

# Final Project Report

2017313008 김태은

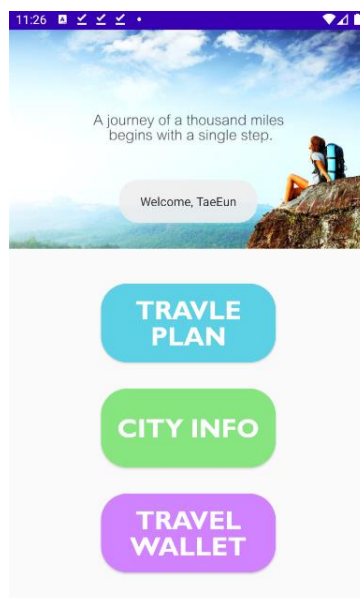
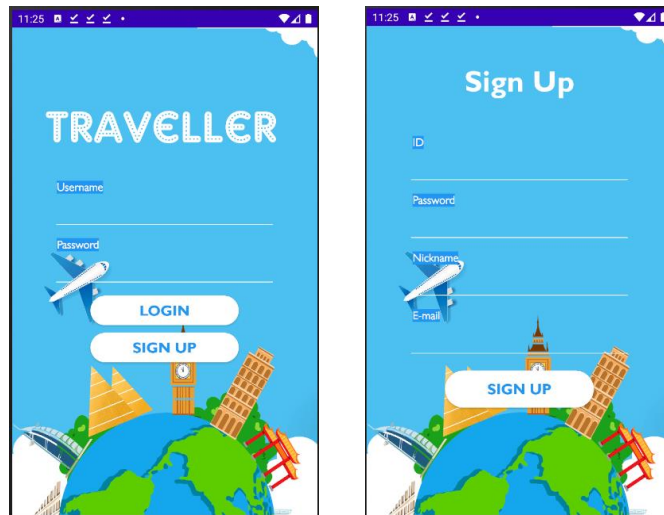
## 1. 주제

어플리케이션 이름: Traveller

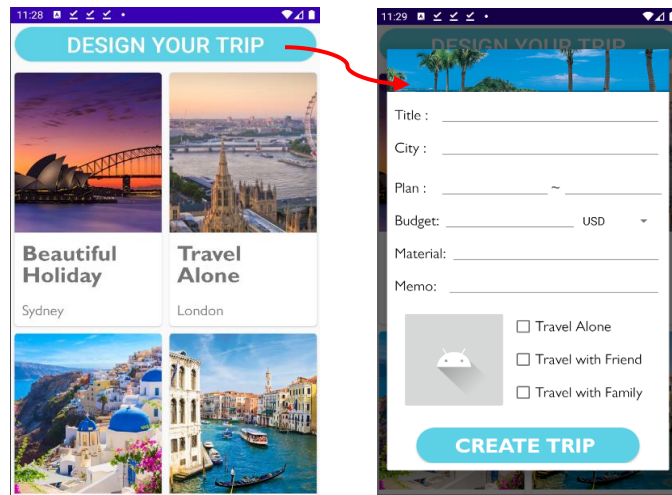
여행을 할 때 편리하게 사용할 수 있는 기능들을 담은 여행 어플리케이션입니다.

크게 총 4가지의 기능이 있습니다.

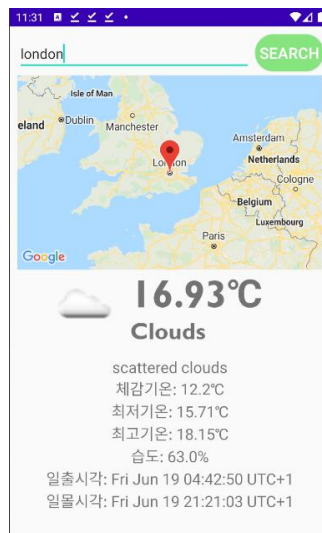
### ① Login & Sign Up



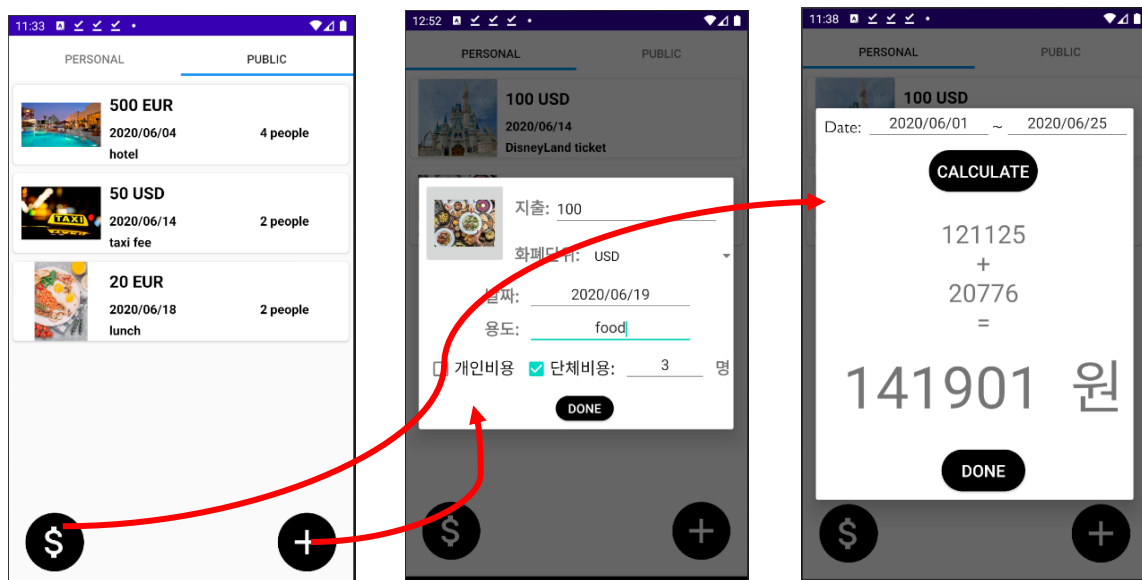
## ② Create & View Travel Plan



## ③ Search City Info



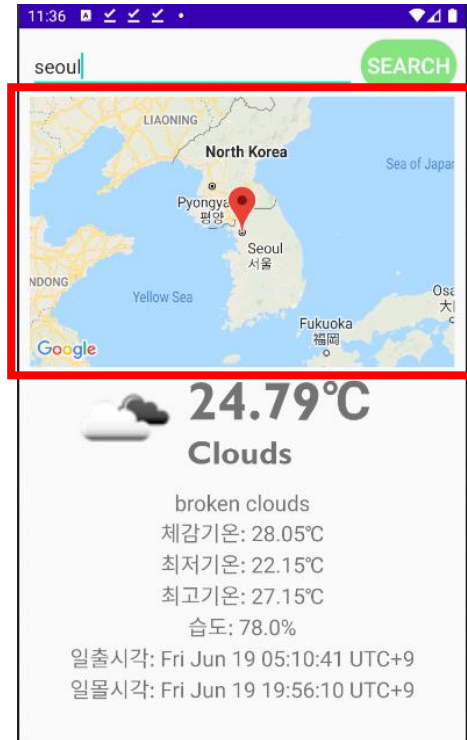
## ④ Manage Travel Wallet



## 2. Open API

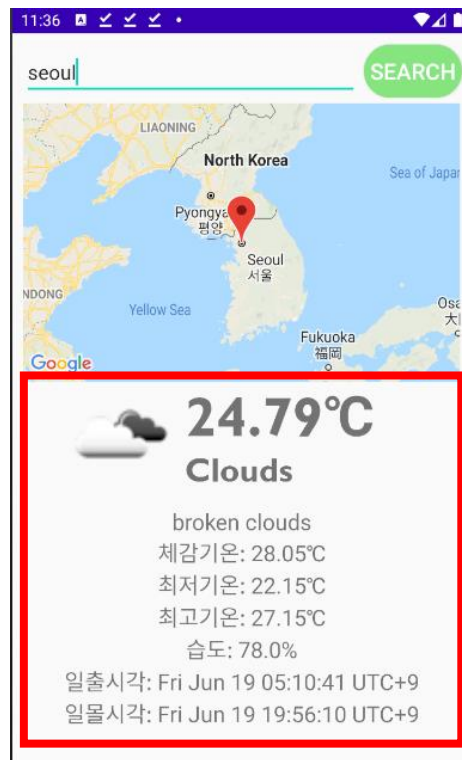
### ① Google Map API

<https://cloud.google.com/maps-platform?hl=ko>



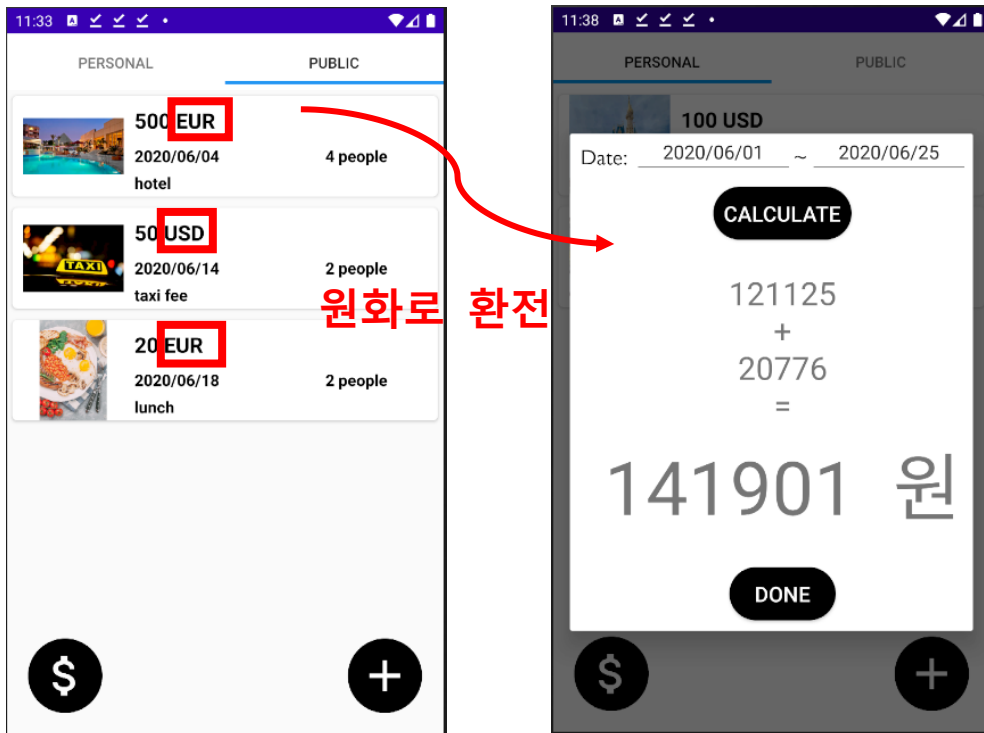
### ② OpenWeatherMap API

<https://openweathermap.org/current>



### ③ Foreign Exchange rates API

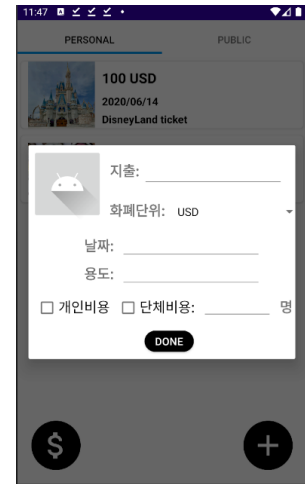
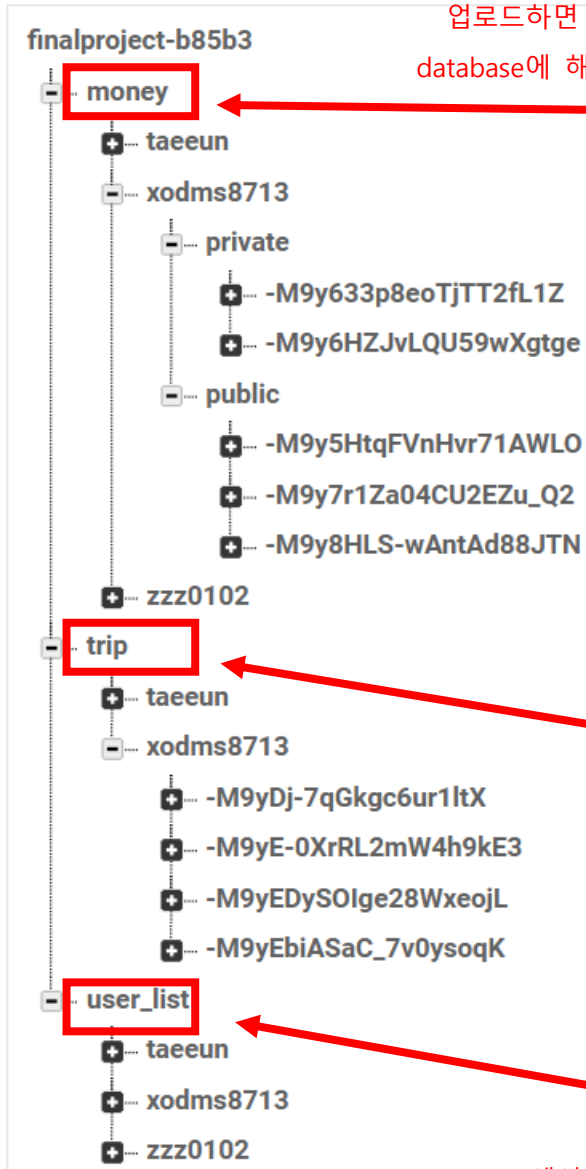
<https://exchangeratesapi.io/>



### 3. Back-end Server : Firebase

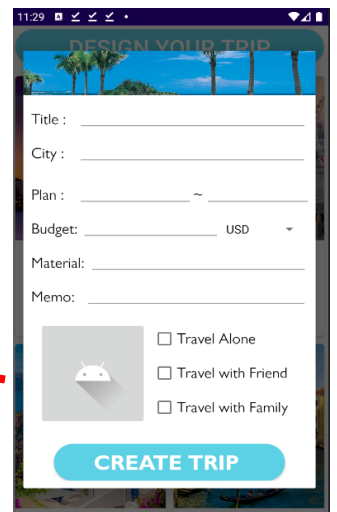
Wallet page pop up에서 지출상황을

업로드하면 Firebase real-time  
database에 해당 내용이 저장된다.



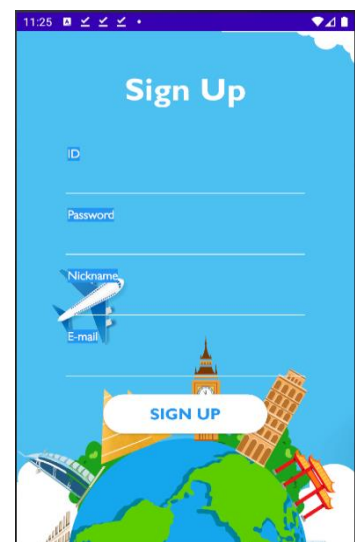
Plan page pop up에서 여행계획을

업로드하면 Firebase real-time  
database에 해당 내용이 저장된다.

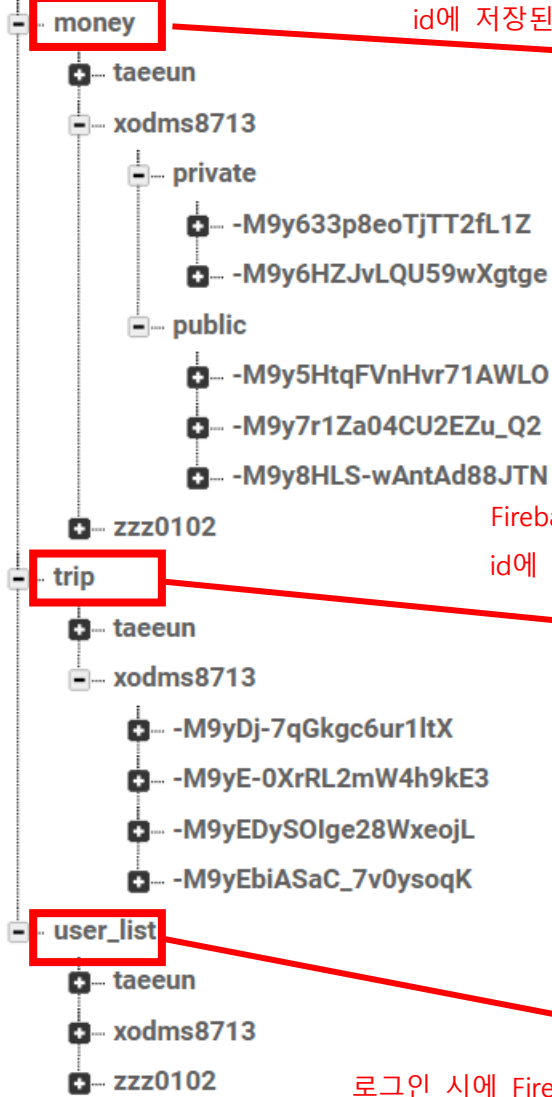


Sign Up page에서 회원가입을 하면

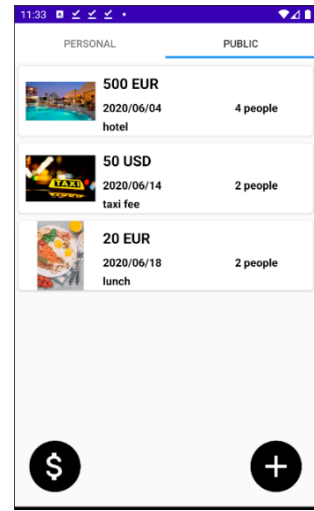
Firebase real-time database에 해당  
내용이 저장된다.



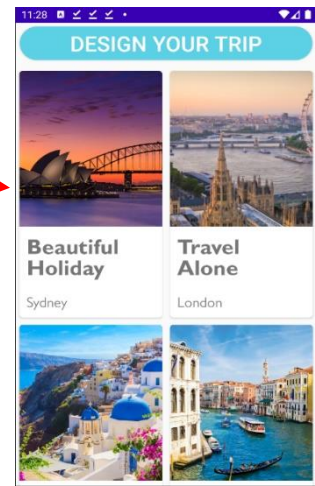
finalproject-b85b3



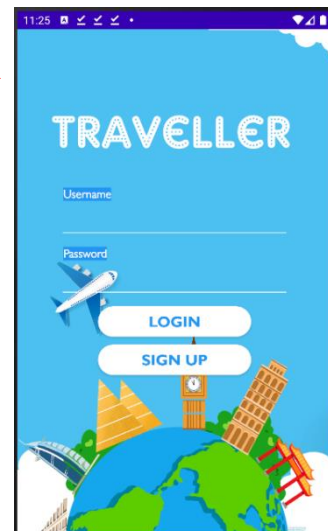
Firestore real-time database에서 해당 id에 저장된 지출 내역을 불러온다.



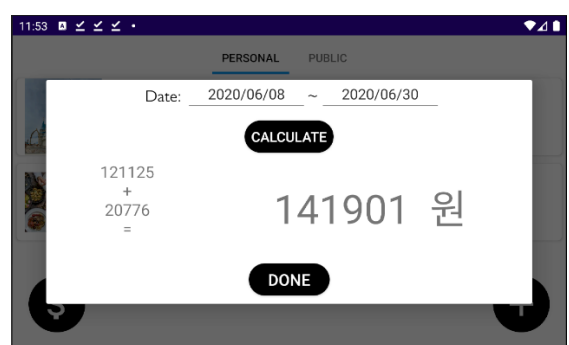
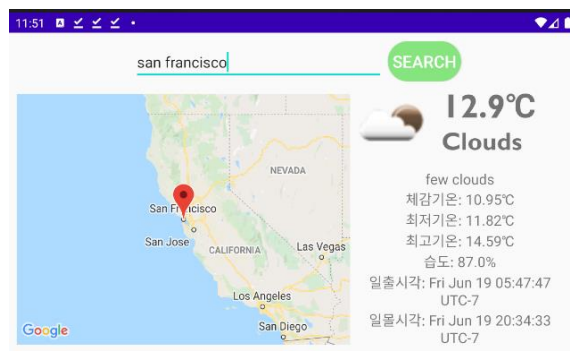
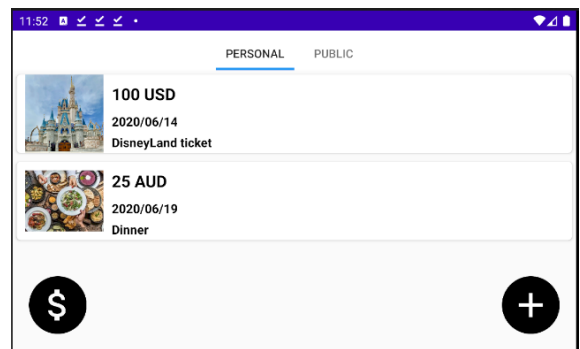
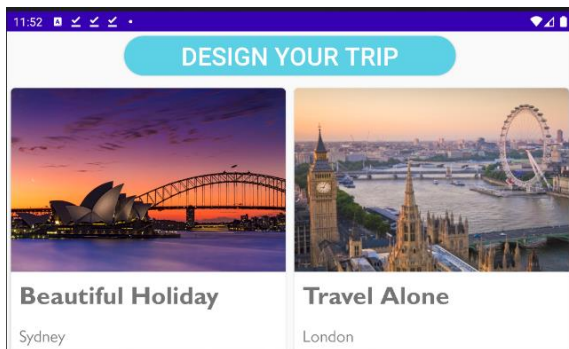
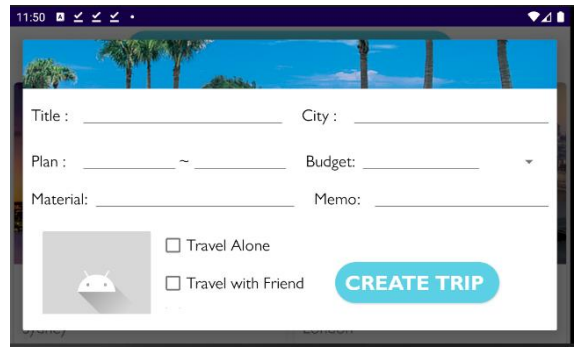
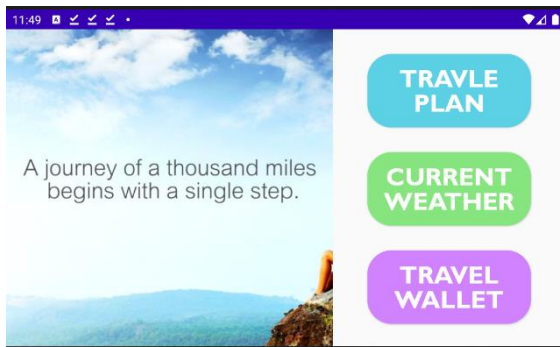
Firestore real-time database에서 해당 id에 저장된 여행 계획들을 불러온다.



로그인 시에 Firestore real-time database에서 정보를 확인하여 성공/실패 여부를 알려준다.

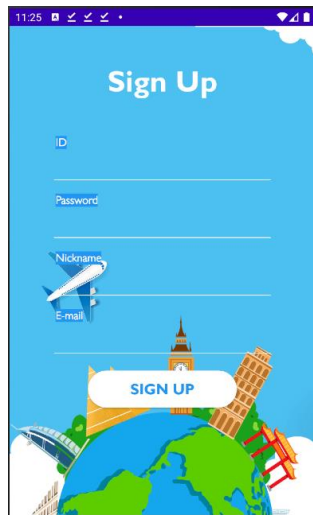


## 4. Supporting Landscape





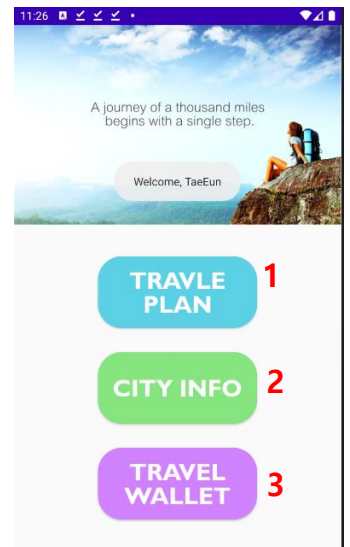
## 5. How to use



회원가입

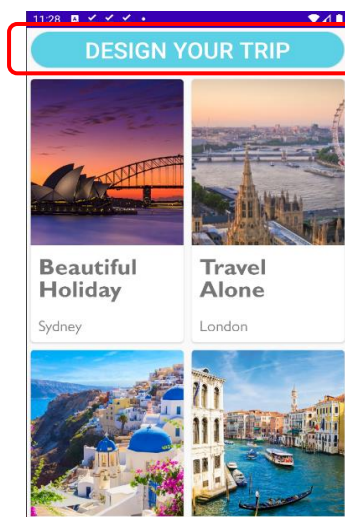


로그인

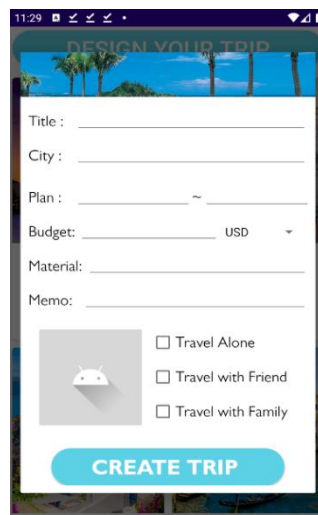


Select Page

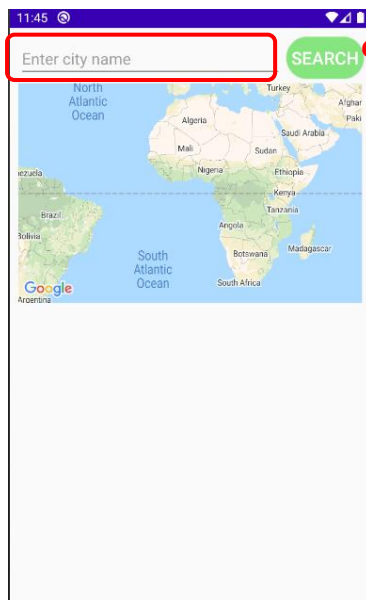
### 1. TRAVEL PLAN



click



### 2. CITY INFO

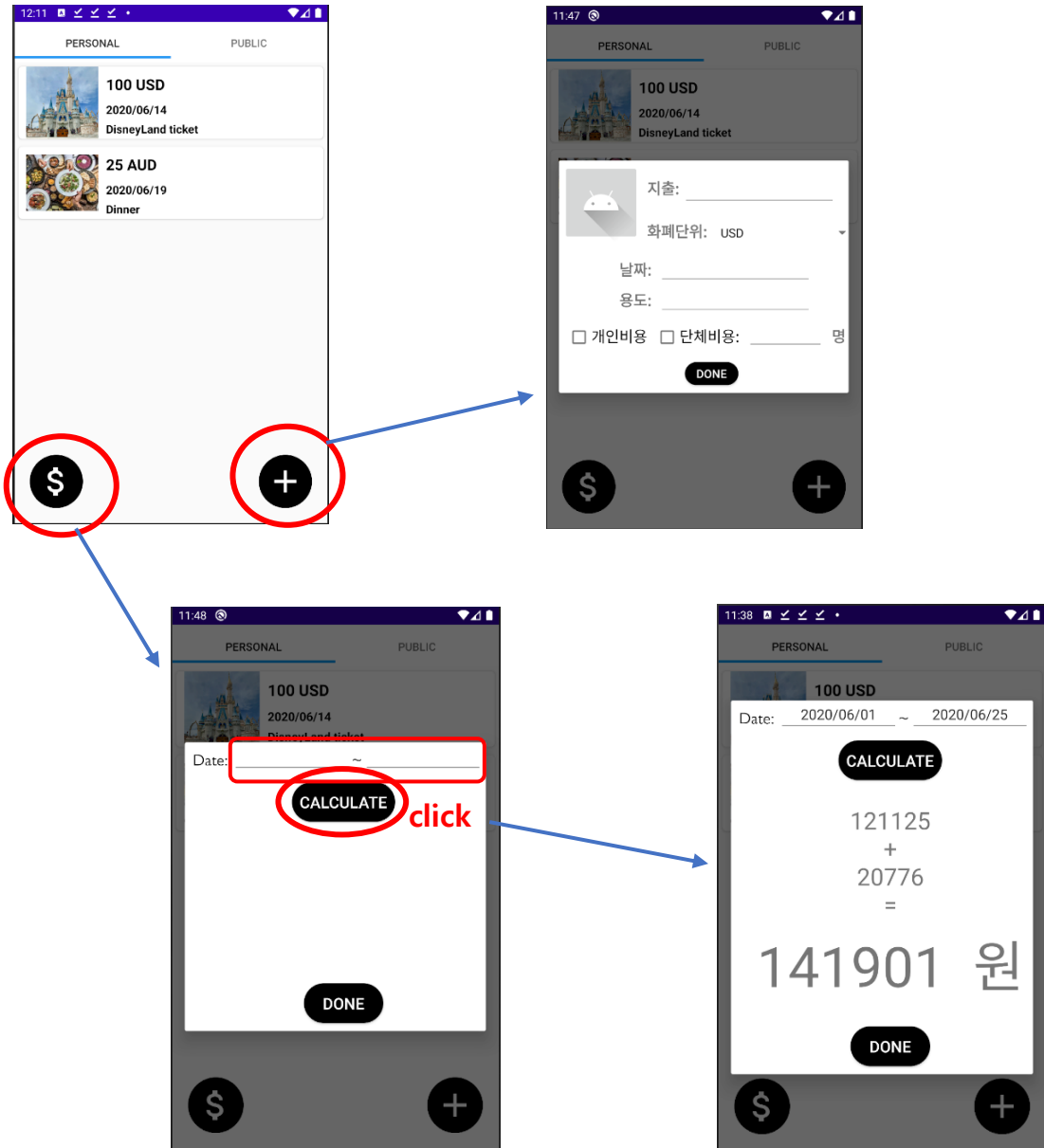


click

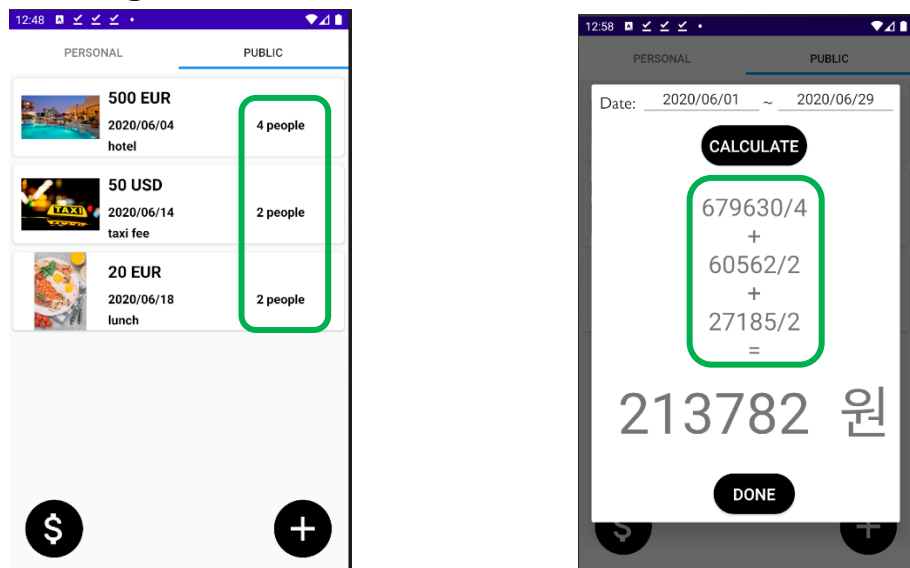




### 3. TRAVEL WALLET




public fragment일 때는, 명수로 나눈 금액을 보여준다.



## 6. Challenge

### Challenge 1 RecyclerView With CardView in a GridLayout



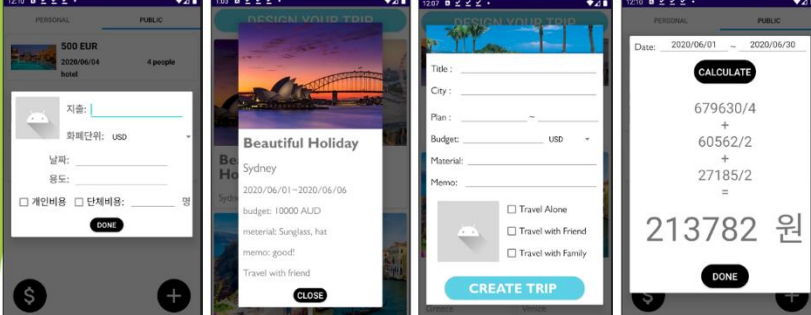
```

    recyclerView = (RecyclerView) findViewById(R.id.plan_recycler_view);
    layoutManager = new GridLayoutManager(context, PlanPage.this, spinCount, 2);
    recyclerView.setLayoutManager(layoutManager);

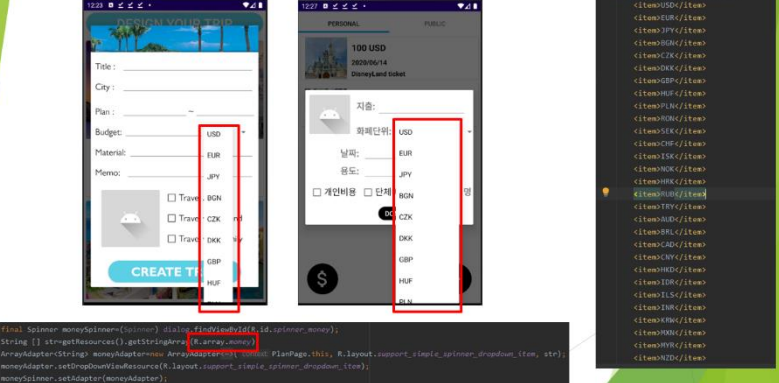
    android.support.design.widget.RecyclerView
    android.support.design.widget.CardView
  
```

Fragment+viewPager2+RecyclerView+CardView

### Challenge 2 Pop Up Dialog



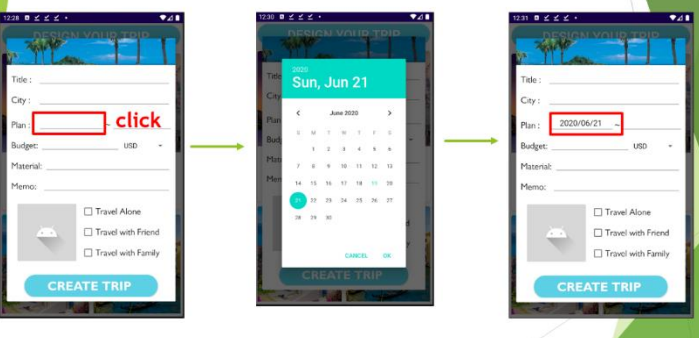
### Challenge 3 Spinner



```

    find<Spinner>(moneySpinner.getId()) dialog.findViewById(R.id.spinner_money);
    String[] stringsResources = getResources().getStringArray(R.array.money);
    ArrayAdapter<String> moneyAdapter = new ArrayAdapter<String>(PlanPage.this, R.layout.support_simple_spinner_dropdown_item, stringsResources);
    moneyAdapter.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item);
    moneySpinner.setAdapter(moneyAdapter);
  
```

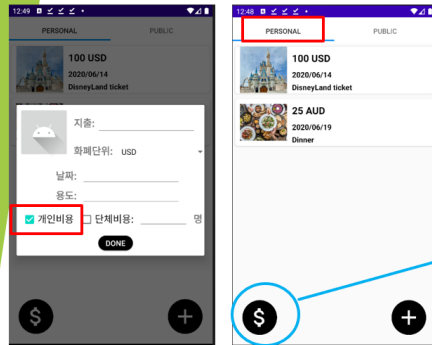
### Challenge 4 DatePicker



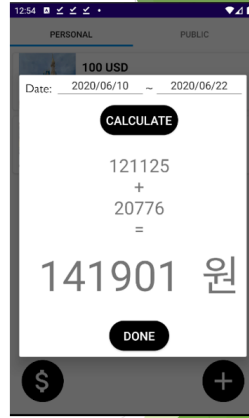
## 7. Creativity

travel wallet에서 개인 비용 / 단체 비용을 나눠서 관리할 수 있습니다.

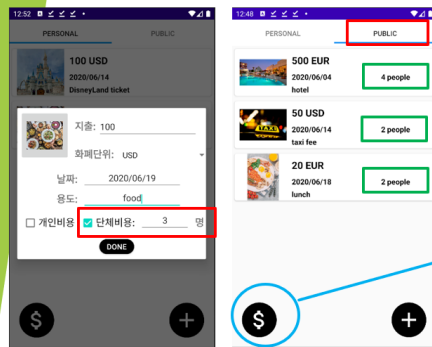
### Creativity 1 (travel wallet)



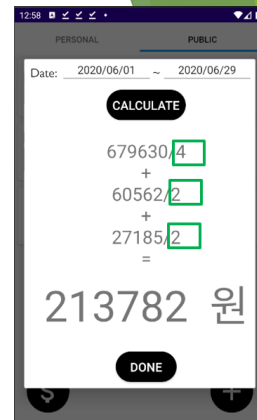
Personal Fragment -> 개인 비용



날짜 선택 -> 해당 날짜 동안 사용한 돈의 합계를 원화로 환전해서 보여줌



Public Fragment -> 단체 비용



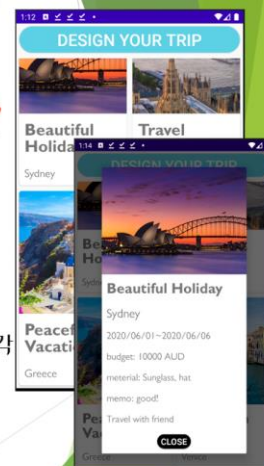
날짜 선택 -> 해당 날짜 동안 사용한 돈을 인원수 만큼 나눈 후, 합계를 원화로 환전해서 보여줌

### Creativity 2 (travel plan, city info)



도시 이름을 검색하면 지도, 날씨, 기온, 습도, 일출/일몰 시각의 정보를 얻을 수 있습니다.

여행 플랜을 디자인하고 그것을 카드뷰 형식으로 볼 수 있으며, 각 카드를 클릭하면 자세한 정보를 확인할 수 있습니다.



# Reference Sources

- Google Map API

<https://developers.google.com/maps/documentation/android-sdk/?hl=ko>

<https://webnautes.tistory.com/647>

- Cardview

<https://developer.android.com/guide/topics/ui/layout/cardview?hl=ko>

<http://kukroid.com/2017/12/13/recyclerview-with-cardview-in-a-gridlayout/>

- Datepicker

<https://developer.android.com/reference/android/widget/DatePicker>

[https://wookkwang.tistory.com/entry/widget-](https://wookkwang.tistory.com/entry/widget-EditText%EB%A5%BC-%ED%81%B4%EB%A6%AD%ED%95%98%EC%97%AC-DatePicker-%EB%B0%8F-TimePicker-%EB%8B%A4%EC%9D%B4%EC%96%BC%EB%A1%9C%EA%B7%B8-%ED%8C%9D%EC%97%85%ED%95%98%EA%B8%B0)

[EditText%EB%A5%BC-%ED%81%B4%EB%A6%AD%ED%95%98%EC%97%AC-](https://wookkwang.tistory.com/entry/widget-EditText%EB%A5%BC-%ED%81%B4%EB%A6%AD%ED%95%98%EC%97%AC-DatePicker-%EB%B0%8F-TimePicker-%EB%8B%A4%EC%9D%B4%EC%96%BC%EB%A1%9C%EA%B7%B8-%ED%8C%9D%EC%97%85%ED%95%98%EA%B8%B0)

[DatePicker-%EB%B0%8F-](https://wookkwang.tistory.com/entry/widget-EditText%EB%A5%BC-%ED%81%B4%EB%A6%AD%ED%95%98%EC%97%AC-DatePicker-%EB%B0%8F-TimePicker-%EB%8B%A4%EC%9D%B4%EC%96%BC%EB%A1%9C%EA%B7%B8-%ED%8C%9D%EC%97%85%ED%95%98%EA%B8%B0)

[TimePicker-%EB%8B%A4%EC%9D%B4%EC%96%BC%EB%A1%9C%EA%B7%B8-%ED%8C%9D%EC%9](https://wookkwang.tistory.com/entry/widget-EditText%EB%A5%BC-%ED%81%B4%EB%A6%AD%ED%95%98%EC%97%AC-DatePicker-%EB%B0%8F-TimePicker-%EB%8B%A4%EC%9D%B4%EC%96%BC%EB%A1%9C%EA%B7%B8-%ED%8C%9D%EC%97%85%ED%95%98%EA%B8%B0)

[7%85%ED%95%98%EA%B8%B0](https://wookkwang.tistory.com/entry/widget-EditText%EB%A5%BC-%ED%81%B4%EB%A6%AD%ED%95%98%EC%97%AC-DatePicker-%EB%B0%8F-TimePicker-%EB%8B%A4%EC%9D%B4%EC%96%BC%EB%A1%9C%EA%B7%B8-%ED%8C%9D%EC%97%85%ED%95%98%EA%B8%B0)

- Spinner

<https://developer.android.com/guide/topics/ui/controls/spinner?hl=ko>