DB 작성 문서

현재까지 작성한 country model data

```
"country_name": "",
"country_code": "GH", # https://ko.wikipedia.org/wiki/ISO_3166 참조 api param 으로 사용
# 메
"exchange_rate_code": "GHS", # 통화 코드 환율을 받아오기 위한 param 으로 사용하려 했음
"ysd_er": "",
"cur_nm": "",
"status": "▶20.9.1.부터 코토카 국제공항의 국제선 항공 운항 재개(20.8.30.)(단, 육로 및 해로 국경은봉쇄 유지)\r\n* 탑승 전 72시간 이내 검사받은 코로나19 PCR 음
"status_wrt_dt": "2022-02-16",
"events" : [],
"visa" : [],
```



- api parameter 는 postman에서 url을 찍어보는 게 가장 수월하다고 생각
- 일단은 api로 db를 만들어두고 crontab 이나 apscheduler 를 통해 주기적으로 갱신 하는 방향으로 생각했었음
- 하단의 모델 작성란 수정되지 않은 부분이 있어, 흐름 참고만 하는 걸 추천

DB에 반영 안된 API

 $\frac{\text{https://s3-us-west-2.amazonaws.com/secure.notion-static.com/f0bc89b6-35e3-42ee-aac8-f0bb0dfc1c55/18.\%EA\%B8\%}{B0\%EC\%88\%A0\%EB\%AC\%B8\%EC\%84\%9C_\%EC\%99\%B8\%EA\%B5\%90\%EB\%B6\%80_\%EA\%B3\%B5\%EC\%A7\%8}{0\%EC\%82\%AC\%ED\%95\%AD_v1.2.docx}$

```
# 18. 외교부 공지사항
# https://www.data.go.kr/iim/api/selectAPIAcountView.do
import requests
api_key = "<API KEY>"
url = f"http://apis.data.go.kr/1262000/NoticeService2/getNoticeList2?serviceKey={api_key}%2F0BWaoU5xsw5hNE4zys87bTkD3C3y0Gm5RXWURYvakg
response = requests.request("GET", url)
```

- · news api
- country params로 검색할 수 있을 거라 생각

```
import requests
API_KEY = '<API KEY>'
 \verb|wrl = f| \verb|https://newsapi.org/v2/top-headlines?q=travel&category=business&language=en&country=us&apiKey={API\_KEY }| \verb|wrl = f| \verb|https://newsapi.org/v2/top-headliness&language=en&country=us&apiKey={API\_KEY }| \verb|wrl = f| \verb|https://newsapi.org/v2/top-headliness&language=en&country=us&apiKey={API\_KEY }| \verb|wrl = f| \verb|https://newsapi.org/v2/top-headliness&language=en&country=us&apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKey=apiKe
payload={}
headers = \{\}
response = requests.request("GET", url, headers=headers, data=payload)
print(response.json()['articles'])
# response
[{'author': 'Andrea Cavallier',
       'content': 'Thousands of flights were delayed and hundreds were cancelled '
                                   'across the United States as severe weather hampered travel on
                                   'one of the busiest holiday travel weekends of the year.\r\
                                   'As of Sunday night... [+4545 chars]',
     'description': 'Thousands of flights were delayed and hundreds were canceled '
                                             'across the United States as severe weather hampered travel
                                              'on one of the busiest holiday travel weekends of the year.',
     'publishedAt': '2022-11-28T05:31:04Z'.
       'source': {'id': None, 'name': 'Daily Mail'},
      'title': 'Thousands of flights delayed or cancelled after severe weather '
                             'sets off travel chaos - Daily Mail',
     'url': 'https://www.dailymail.co.uk/news/article-11476065/Thousands-flights-delayed-cancelled-severe-weather-sets-travel-chaos.html'
     'urlToImage': 'https://i.dailymail.co.uk/1s/2022/11/28/05/64999065-0-image-a-60_1669613352327.jpg'}]
```

DB 반영 API

• 공공데이터 사용

 $\frac{\text{https://s3-us-west-2.amazonaws.com/secure.notion-static.com/08cb559a-2a1b-4d86-b65e-65c818e66d72/22.\%EA\%B}{8\%B0\%EC\%88\%A0\%EB\%AC\%B8\%EC\%84\%9C_\%EC\%99\%B8\%EA\%B5\%90\%EB\%B6\%80_\%EA\%B5\%AD\%EA\%B}{0\%80-\%EC\%A7\%80\%EC\%97\%AD\%EB\%B3\%84_\%ED\%91\%9C\%EC\%A4\%80\%EC\%BD\%94\%EB\%93\%9C_v1.2_(1).}{\frac{\text{docx}}{0}}$

```
# 22. 외교부_국가_지역별_표준코드
# https://www.data.go.kr/iim/api/selectAPIAcountView.do
# country code, name 를 받아오는데 사용
import requests
from urllib.parse import urlencode, unquote
import json
API_KEY = '<API KEY>'
url = "http://apis.data.go.kr/1262000/CountryCodeService2/getCountryCodeList2"
qs = "?" + urlencode(
  {
        'ServiceKev': unquote('<API KEY>'),
       'pageNo': 1,
        'numOfRows': 250,
)
response = requests.get(url + qs)
## response
```

 $\frac{\text{https://s3-us-west-2.amazonaws.com/secure.notion-static.com/e522cc5c-42d8-4977-8060-56d2b15133b5/13.\%EA\%B}{8\%B0\%EC\%88\%A0\%EB\%AC\%B8\%EC\%84\%9C_\%EC\%99\%B8\%EA\%B5\%90\%EB\%B6\%80_\%EA\%B5\%AD\%EAMB}{0\%80\%EC\%A7\%80\%EC\%97\%AD\%EB\%B3\%84_\%EC\%9E\%85\%EA\%B5\%AD\%ED\%97\%88\%EA\%B0\%80\%EC\%9}{A\%94\%EA\%B1\%B4_v1.2_(1).docx}$

```
# 13. 외교부 국가 지역별 입국허가요건
# https://www.data.go.kr/iim/api/selectAPIAcountView.do
# visa 를 받아오는데 사용
import requests
API_KEY = '<API KEY>'
url = f"http://apis.data.go.kr/1262000/EntranceVisaService2/getEntranceVisaList2?serviceKey={API KEY}%2F0BWaoU5xsw5hNE4zys87bTkD3C3y0G
response = requests.request("GET", url)
print(response.json()['data'][0])
## response.jsno()
    "currentCount": 1,
    "data": [
        {
            "country_eng_nm": "Ghana",
            "country_iso_alp2": "GH",
            "country_nm": "가나",
            "dplmt_pspt_visa_cn": "X",
            "dplmt_pspt_visa_yn": "Y",
            "gnrl_pspt_visa_cn": "X",
            "gnrl_pspt_visa_yn": "Y",
            "have_yn": "Y",
            "id": 83,
            "nvisa_entry_evdc_cn": "",
            "ofclpspt_visa_cn": "X",
"ofclpspt_visa_yn": "Y",
"remark": ""
        }
    "numOfRows": 1,
    "pageNo": 1,
    "resultCode": 0
    "resultMsg": "정상",
```

```
"totalCount": 170
}
```

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/d98cf07a-affc-49db-8a26-bafba8086a52/44.%EA%B8%B0%EC%88%A0%EB%AC%B8%EC%84%9C_%EC%99%B8%EA%B5%90%EB%B6%80_%EA%B5%AD%EA%B0%B0%EB%B3%84_%ED%95%B4%EC%99%B8%EC%9E%85%EA%B5%AD%EC%9E%90_%EC%A1%B0%EC%B9%988%ED%98%84%ED%99%A9_v1.1.docx

```
# 44. 외교부 국가별 해외입국자 조치현황
 # https://www.data.go.kr/iim/api/selectAPIAcountView.do
 # 22 에서 가져온 country_code 를 cond[country_iso_alp2::EQ] 검색 parameter로 사용
 # status, status_wrt_dt 를 받아오는데 사용
import requests
 API_KEY = '<API KEY>'
 wrl = f"http://apis.data.go.kr/1262000/CountryOverseasArrivalsService/getCountryOverseasArrivalsList?serviceKey={API\_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API\_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey={API_KEY}/0BWaoU5xsw5harrivalsList?serviceKey=
 response = requests.request("GET", url)
print(response.json())
 ## response.json()['data']
            "currentCount": 1,
             "data": [
                      {
                                   "country_eng_nm": "Netherlands",
                                    "country_iso_alp2": "NL",
                                   "country_nm": "네덜란드",
                                   "html_origin_cn": "<span style=\"font-size: 12pt;\">>출발지별 입국 제한 (모든 교통수단 망라)</span>
                                   "notice_id": "ATC0000000008799",
                                   "title": "각국의 해외입국자에 대한 조치 현황(국가 순서별)",
                                   "txt_origin_cn": "▶출발지별 입국 제한 (21.8.8.부터 적용, 모든 교통수단 망라)\r\n가. EU 역내\r\n(새로운 변이바이러스 우려가 있는 경우를 제외하고는
                                   "wrt_dt": "2022-03-28"
                      }
              "numOfRows": 10,
            "pageNo": 1,
            "resultCode": 0
            "resultMsg": "정상",
"totalCount": 180
}
```

• 다른 API 사용

https://www.predicthq.com/apis/event-api

• 이벤트

```
# events 를 받아오는데 사용
import requests
API_KEY = '<API KEY>'
response = requests.get(
    url="https://api.predicthq.com/v1/events/",
    headers={
      "Authorization": f"Bearer {API KEY}",
      "Accept": "application/json"
    params={
      "Category": "public-holidays,festivals,concerts",
"start.gte": "2022-12-02", # 시작 날짜
      "country": "JP" # 22 country_code 를 검색 parameter 로 사용
print(response.json()['results'][0])
## response.json()['results'][0]
{'aviation_rank': 100,
 'brand_safe': True,
 'category': 'public-holidays',
'country': 'JP',
```

```
'description': '',
'duration': 86399,
'end': '2023-02-23T23:59:59Z',
'labels': ['event-group',
                         'holiday',
                        'holiday-national',
                        'recurring'],
              'name': "Emperor's Birthday",
              'type': 'event-group'}],
'first_seen': '2020-01-01T00:05:39Z'
'geo': {'geometry': {'coordinates': [138.252924, 36.204824], 'type': 'Point'}},
'id': 'pkjY2B23jEYYJossBi',
'labels': ['holiday', 'holiday-national'],
'local_rank': None,
'location': [138.252924, 36.204824], 'phq_attendance': None,
'place_hierarchies': [['6295630', '6255147', '1861060']],
'private': False,
'rank': 90,
'relevance': 0.0,
'scope': 'country',
'start': '2023-02-23T00:00:00Z',
'state': 'active',
'timezone': None,
'title': "Emperor's Birthday",
'updated': '2022-11-25T02:39:32Z'}
```

어제자 환율

https://www.koreaexim.go.kr/ir/HPHKIR020M01?apino=2&viewtype=C&searchselect=&searchword=

```
# ysd_er, cur_nm 을 받아오는데 사용
# 현재 짜듄 코드로는 일일 요청 초과 및 지원하는 국가가 적어 다른 api 고려 필요
 import requests
   API_KEY = '<API KEY>'
 \verb|wrl = f| \verb|https://www.koreaexim.go.kr/site/program/financial/exchangeJSON?authkey={API\_KEY} & search date=20180102 \& data=AP01 | Search date=20180102 & data=AP01 | Search data=20180102 & da
 payload={}
 headers = {
                  "Cookie": "JSESSIONID=t43WUsr3iRZGDaGRoEicp4wCA4mZ9EulPEyoGS676VdFlYFLb3mGZW0MBEOSu9aI.aGiwX2RvbWFpbi9ITVBNUzEy; wMONID=-Ecmhyu\_vnR" | State of the control of the contro
 response = requests.request("GET", url, headers=headers, data=payload)
 print(response.json()[0])
   # response
                                                           "result": 1,
                                                             "cur_unit": "AED",
                                                         "ttb": "288.78",
"tts": "294.61",
                                                             "deal_bas_r": "291.7",
                                                           "bkpr": "291",
"yy_efee_r": "0",
                                                         "ten_dd_efee_r": "0",
                                                         "kftc_bkpr": "291",
"kftc_deal_bas_r": "291.7",
"cur_nm": "아랍에미리트 디르함"
```

DB 반영 json

```
# exchange_rate_code 를 가져오기 위해 사용
import json
```

```
file_path = "./iso4217.json"
with open(file_path, 'r') as file:
    er_list = json.load(file)
```

모델 작성

```
import requests
from urllib.parse import urlencode, unquote
import json
import datetime
from dateutil.relativedelta import relativedelta
td = (datetime.datetime.now() - relativedelta(days=1)).strftime('%Y-%m-%d')
url = "http://apis.data.go.kr/1262000/CountryCodeService2/getCountryCodeList2"
qs = "?" + urlencode(
               'ServiceKey': unquote('<DATA API KEY>'),
               'pageNo': 1,
                'numOfRows': 250,
      }
)
response = requests.get(url + qs)
url_status = f"http://apis.data.go.kr/1262000/CountryOverseasArrivalsService/getCountryOverseasArrivalsList?serviceKey=<DATA API KEY>/
response_status = requests.request("GET", url_status)
region_code = []
fest_json = []
file_path = "./iso4217.json"
cnt = 1
with open(file_path, 'r') as file:
       # iso4217 파일 열기
        er_code_list = json.load(file)
        for res in response.json()['data']:
              new_dict = {}
               rs = list(res.values())
               # 모델 데이터 json 파일 작성
               new_dict['model'] = 'country.country'
               new_dict['fields'] = {}
               if not rs[0]:
                      continue
               new_dict['fields']['country_name'] = rs[0]
               new_dict['fields']['country_code'] = rs[1]
query = new_dict['fields']['country_code']
               for er in er_code_list:
                      if er['IS03166-1-Alpha-2'] == query:
                              new_dict['fields']['exchange_rate_code'] = er['ISO4217-currency_alphabetic_code']
                              break
                      else:
                              new dict['fields']['exchange rate code'] = None
               \# \ er\_url = f"https://www.koreaexim.go.kr/site/program/financial/exchangeJSON?authkey=<API \ KEY>\&searchdate=\{td\}\&data=AP01" \ API \ AP
               # er_headers = {
                                 'Cookie': 'JSESSIONID=h95M11w7ClPjUxXq13Ka43ztoEUzD5UCG23pN5axk1G3kbyfbEWwZFAm3CUnKtFV.aG1wX2RvbWFpbi9ITVBNUzEy; WMO
                                 }
               # er_response = requests.request("GET", er_url, headers=er_headers)
               # for e in er response.ison():
                         print(e['cur_unit'], new_dict['fields']['exchange_rate_code'])
                           if e['cur_unit'] == new_dict['fields']['exchange_rate_code']:
                                  new_dict['fields']['ysd_er'] = e['kftc_deal_bas_r']
                                 new_dict['fields']['cur_nm'] = e['cur_nm']
                                 break
               status_url = f"http://apis.data.go.kr/1262000/CountryOverseasArrivalsService/getCountryOverseasArrivalsList?serviceKey=Eenkiiy
               status_response = requests.request("GET", status_url)
               # print(status_response.json()['data'][0]['txt_origin_cn'])
                      new\_dict['fields']['status'] = status\_response.json()['data'][0]['txt\_origin\_cn']
                      new_dict['fields']['status_wrt_dt'] = status_response.json()['data'][0]['wrt_dt']
               except:
                      pass
               fest_response = requests.get(
```

```
url="https://api.predicthq.com/v1/events/",
                 "Authorization": "Bearer predicthg api key>",
                  "Accept": "application/json"
                 }.
                 params={
                 "category": "public-holidays, festivals, concerts",
"start.gte": "2022-12-02",
                 "country": f"{query}"
# 이 부분 오류 있을듯?
                 try:
                         for festival in fest_response.json()['results']:
                                  fest_dict = {}
                                  fest_dict['model'] = 'country.event'
fest_dict['fields'] = {}
                                  fest_dict['fields']['country_code'] = query
                                  fest_dict['fields']['title'] = festival['title']
                                   fest_dict['fields']['description'] = festival['description']
                                  fest_dict['fields']['category'] = festival['category']
                                  fest_dict['fields']['st_dt'] = festival['start'][:10]
fest_dict['fields']['ed_dt'] = festival['end'][:10]
                                  fest_dict['location'] = festival['location']
                                  fest_json.append(fest_dict)
                                  # new_dict['fields']['events'].append(fest_dict)
                 except:
                 permission\_url = "http://apis.data.go.kr/1262000/EntranceVisaService2/getEntranceVisaList2?serviceKey=< data api key>%2F0BWaoU5 (api key>%2F0BWaoU5) (api 
                 permission_response = requests.request("GET", permission_url)
                 new_dict['fields']['visa'] = []
                         for permission in permission_response.json()['data']:
                                  permission\_dict = \{\}
                                  permission_dict['have_yn'] = permission['have_yn']
                                  permission_dict['gnrl_pspt_visa_yn'] = permission['gnrl_pspt_visa_yn']
permission_dict['gnrl_pspt_visa_cn'] = permission['gnrl_pspt_visa_cn']
                                  permission_dict['ofclpspt_visa_yn'] = permission['ofclpspt_visa_yn']
permission_dict['ofclpspt_visa_cn'] = permission['ofclpspt_visa_cn']
                                  permission_dict['dplmt_pspt_visa_yn'] = permission['dplmt_pspt_visa_yn']
permission_dict['nvisa_entry_evdc_cn'] = permission['nvisa_entry_evdc_cn']
                                  permission_dict['remark'] = permission['remark']
new_dict['fields']['visa'].append(permission_dict)
                 except:
                 region_code.append(new_dict)
                 print(cnt, len(response.json()['data']))
                 cnt += 1
                 if cnt == 20:
with open('country_test2.json', 'w', encoding='utf-8') as make_file:
           json.dump(region_code, make_file, ensure_ascii=False, indent=2)
import json
import requests
# events 를 제외한 db 작성 후 실행
file_path = "./country_test.json"
currency_set = set()
fest_ison = []
with open(file_path,'rt', encoding='UTF-8') as file:
         countries = json.load(file)
         cnt = 1
         for country in countries:
                 q = country['fields']['country_code']
                 fest_dict = {}
                 fest_dict['model'] = 'countries.event'
                 fest_dict['fields'] = {}
                 fest_response = requests.get(
                 url="https://api.predicthq.com/v1/events/",
                 headers={
                 "Authorization": "Bearer <API KEY>",
                 "Accept": "application/json"
                 },
                 params={
```

```
"category": "public-holidays, festivals, concerts",
    "start.gte": "2022-12-02",
#    "category": "public-holidays, festivals, concerts",
    "country": f"{q}"
})
try:
    for festival in fest_response.json()['results']:
        fest_dict['fields']['country_code'] = q
        fest_dict['fields']['idescription'] = festival['description']
        fest_dict['fields']['idescription'] = festival['description']
        fest_dict['fields']['st_detyory'] = festival['category']
        fest_dict['fields']['st_dt'] = festival['start'][:10]
        fest_dict['fields']['ed_dt'] = festival['end'][:10]
        fest_dict['location'] = festival['location']
        fest_json.append(fest_dict)
except:
        pass
    print(cnt)
        cnt += 1

with open('event_test.json', 'w', encoding='utf-8') as make_file:
        json.dump(fest_json, make_file, ensure_ascii=False, indent=2)
```