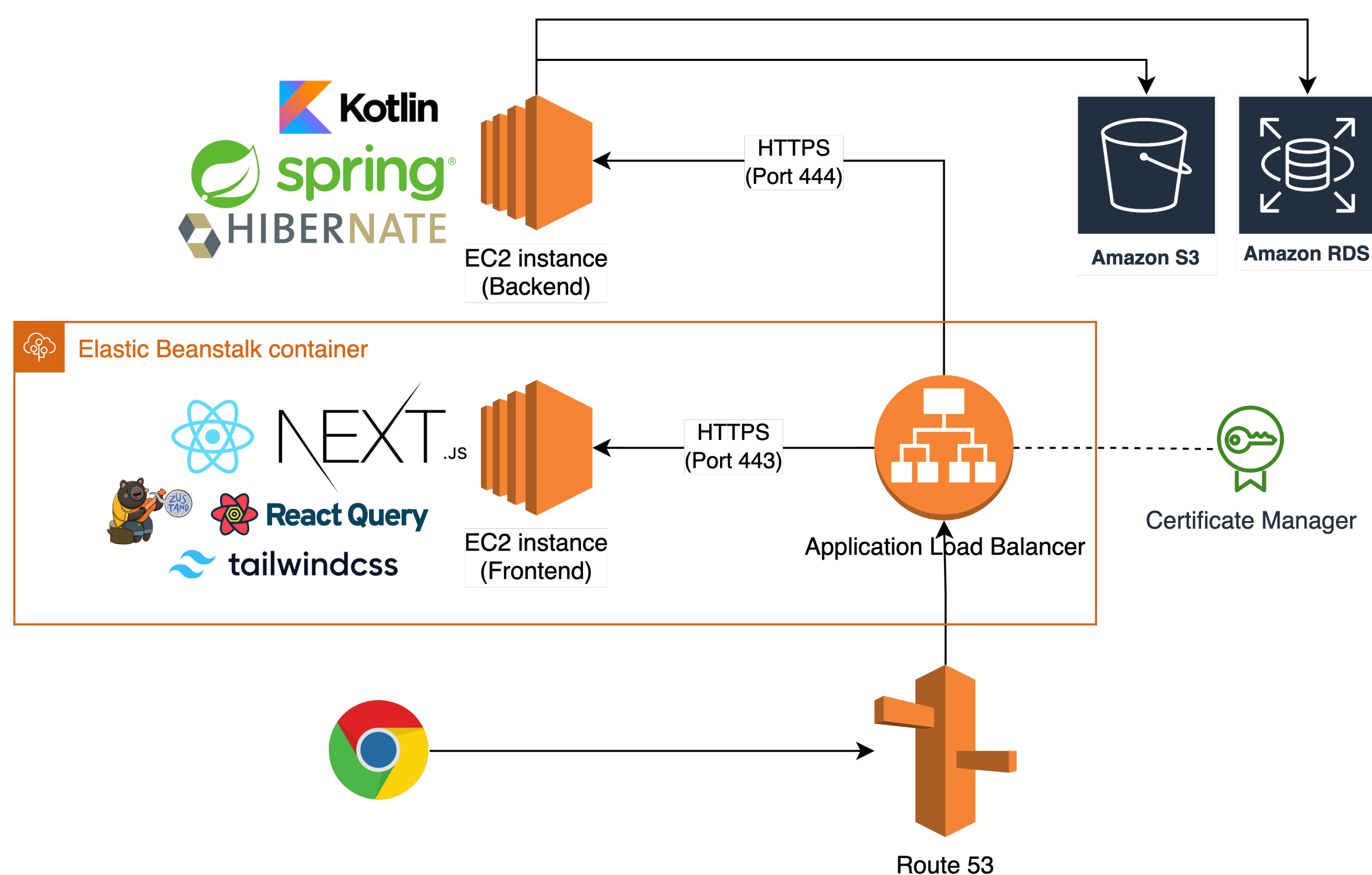
Take a peek at others' footprints

Flow Diagram

- 5. Find the nearest places to associate with the given UUIDs.
- 6. Return analyzed result
- 7. Fill missing information
- 1. Preprocess and upload photos
- 4. Click Analyze button
- 2. Upload to S3 and assign a UUID
- 3-2. Return UUID
- 3-1. Save Photo entity along with its coordinates

Time&Place Grouping

Photos uploaded by User

Footprint 1

Footprint 2

Criterion 1 : Time (< 1 hour)
Criterion 2 : Distance (< 50m; GPS error)

System Architecture

Kotlin
spring
HIBERNATE
EC2 instance (Backend)

HTTPS (Port 444)

Amazon S3   Amazon RDS

Elastic Beanstalk container

NEXT.JS
React Query
tailwindcss
EC2 instance (Frontend)

HTTPS (Port 443)

Application Load Balancer

Certificate Manager

Route 53

Conclusion & Future Works

With Footprinter, maintaining trip records and sharing them is made so much easier.

Future Work
1. Improve the accuracy of location prediction by introducing ML features
2. Encourage users to record their footprints by providing more incentives.