

# CS426 Mobile Device Application Development Report

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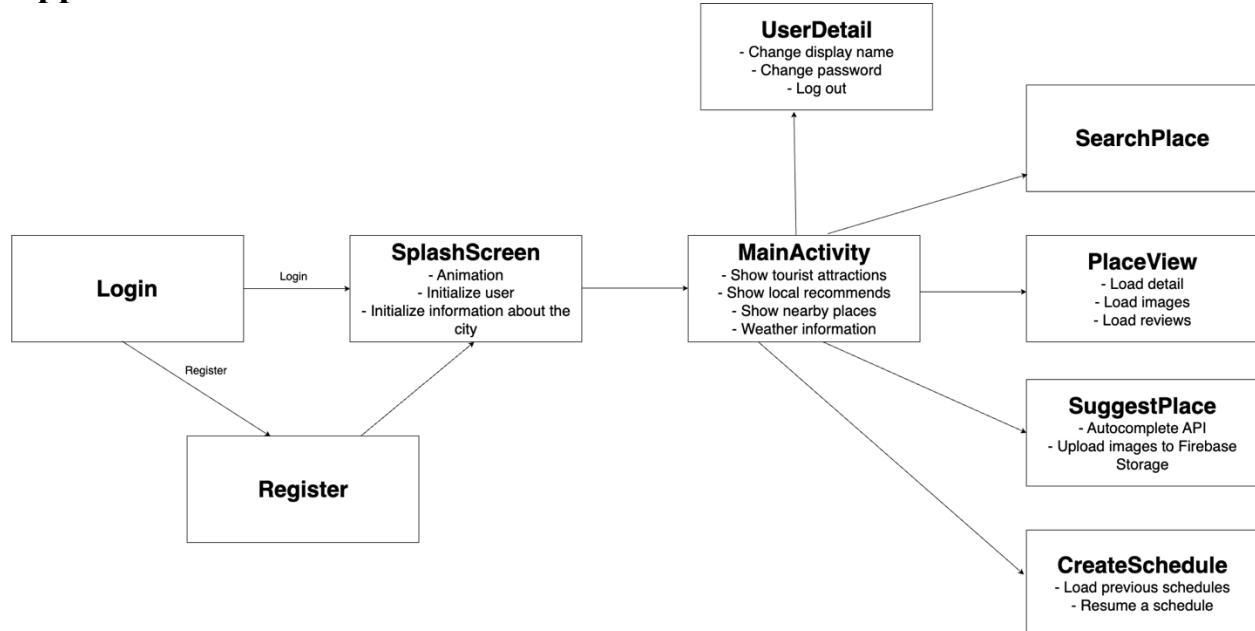
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Travel There is a mobile application for tourists that can help people to discover places across cities in Vietnam. The app works based on user's current location to identify which city he / she is in and therefore the app is able to introduce locations to the tourist. For example, if you're standing in Ho Chi Minh City, the application will be constraint to the Ho Chi Minh City and show places in Ho Chi Minh City. Apart from viewing popular tourist attractions, tourists can discover hidden gems from locals. Tourists can also use this app to create travelling schedules.

The backend of this application is based on the Google Firebase.

## App structure



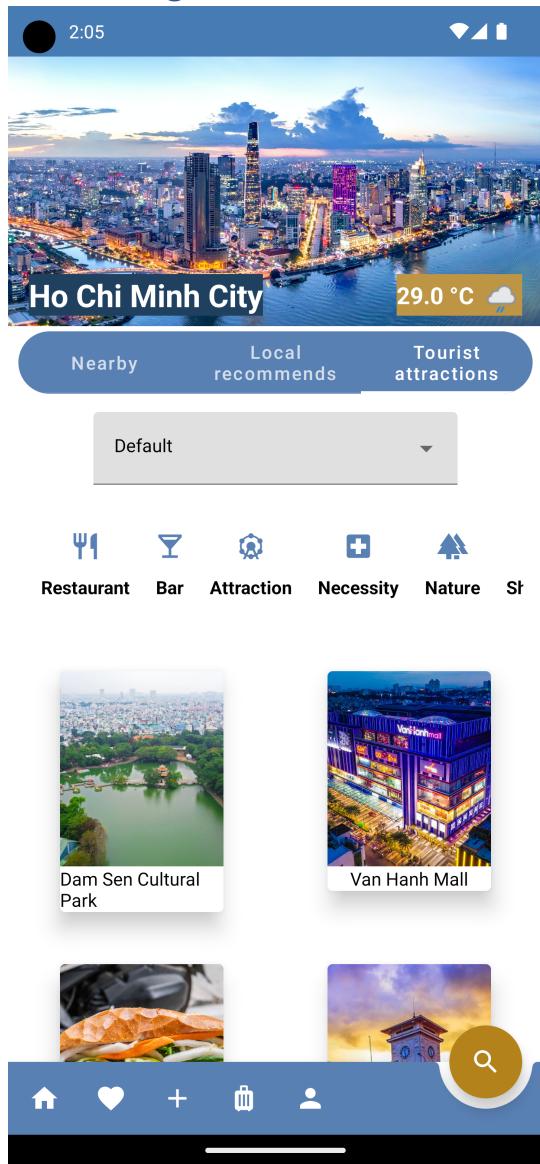
## Major features

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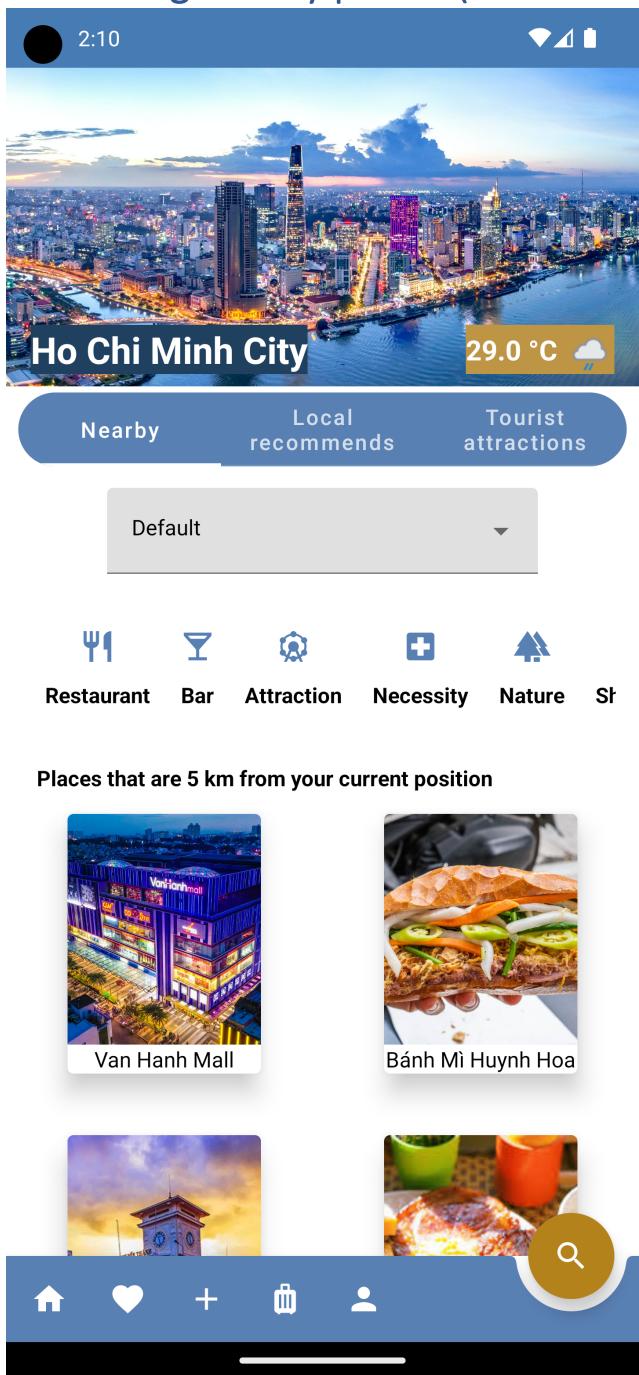
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## 1. Viewing tourist attractions

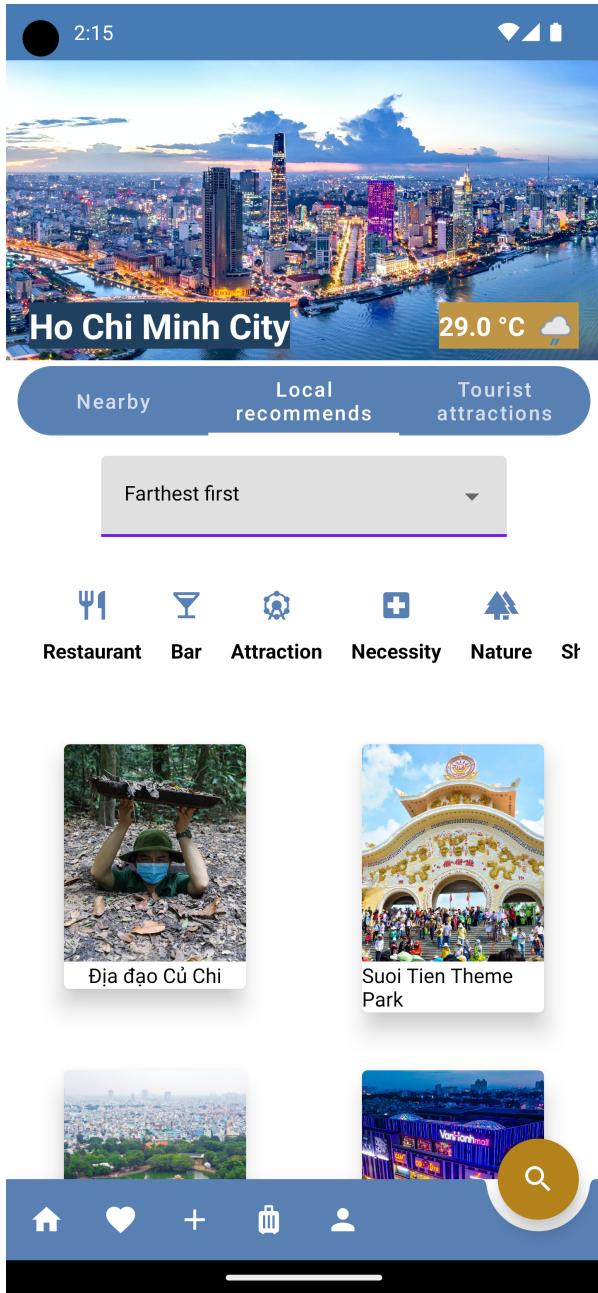


## 2. Viewing nearby places (within 5km from the current location)



*The above screenshot is taken when user is standing at 72 Lê Thánh Tôn, Bến Nghé, District 1, Ho Chi Minh City.*

### 3. Viewing local recommends



Locations with 5 or more recommendation points will be get recommended on this page. The above screenshot is showing recommended places with filter **Farthest first** to sort locations farthest from the current position first (from **72 Lê Thánh Tôn, Bến Nghé, District 1, Ho Chi Minh City**)

For all of these three pages, users can filter which categories of locations that they want to see. For example, if they only want to see restaurants, they can use the **Restaurant filter**.



Ho Chi Minh City

29.0 °C



Nearby

Local  
recommends

Tourist  
attractions

Farthest first



Restaurant



Bar



Attraction



Necessity

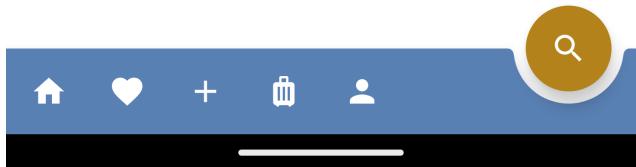


Nature

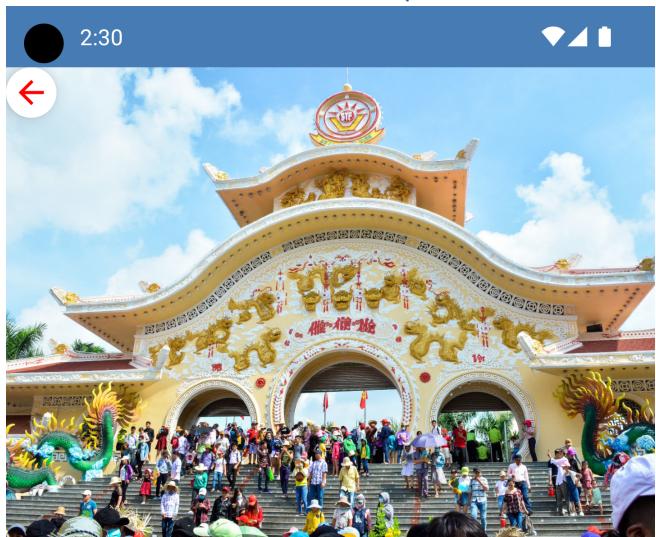
St



Bánh Mì Huynh Hoa



#### 4. View details about a place



About

Reviews

Suggestions

## Suoi Tien Theme Park



VR83+F57, Phường Tân Phú, Quận 9, Ho Chi Minh City, Vietnam

### Categories



Attraction



Nature



Add to favorites



Navigate

Users can view the address of a place and its categories. These categories are based on the **Places API** from Google. Users can also **Add to / Remove from favorites** and start **navigation (based on the Google Maps intent)** on this page.



About

Reviews

Suggestions

8.5

0 - 4

5 - 8

9 - 10

Submit

Viet Tung 14:35:43 07/09/2023

10

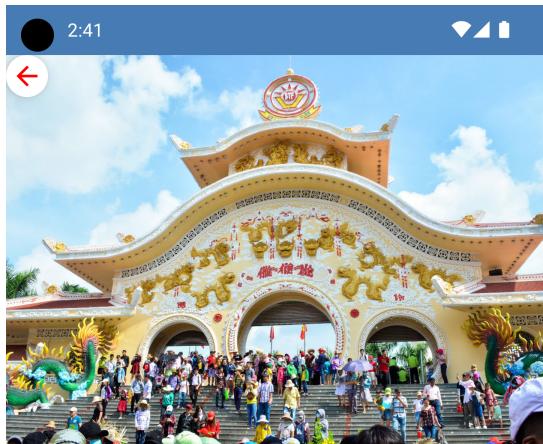
Suoi Tien is a good place to visit. Highly recommended

Viet Tung 14:37:05 07/09/2023

7

Decent

Users can view reviews for this place in the *Reviews* tab with the average score. Based on this, tourists can decide whether they should go to this place. Users can also filter reviews based on their score with three ranges **0 - 4, 5 - 8, and 9 - 10**.



8.5

0 - 4

5 - 8

9 - 10

Enter text

Submit

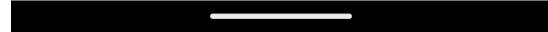
0

▼

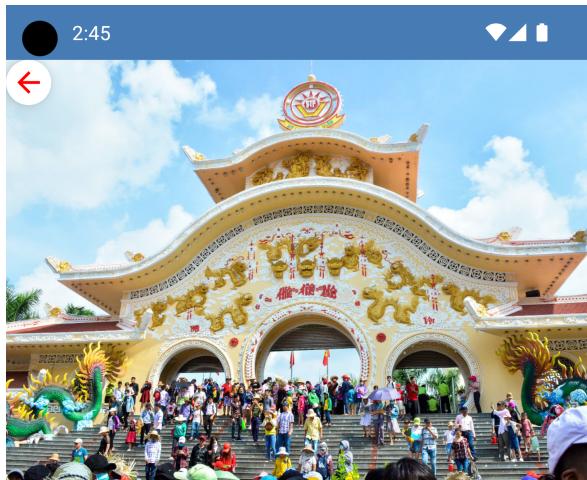
Viet Tung 14:37:05 07/09/2023

7

Decent



The final tab is the *Suggestions* tab, in which users can view the **recommendations score**. The higher the score, the more people who have recommended this place. Users can also browse images about this place.

[About](#)[Reviews](#)[Suggestions](#)

## Recommendation score: 6

[Recommend this place](#)[Images](#)

## 5. Suggest (recommend) a place

If you love a place and you want to make it more popular among people, you can also recommend a place (new or existing) to this application. Each recommendation is equal to 1 recommendation score. You can also upload images about this place to demonstrate it to tourists.



Suggest a place

au lac dd

📍 Au Lac Do Brazil Pasteur, Pasteur, Vo Thi Sau  
Ward, District 3, Ho Chi Minh City, Vietnam

📍 Au Lac do Brazil 02, Đường Phùng Khắc Khoan,  
Da Kao, District 1, Ho Chi Minh City, Vietnam

📍 Âu Lạc do Brazil Hanoi, Phố Trần Bình Trọng,  
Tran Hung Dao, Hoàn Kiếm, Hanoi, Vietnam

📍 Au Lac do Brazil, Đường Ven Biển, ấp Bình Hải,  
Bình Châu, Xuyên Mộc District, Ba Ria - Vung  
Tau, Vietnam

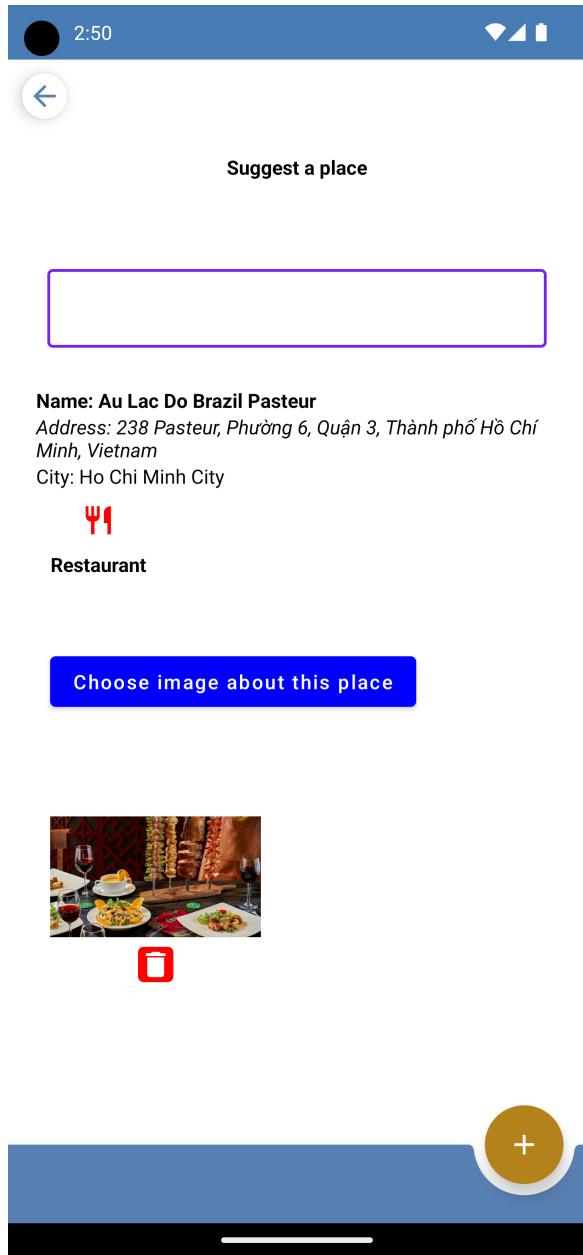
📍 Au Lac Do Brazil Aldb, Đường Tôn Đức Thắng,  
Bến Nghé, District 1, Ho Chi Minh City, Vietnam

**Name: Au Lac Do Brazil Pasteur**

Address: 238 Pasteur, Phường 6, Quận 3, Thành phố Hồ Chí  
Minh, Vietnam

City: Ho Chi Minh City

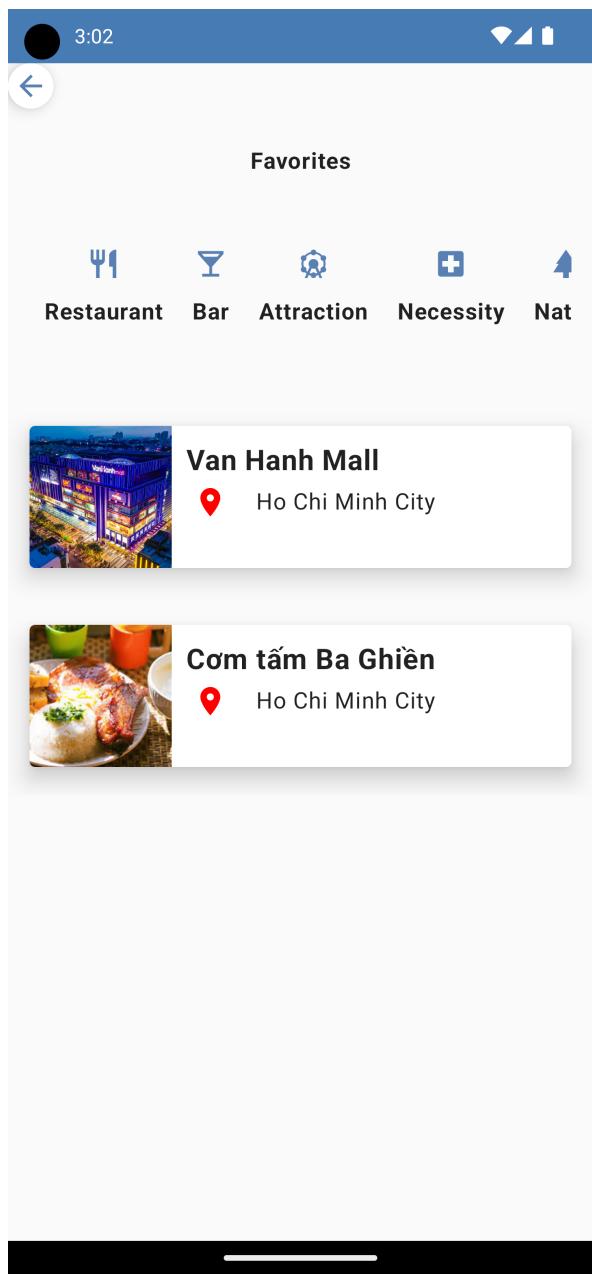




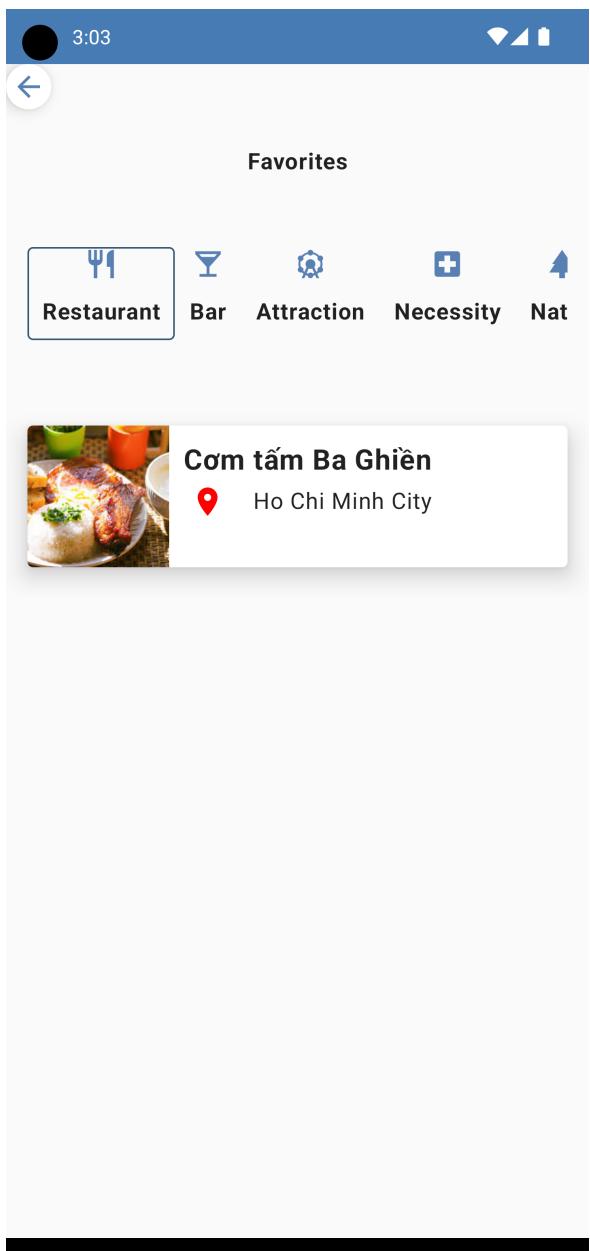
Users first search keyword to look for their desired place and they can pick one from the suggestions based on the **Autocomplete API**. After that, various information about this place, including *name*, *address*, *city*, and *categories* will be fetched thanks to the **Places API**. This recommendation will be uploaded to the **Firebase Firestore** database and images will be uploaded to the **Firebase Storage**.

## 6. Favorites

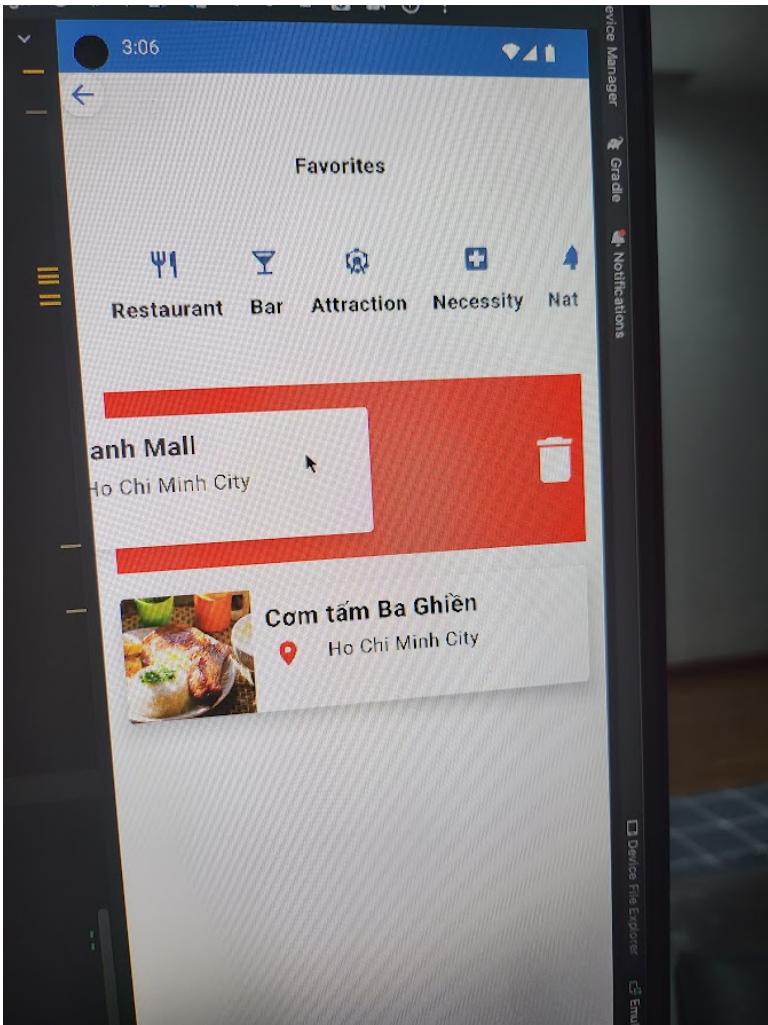
In the current city, when you encounter a place that you wish to go, you can add it to favorites and then view the list of favorite locations.



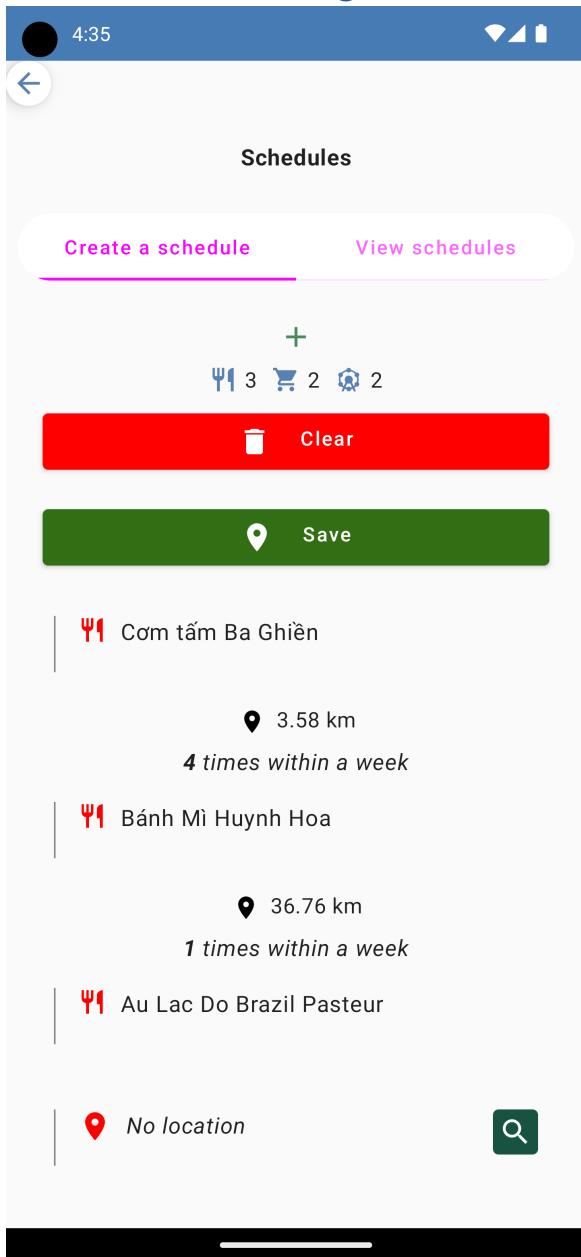
Users can also filter which categories of favorites that they want to see



From this page, if the user wishes to remove the place from favorites, he / she can swipe to delete.

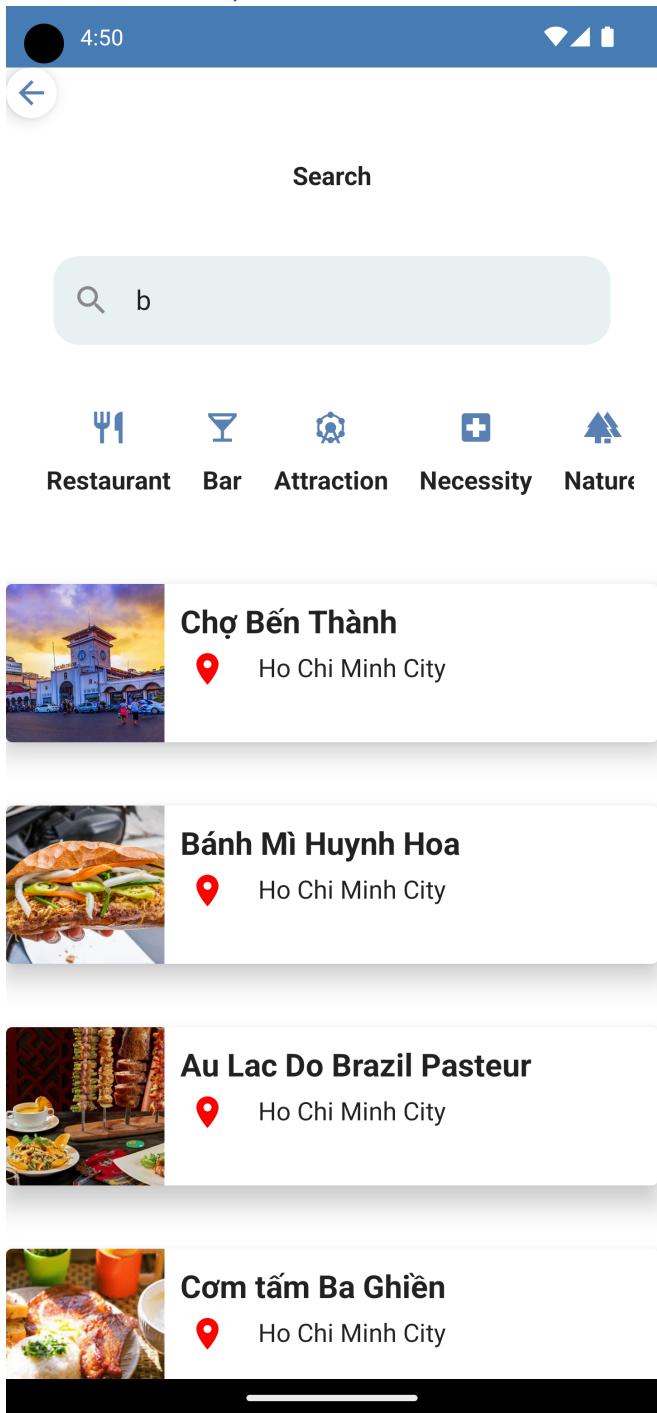


## 7. Create a travelling schedule

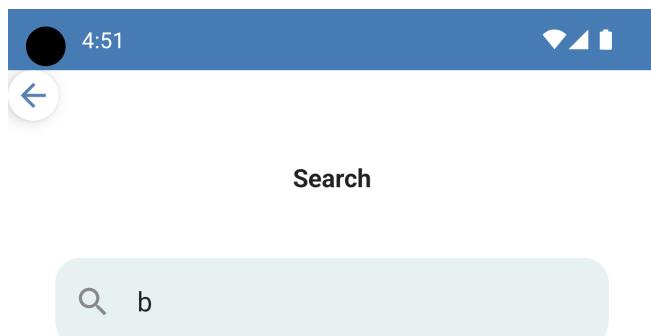


Users can take into considerations factors such as *distances between checkpoints, number of visit times within 7 days, how many places of each category that are in the schedule* to better make a schedule.

## 8. Search for places



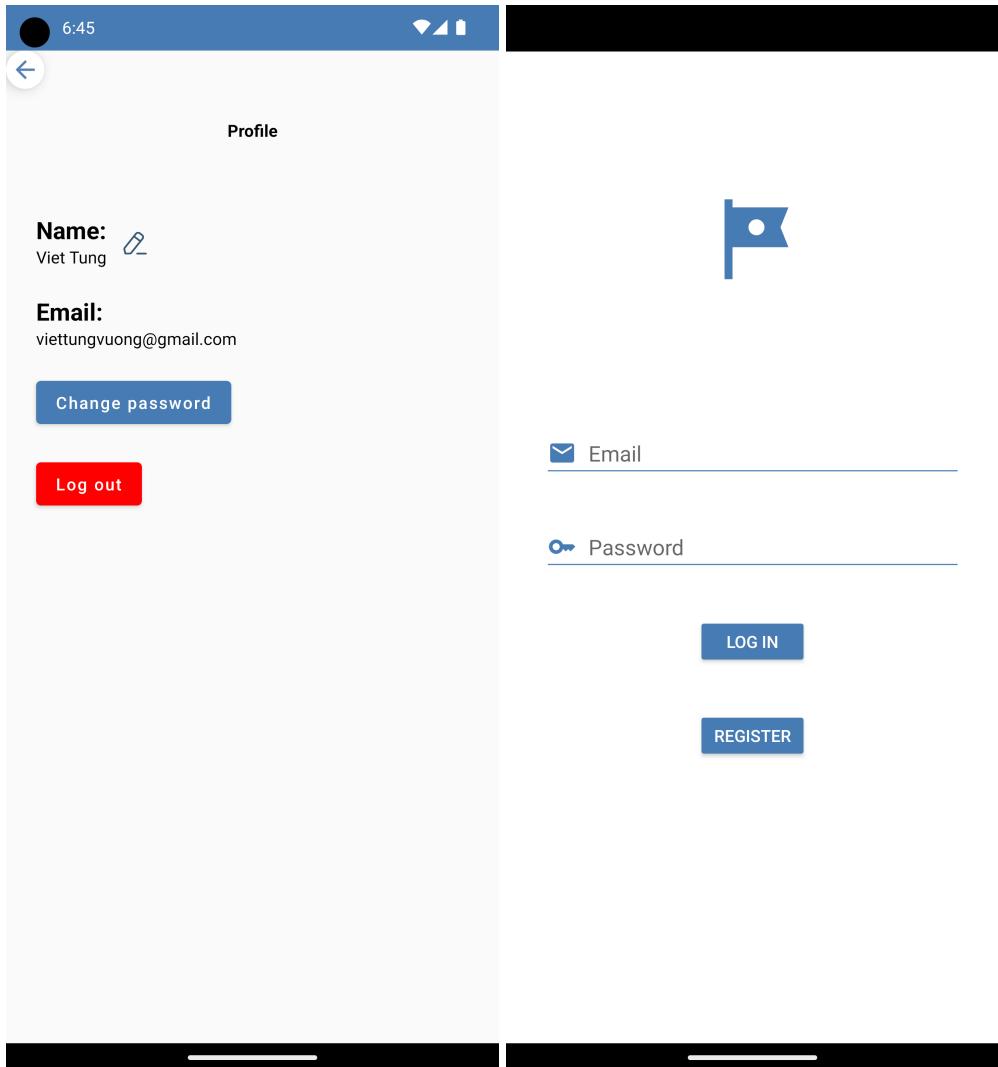
Users can search for places. When the user type a query, it will show locations that match the query. You can also filter by category to narrow down the results.

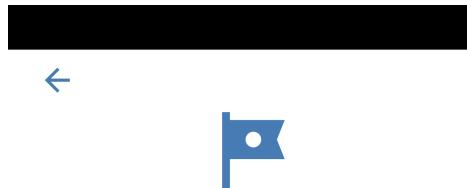


- **Bánh Mì Huynh Hoa**  
📍 Ho Chi Minh City
- **Au Lac Do Brazil Pasteur**  
📍 Ho Chi Minh City
- **Cơm tấm Ba Ghiền**  
📍 Ho Chi Minh City

## 9. Login / Register

This application manages users by using the mechanism of accounts based on **Firebase Authentication**. Each user can only recommend a place once (if you have and you try to do it again, the app won't allow you to do so). Users can also change their password and display name. The app also supports auto login if you have already log in beforehand on this device.





Name

Email

Password

REGISTER



## 10. Weather information



In the homepage, there is a mini widget that shows information about the current weather of the city with temperature and an icon indicating the condition.