

MyHikingMapHK – An App for Hiking in Hong Kong

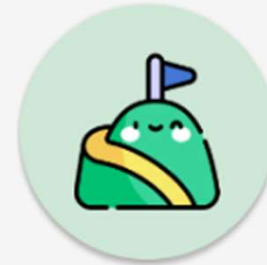
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Introduction

Our app: **MyHikingMapHK**

- Inspired by MyMapHK (Lands Dept.)
- A platform designed to enhance the hiking experience of citizens
- This App is mainly designed for people who like hiking



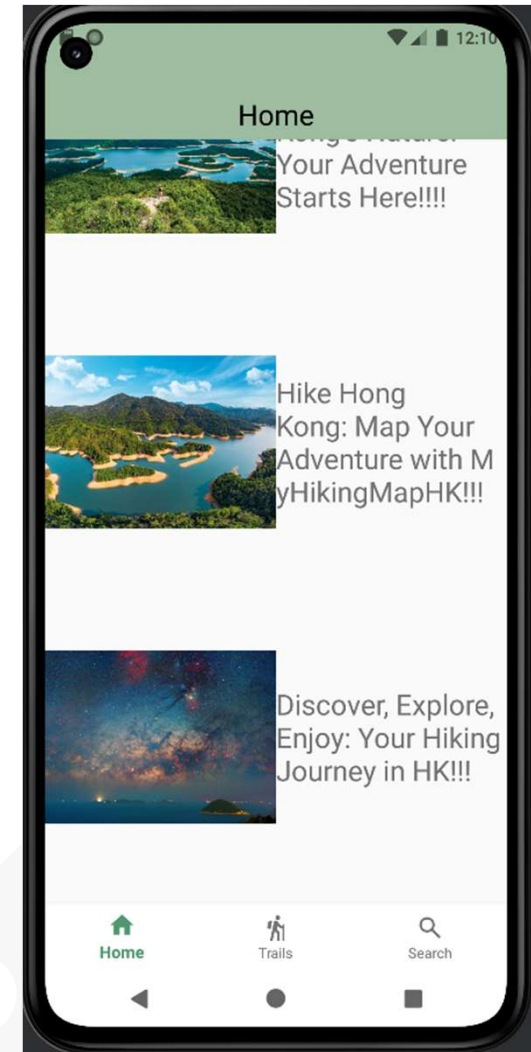
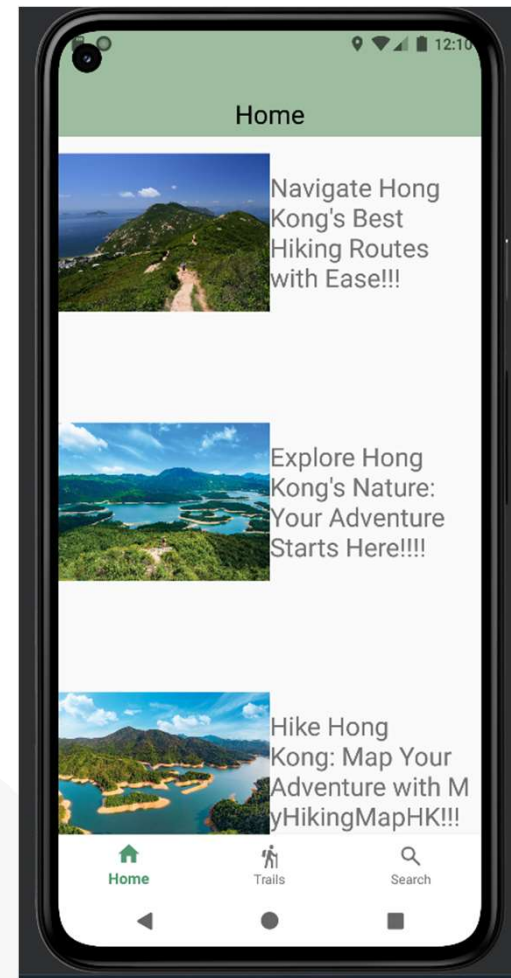
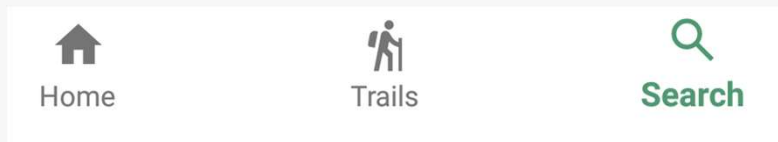
MyHikingM..

Layout



Home Page:

- Thumbnails of the mountain and statements
→ Increase the interest of users in hiking
- 3 categories in bottom with different function.

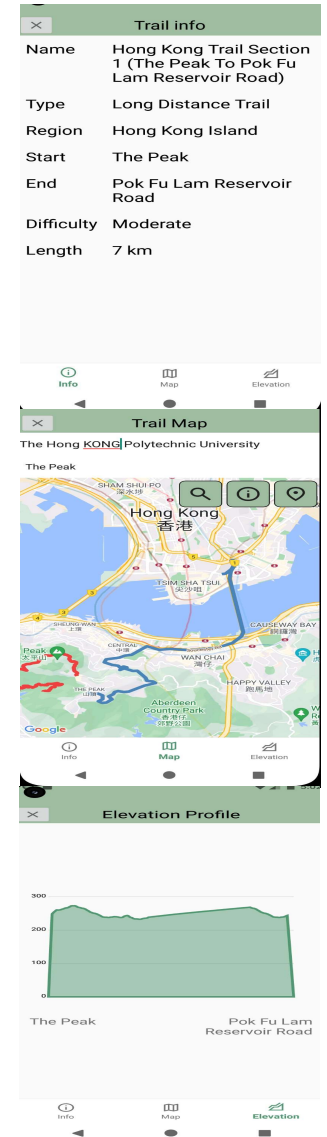
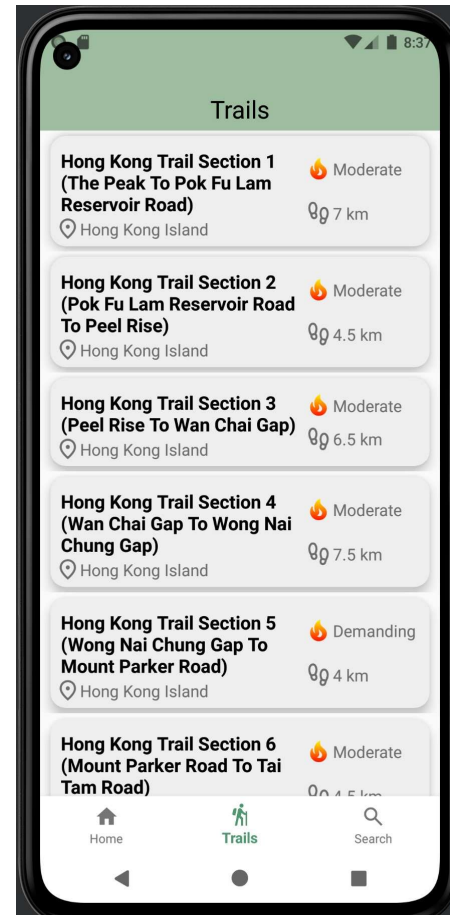


Layout



Trails Page:

- List all the hiking trails in HK including:
 - Region
 - Suggested route
 - Difficulty
 - Length
- Can be clicked for more information

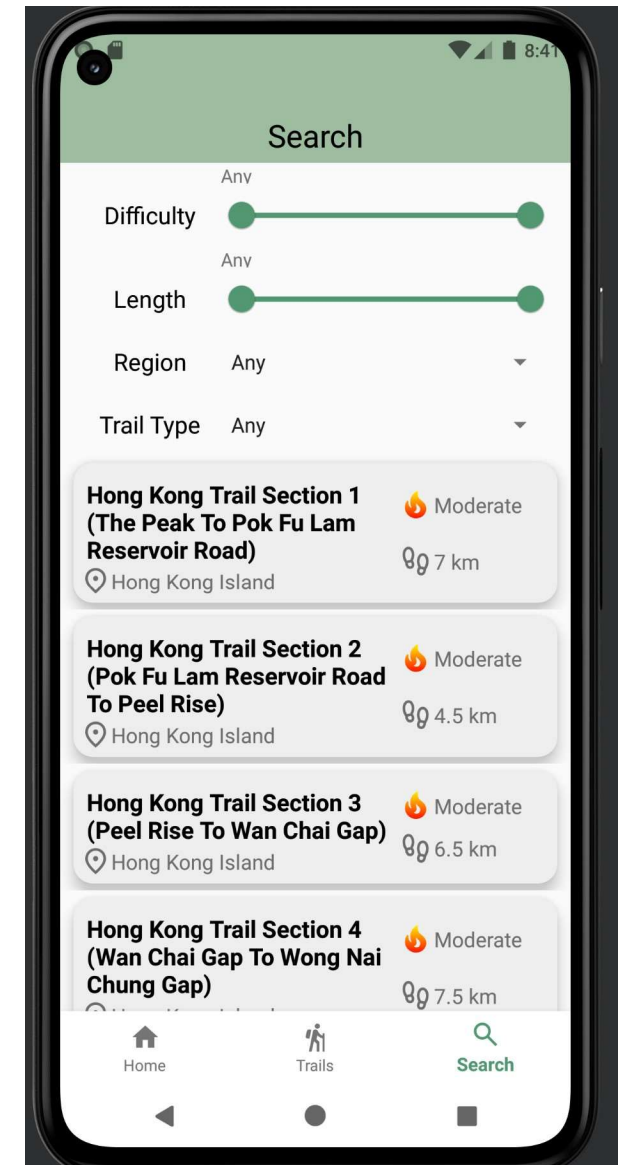


Layout



Search Page:

- Provide optional settings to range of selection for the user
- Show all the suitable hiking trail based on user's selection

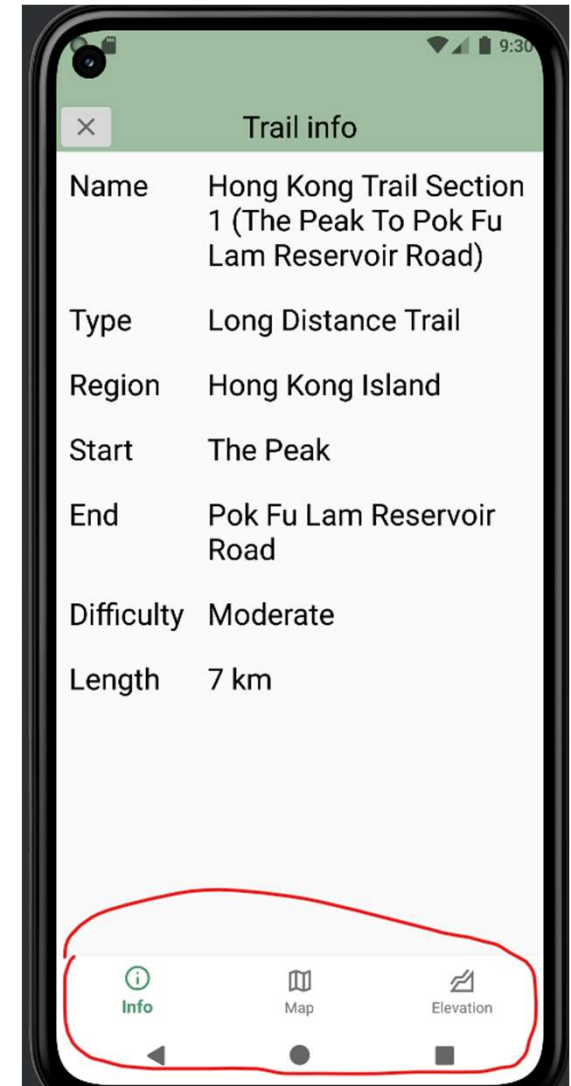


Layout



Trails Page:

- 3 categories in bottom will be changed to
 - Info
 - Map
 - Elevation



Functions (Trails)

• Trial Information

- Name
- Type
- Region
- Start
- End
- Difficulty
- Length

| Trail info | |
|------------|---|
| Name | Hong Kong Trail Section 1 (The Peak To Pok Fu Lam Reservoir Road) |
| Type | Long Distance Trail |
| Region | Hong Kong Island |
| Start | The Peak |
| End | Pok Fu Lam Reservoir Road |
| Difficulty | Moderate |
| Length | 7 km |


Info

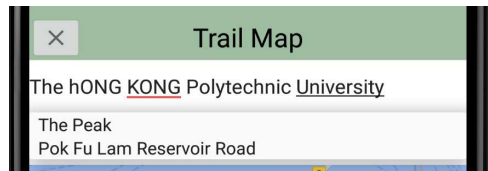

Map


Elevation

Functions (Trails)

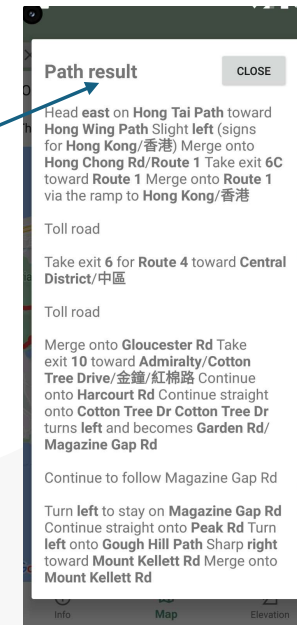
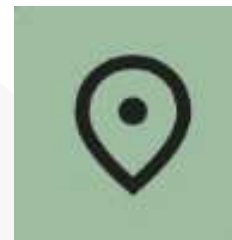
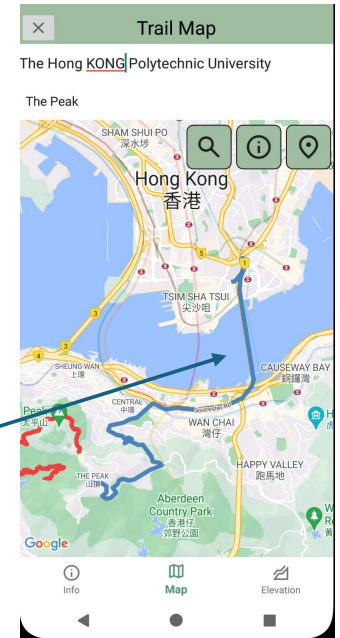
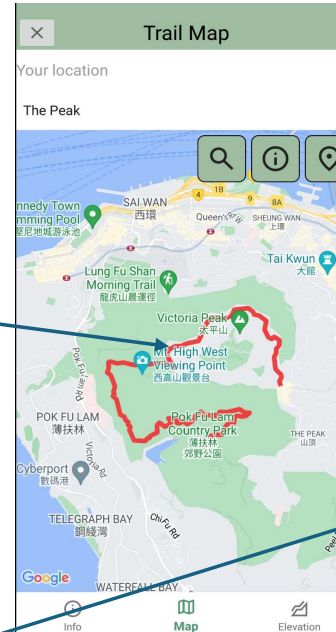
• Trail Map

- Show the path of the hiking trail



- Set origin and destination of the place
→ Showing the path of the route
→ Showing the detail of each step of the route

- Get current location
→ Showing the current location of the user

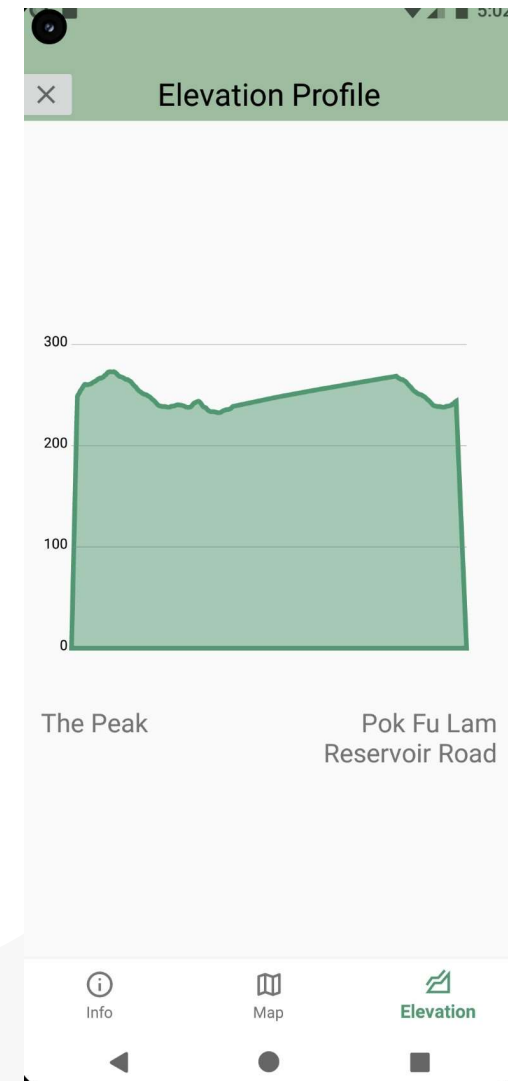


Functions (Trails)

○ Elevation profile

→ Showing the elevation (height) of the hill

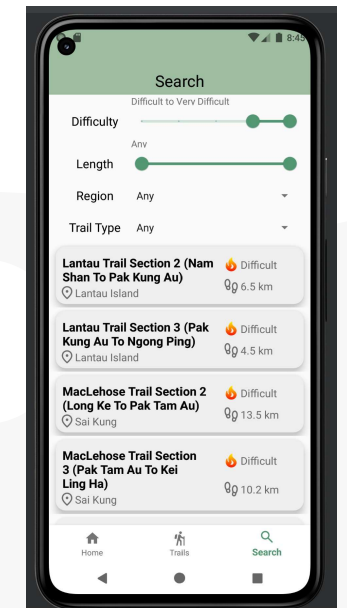
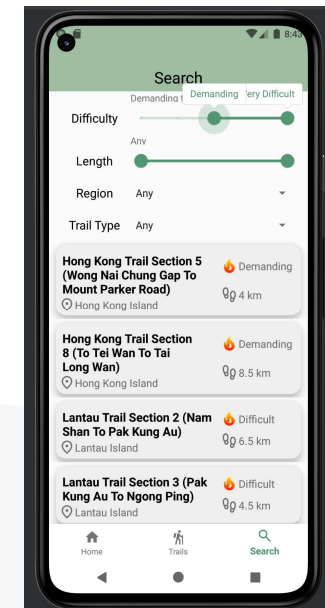
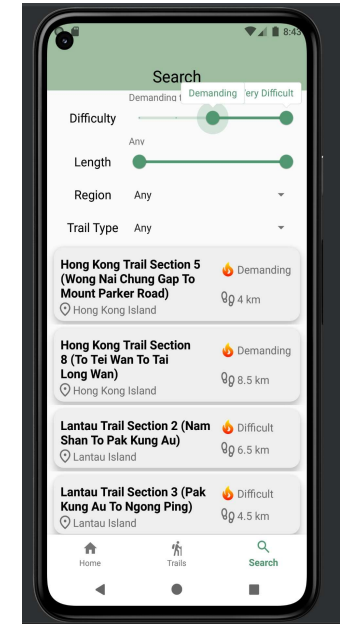
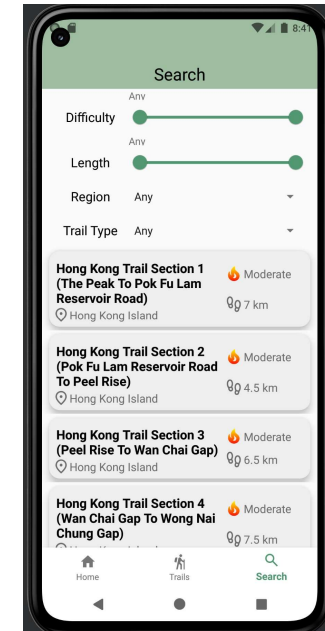
→ Showing the changes of elevation from the origin to the destination



Function (Select the Difficulties of Hiking Route)

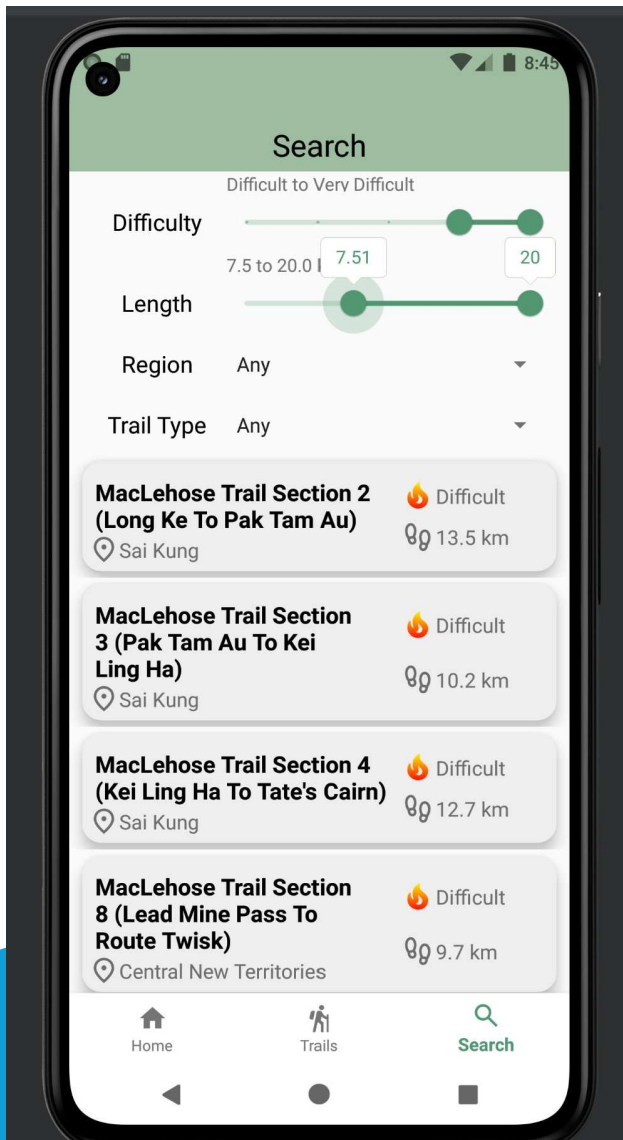
How does the app fulfill user's need?

- A scroll bar to range the difficulty
→ e.g., Easy to Very Difficult (Showing all the Trail section)
→ Based on the suitability of the users

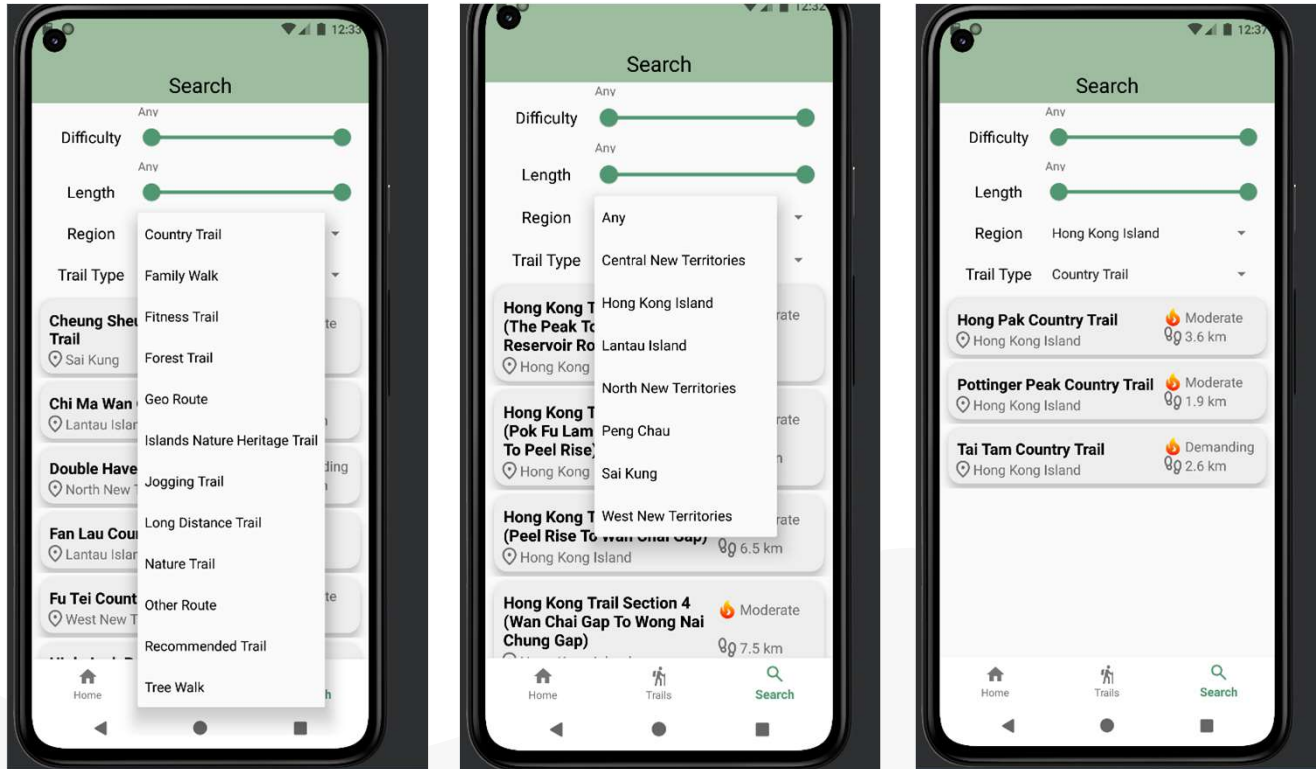


Function (Select the Length of Hiking Route)

- Users can choose different hiking routes and lengths based on their desires
 - Another scroll bar to range the length (proportional to difficulty)
 - 0 km (Lowest Length) to 20 km (Highest Length)
- Based on the suitability of the users



Function (Select the Region and Trail Type of Hiking Place)



- Users can select the Region Type and Trail Type that they want → filter out based on your preference

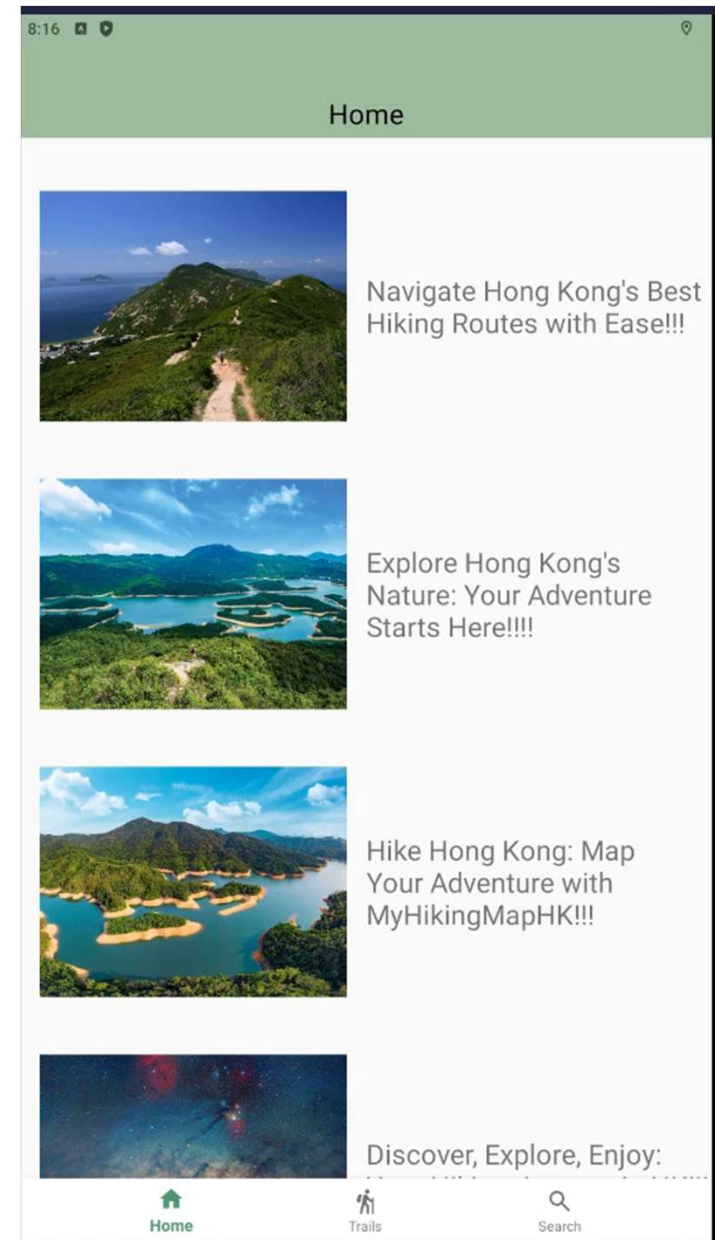
→ Region type:

e.g., nearest to Hong Kong Island

→ Trail Type:

e.g., Family Walk/Fitness Walk/Country Trail

Demonstration of our MyHikingMapHK App



Significance of the app

- **Providing more details of the hiking trials**

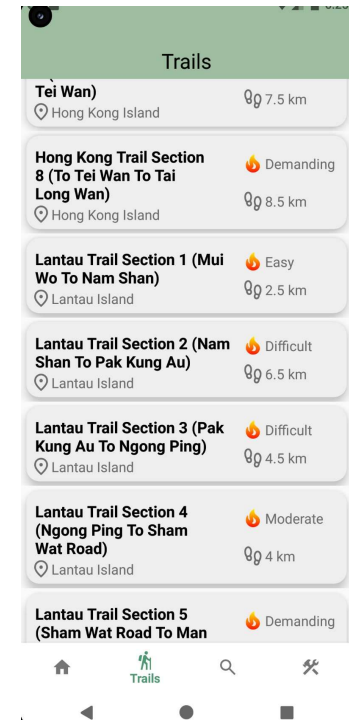
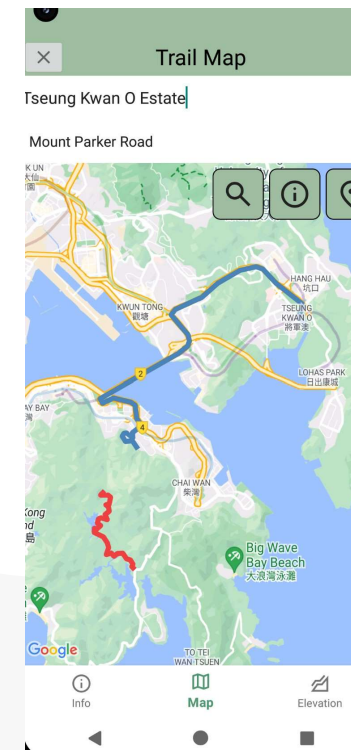
→ Allowing users to choose the hiking trials based on their willingness (e.g., difficulties, region, walking distance.....)

→ Ensure better planning

- **Supporting local tourism**

→ Attracting tourists who love hiking

→ Giving them more information about the hiking routes and how to get there



Significance of the app

- **Promoting recreation and healthy lifestyles**

- Encourage citizens to go hiking with the help of details of hiking trails

- Promote physical health

- **Reduce the risk while hiking**

- Clear path's instructions

- Find current location through GPS while get lost or in emergency

The Potential Profit Model in the MyHikingMapHK



Government Funding and Sponsorship: Likely funded by the government for public service



Data Monetization: Valuable data collected could be sold to researchers or planners



Partnerships: Collaborate with businesses for promotions within the app



Premium Features: Offer advanced features for a fee.

Difficulties encountered

• Self-learning

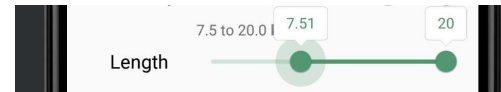
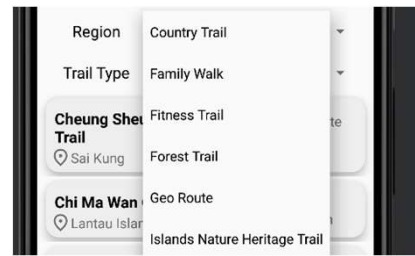
→ Most functions are not included in the Lab tutorials:

e.g.,

RecyclerView - scrollable buttons

Spinner - dropdown menu

RangeSlider - two-thumb slider



→ Need to look up the documentations on the Internet

→ The location might not have enabled → window pop up for user to enable their location

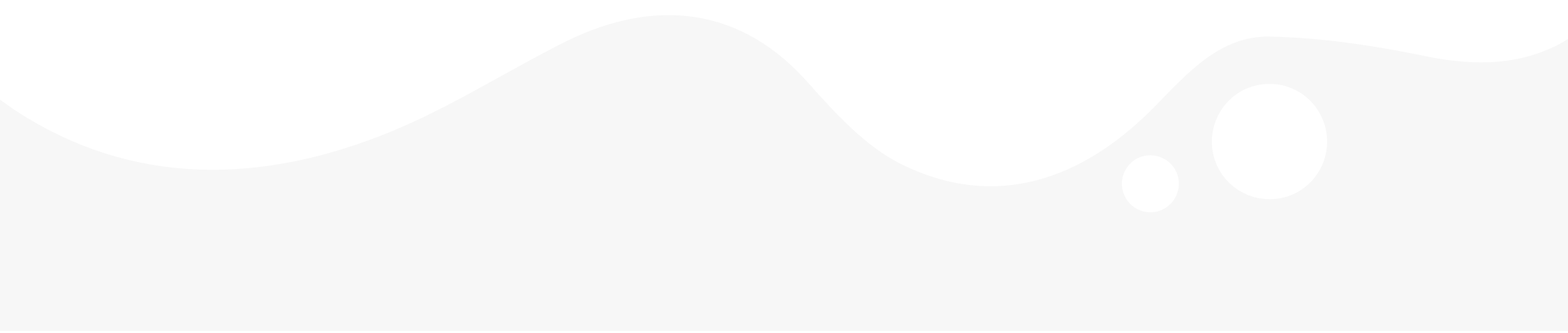
→ Finding API Sources (trail paths from open ESRI, path finding from Google, elevation from Trail Watch)

Limitations

- **Limited Offline Functionality**

- Mountains with high elevation or high density of tree may result in poor or no connectivity

- **No detailed topographic information crucial**

- Trail conditions
 - E.g., specific hazards like cliffs or crevasses
- 
- A decorative graphic at the bottom of the slide consisting of a light gray wavy line. To the right of the wave, there are two white circles of different sizes, one larger than the other, positioned as if they are floating or part of the landscape.


Limitations (Cont.)

- **Lack of Real-Time Updates**

- Information on trail closures
- Weather conditions
- Other dynamic factors

→ The data may not be current as the data is imported by reading csv

- **Language barriers**

- Have difficulties to hikers who do not know English
 - May not be suitable to all users
- 

Thank **you!**

Any questions?

Q & A session