

GIS 시각화 프로젝트 - VISIT JEJU

1. 데이터 불러오기

- 00.data_collect.ipynb

2. flask_run_file

2.1 기본 작업, import

```
#-----
# pip install Flask, requests
# -----OpenAPI KEY : cptjvrh7ki6dxd9q
# 제주관광공사_비짓제주 관광정보 오픈 (API)
# https://www.data.go.kr/data/15076361/openapi.do
# http://api.visitjeju.net/vsjApi/contents/searchlist
#-----

from flask import Flask, session, render_template, make_response, jsonify, request, redirect,
url_for

import cx_Oracle
import pandas as pd
import numpy as np
import random

import json
import folium
from folium import plugins
import re
import googlemaps
import pprint
import requests

app = Flask(__name__)
app.secret_key = "1111122222"

#####
####
"""
CREATE TABLE JEJU_USERS
```

```
(
    SEQ VARCHAR2(20) PRIMARY KEY
, USERID VARCHAR2(20) NOT NULL
, COLUMN2 VARCHAR2(20) NOT NULL
, USERNM VARCHAR2(20) NOT NULL
);
create sequence JEJU_USERS_SEQ start with 1 increment by 1;
insert into jeju_users values(JEJU_USERS_SEQ.nextval, 'lee', '111','아무개');
insert into jeju_users values(JEJU_USERS_SEQ.nextval, 'hong', '222','홍길동');
commit;
"""
```

2.1 login 화면

```
""" -----
[화면] 로그인 폼
----- """
@app.route('/login_form', methods=["get"])
def login_form():
    return render_template('login_form.html')

""" -----
[처리부] 로그인
----- """
@app.route('/login', methods=["post"])
def login():
    userid = request.form.get("userid")
    userpw = request.form.get("userpw")

    session['USER_ID_SESSION'] = userid
    return redirect("/")

""" -----
[처리부] 로그아웃
----- """
@app.route('/logout', methods=["get"])
def logout():
    session.pop('USER_ID_SESSION')
    return redirect("/")

""" -----
[화면] 회원가입 폼
----- """
@app.route('/register_form', methods=["get"])
def register_form():
    return render_template('register_form.html')
```

2.3 공통함수

```
""" -----
[공통함수] 리스트+지도마커 생성
----- """

def make_map_html(cate='숙박', search_str="", contentsid_list=None):
    df = pd.read_csv("./datasets_jeju/data.csv")
    print(df['label'].value_counts())

    """ -----
    [처리부] 리스트
    ----- """

    #----- 메인화면 : 관광명소 검색 시
    if len(search_str) > 0 :
        df = df[ df['title'].str.contains(search_str) ]
    # ----- 로그인 > 마이페이지 : 찜목록 출력 시
    elif contentsid_list is not None:
        df = df[df['contentsid'].isin( contentsid_list ) ] # ['CONT_000000000500349',
        'CONT_000000000500477', 'CNTS_000000000001195']
    # ----- 메인화면 기본 관광지 출력
    else :
        df = df[ df['label'] == cate ]

    #df['tag'] = df['tag'].apply(lambda x: x.split(",")[0] if len(x) > 0 else cate)
    df = df[['contentsid', 'title', 'latitude', 'longitude', 'address', 'phoneno', 'tag', 'likecnt',
    'reviewcnt', 'evelpt', 'thumb']]

    """ -----
    [처리부] 지도마커
    ----- """

    geo_list = []
    name_list = []
    for i in range(len(df)):
        lat = df.iloc[i]['latitude']
        lng = df.iloc[i]['longitude']
        sname = df.iloc[i]['title']
        sid = df.iloc[i]['contentsid']
        geo_list.append((lat, lng))
        popup_url = f"/detail_view?contentsid={sid}"
        popup_option =
        "'status=no,menubar=no,toolbar=no,scrollbars=yes,resizable=yes,width=400,height=600'"
        popup_html = f"""<font size=2><b><a href="\"javascript:window.open({popup_url},'\"
        {popup_option})\">{sname}</a></b></font><br>
            {df.iloc[i]['address']}
            <img src='{df.iloc[i]['thumb']}' width=150 height=100>
            {df.iloc[i]['phoneno']}"""
        name_list.append(popup_html)
    map = folium.Map(location=[33.41041350000001, 126.4913534], zoom_start=11,
        tiles='OpenStreetMap') # Stamen Terrain')
    plugins.MarkerCluster(geo_list, popups=name_list).add_to(map)
    # -----
    # web browser에 보이기 위한 준비
```

```

map.get_root().width = "800px"
map.get_root().height = "600px"
html_str = map.get_root()._repr_html_()

return html_str, df[:4]

```

2.4 처리부(RESTful)

```

""" -----
[처리부 : REST] 메인화면 우측 지도하단 네이게이션 바 - 카테고리 리스트+지도마커 생성
카테고리 : '음식점', '관광지', '숙박', '쇼핑'
----- """

@app.route('/search_map_html') #, methods=['POST'])
def search_map_html(cate='숙박', search_str=""):
    # prm_dic = request.get_json()
    # print(prm_dic['cate'])

    if request.method == "GET":
        cate = request.args.get("cate")
        search_str = request.args.get("search_str")
        print("GET", cate, search_str)
    elif request.method == "POST":
        cate = request.form.get("cate", default='숙박')
        search_str = request.form.get("search_str", default='숙박')
        print("POST", cate, search_str)

    if bool(cate) == False:
        cate = '숙박'
    if bool(search_str) == False:
        search_str = ''

    """ -----
    [호출] 리스트+지도마커 공통함수
    ----- """

    html_str, df = make_map_html(cate=cate, search_str=search_str)

    #-----STRING으로 전달할 경우 -----
    # df_json_str = df.to_json(orient='records')
    # res_string = json.dumps({"KEY_MAP_HTML": html_str, "KEY_DF_JSON": df_json_str})
    # return res_string

    # -----OBJECT로 전달할 경우 -----
    df_json_str = df.to_json(orient='records')
    res_object = {"KEY_MAP_HTML": html_str, "KEY_DF_JSON_STR": df_json_str}
    #print(type(jsonify( res_object )), jsonify( res_object )) # <Response 311603 bytes [200 OK]>
    #print(type(json.dumps(res_object)) , json.dumps(res_object) )
    #return jsonify( res_object )
    return json.dumps(res_object)

```

```

""" -----
[화면] 메인
----- """

@app.route('/', methods=["get", "post"])
def index():
    # session['USER_ID_SESSION'] = USER_ID
    if request.method == "GET":
        cate = request.args.get("cate")
        search_str = request.args.get("search_str")
        print("GET", cate, search_str)
    elif request.method == "POST":
        cate = request.form.get("cate", default='숙박')
        search_str = request.form.get("search_str", default='숙박')
        print("POST", cate, search_str)

""" -----
[호출] 리스트+지도마커 공통함수
----- """

if bool(cate) == False :
    cate = '숙박'
if bool(search_str) == False:
    search_str = ''
html_str, df = make_map_html(cate=cate, search_str=search_str)
df_json_str = df.to_json(orient='records')
df_json      = json.loads(df_json_str)

return render_template('index.html' ,
                       KEY_CATE=cate,
                       KEY_MAP_HTML=html_str,
                       KEY_DF_JSON_STR=df_json)

```

2.5 처리부(화면)

```

""" -----
[처리부 -> 화면 : 찜목록] 리스트+지도마커 생성 --> 화면 이동
----- """

@app.route('/booking', methods=["get"])
def booking():
    if session['USER_ID_SESSION'] == False:
        return redirect("/login_form")
    else :
        try :
            """ -----
            [호출] 리스트+지도마커 공통함수
            ----- """

            with open(file=f"./user_booking/{session['USER_ID_SESSION']}.txt", encoding='UTF-8',
mode='r') as fr:

```

```

        contentsid_list = fr.readlines()
        contentsid_list = [contentsid.strip() for contentsid in contentsid_list]
        html_str, df = make_map_html(cate="", search_str="", contentsid_list= contentsid_list)
        df_json_str = df.to_json(orient='records')
        df_json = json.loads(df_json_str)

        return render_template('booking.html',
                               KEY_MAP_HTML=html_str,
                               KEY_DF_JSON=df_json)

    except :
        return redirect("/")

@app.route('/booking_add', methods=["get"])
def booking_add():
    contentsid = request.args.get("contentsid")
    print("GET", contentsid)

    if bool(contentsid) == False:
        return "500"
    elif session['USER_ID_SESSION'] == False:
        return "403"
    else :
        try :
            with open(file=f"./user_booking/{session['USER_ID_SESSION']}.txt", encoding='UTF-8',
mode='a') as fw:
                fw.write(contentsid+"\n")
            return "200"
        except :
            return "500"

```

2.6 처리부(상세화면)

```

""" -----
[처리부 : 상세화면] 관련 유튜브영상 가져오기
# pip install youtube-search-python
----- """

from youtubearchpython import VideosSearch
# import pandas as pd
# import json
#-----

def my_youtube_search(search_str='제주도', nrow=3) :
    videosSearch = VideosSearch(search_str, limit=nrow)
    json_res = videosSearch.result()
    #print(videosSearch.result()) ## [{},{},{}]
    #print(json.dumps(videosSearch.result(), sort_keys=True, indent=4))
    movie_list = json_res['result']
    #print(json.dumps(movie_list, sort_keys=True, indent=4))

```

```
tot_list = []  
for movie in movie_list:  
    dict = {}  
    # print(movie['thumbnails'][0]['url'])  
    # print(movie['link'])  
    # print(movie['title'])  
    dict["title"] = movie['title']  
    try :  
        dict["movie"] = movie['richThumbnail']['url']  
    except :  
        dict["movie"] = movie['thumbnails'][0]['url']  
  
    dict["img"] = movie['thumbnails'][0]['url']  
    dict["duration"] = movie['duration']  
    dict["url"] = movie['link']  
    dict["rdate"] = movie['publishedTime']  
    dict["cnt"] = movie['viewCount']['text']  
    tot_list.append(dict)  
return tot_list #[{},{}]
```

""" -----
[처리부 : 상세화면] 관련 리뷰댓글 가져오기
pip install youtube-search-python
----- """

```
def get_review_list(contentsid) :  
    contentsid = "CONT_000000000500811"  
    headers_val={  
        'Cookie': '_gcl_a=1.1.1634613698.1677463189; Hm_lvt_f6d5e380b023c5b1e946de764e07a2a2=1677463189;  
_fbp=fb.1.1677463189486.1921927163;  
iceJWt=SDP+eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJBbm9ueWVvdXMiLCJhdwQiOiJJMjQ0NGQwOC05YjA0LTRjYmEtYWWE5ZS1m  
ZjdmcWQNTFiZWIIiLCJqdGkiOiJJMjQ0NGQwOC05YjA0LTRjYmEtYWWE5ZS1mZjdmcWQNTFiZWIIiLCJpc3MiOiJJLU90IiwiaWF0  
IjoxnNjc3NzI5NTQwLClleHAiOjE2Nzc4Mzc1NDk5ODAwOTBvYTpGacBX1tpdD0HwvdiyIZJqVSOGeg1LjzUsyLLOQKSe97czp7VAZOti  
-22JGGWRp1pBpdYdybvngC1Svg;  
iceRefreshJWt=SDP+eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJBbm9ueWVvdXMiLCJhdwQiOiJJMjQ0NGQwOC05YjA0LTRjYmEtYWWE5ZS1m  
GFHM5NWQWTZjknY1OTMlLCJpc3MiOiJJLU90IiwianRpIjoicjY0NGE4NmMtZGN1Mi00YTQ1LTljN2MtMTlkZWNjMmVmYTcwIiwiaWF0IjoxnNjc3NzI5NTQwLClleHAiOjE2Nzc4MDIOMTIOMDB9.JksFE8AAH3_Bju8YBiYy7KftXYvicOgc4coi4LZeJ_OsDButjABp  
sXuGN8qE6kpmgH1hh-KijjZnRdbisQJZJg; _gid=GA1.2.1598970783.1677729565;  
Hm_lpvt_f6d5e380b023c5b1e946de764e07a2a2=1677730295; _ga=GA1.1.1913362389.1677463189;  
_ga_WR7WEFWP2T=GS1.1.1677729564.5.1.1677730541.0.0.0',  
        'Host': 'api.visitjeju.net',  
    }  
    res = requests.get(f"https://api.visitjeju.net/api/contentreviews/list.json?  
_siteId=jeguavj&locale=kr&device=pc&contentsid=  
{contentsid}&noUserId=xxxxx&sorting=created+desc,created+desc&pageSize=5&page=1"  
                        , headers=headers_val)  
    json_dic = json.loads(res.text)  
    # print( json_dic )  
    # print( len(json_dic["items"]) , json_dic["items"] )  
    review_list = []  
    for dic in json_dic["items"]:  
        if bool(dic["created"]):  
            created = dic["created"][4:] + "-" + dic["created"][4:6] + "-" + dic["created"][6:8]
```

```

        # print( dic["evelpt"], dic["tag"], dic["evelcontent"], dic["created"], dic["userid"]
        ["usernm"])
        review_list.append( {"evelpt" : dic["evelpt"],
                             "tag" : dic["tag"],
                             "evelcontent" : dic["evelcontent"],
                             "created" : created,
                             "usernm" : dic["userid"]["usernm"]
                             })

    return review_list

```

""" -----

[화면] 상세화면

----- """

```
@app.route('/detail_view', methods=['GET', 'POST'])
```

```
def detail():
```

```

    if request.method == "GET" :
        contentsid = request.args.get("contentsid", default='CONT_000000000500811')
        print("GET", contentsid)
    elif request.method == "POST" :
        contentsid = request.form.get("contentsid", default='CONT_000000000500349')
        print("POST", contentsid)
    else:
        contentsid = 'CONT_000000000500349'
        print("etc", contentsid)

```

""" -----

[호출] 리스트+지도마커 공통함수

----- """

```

html_str, df = make_map_html(cate="", search_str="", contentsid_list=[contentsid])
df_json_str = df.to_json(orient='records')
df_json = json.loads(df_json_str)

```

""" -----

[호출] 관련댓글

----- """

```

try :
    review_list = get_review_list(contentsid)
    print(review_list)
except :
    review_list = []

```

""" -----

[호출] 유튜브영상

----- """

```

try:
    search_str = df['title'].values[0]
    if bool(search_str) == False:
        search_str = "제주도"
    print(search_str)
    movie_list = my_youtube_search(search_str, 4) # [ {title:}, {title:}, {}]
    print(movie_list)

```



```

except:
    movie_list = []

return render_template('detail.html', KEY_MAP_HTML=html_str
                        , KEY_DF=df_json[0]
                        , KEY_YT_LIST=movie_list
                        , KEY_REVIEW_LIST=review_list
                        )

```

2.7 chart

```

@app.route('/chart')
def chart():
    return render_template('chart_test.html')

if __name__ == '__main__':
    app.debug = True
    app.run(host='0.0.0.0', port=8877)

```

2. index.html

2.1 login

```

<!-- header section start -->
<header class="header-section">
    <!-- top bar -->
    <div class="top-bar-header">
        <div class="container">
            <div class="row">
                <div class="col-xl-6 col-md-8 col-12">
                    <div class="top-bar-left">
                        <span>Braking offer: 50% Offer  of our apartment for 1 month</span>
                    </div>
                </div>
                <div class="col-xl-6 col-md-4 col-12 text-md-right">
                    <div class="top-bar-right">
                        <div class="user-setting">
                            <ul>
{% if session['USER_ID_SESSION'] %}
    <li><a href="/logout"><i class="fas fa-sign-out-alt"></i>Logout</a></li>
{% else %}
    <li><a href="/login_form"><i class="fas fa-sign-out-alt"></i>Login</a></li>

```

```

        <li><a href="/register_form"><i class="fas fa-user"></i>Register</a></li>
{% endif %}

        </ul>
    </div>
</div>
</div>
</div>
</div>
</div>
<!-- main menu -->
<div class="main-header">
    <div class="container">
        <div class="row">
            <div class="col-md-3 logo">
                <a class="navbar-brand" href="index.html">
                    
                </a>
            </div> <!-- /.col-md-3 logo -->
            <div class="col-md-9 d-none d-lg-block text-lg-right">
                <nav id="responsive-menu" class="main-menu">
                    <ul class="menu-items">
                        <li><a href="#">home</a>
                            <ul class="submenu">
                                <li><a href="index.html">Home One</a></li>
                                <li><a href="index-2.html">Home Two</a></li>
                            </ul>
                        </li>
                        <li><a href="about.html">about</a></li>
                        <li><a href="listing-single-details.html">Listing</a>
                            <ul class="submenu">
                                <li><a href="tags.html">tags</a></li>
                                <li><a href="tags-grid.html">tags grid</a></li>
                                <li><a href="explors-map-sidebar.html">Explors</a></li>
                            </ul>
                        </li>
                        <li><a href="explors-map-sidebar.html">Property</a></li>
                        <li><a href="explors-map-sidebar.html">Find</a></li>
                        <li><a href="contact.html">Contact</a></li>
                        <li><a href="#">Pages</a>
                            <ul class="submenu">
                                <li><a href="login.html">login</a></li>
                                <li><a href="register.html">register</a></li>
                                <li><a href="booking.html">booking</a></li>
                                <li><a href="popular-locations.html">Popular Place</a></li>
                                <li><a href="contact.html">contact</a></li>
                            </ul>
                        </li>
                    </ul>
                </nav>
            </div>
        </div>
    </div>
{% if session['USER_ID_SESSION'] %}
    <a href="/booking" class="btn-booking-start">Booking Now</a>
{% endif %}
    <div class="col-xl-6 col-md-4 col-12 text-md-right">
        <div class="top-bar-right">
            <div class="user-setting">
                <ul>

```

```
{% if session['USER_ID_SESSION'] %}
    <li><a href="/logout"><i class="fas fa-sign-out-alt"></i>Logout</a></li>
{% else %}
    <li><a href="/login_form"><i class="fas fa-sign-out-alt"></i>Login</a></li>
    <li><a href="/register_form"><i class="fas fa-user"></i>Register</a></li>
{% endif %}

</ul>
</div>
</div>
</div>
```

2.2 검색창

```
<!-- 검색창 ===== ->
<div class="search-section d-flex col-lg-2 col-sm-12 p-0 bg-cover"
style="background-image: url('static/assets/img/search-bg.jpg')">
    <div class="search-tab-wrap">
        <!-- Nav tabs -->
        <ul class="nav nav-tabs">
            <li class="nav-item">
                <a class="nav-link active" data-toggle="tab" href="#place">place</a>
            </li>
            <li class="nav-item">
                <a class="nav-link" data-toggle="tab" href="#event">event</a>
            </li>
        </ul>
        <!-- Tab panes -->
        <div class="tab-content">
            <div class="tab-pane active container" id="place">
                <div class="search-form-box">
                    <form action="/" method="post" class="search-form">
                        <input type="text" placeholder="검색어" name="search_str">
                        <select name="cate">
                            <option value="전체">전체</option>
                            <option value="음식점">음식점</option>
                            <option value="관광지">관광지</option>
                            <option value="숙박">숙박</option>
                            <option value="쇼핑">쇼핑</option>
                        </select>
                        <button type="submit">장소 검색</button>
                    </form>
                </div>
            </div>
            <div class="tab-pane container" id="event">
                <div class="search-form-box">
                    <h3>Discover Great Event.</h3>
                    <p>Tag: Nightlife, Hotel, Restaurant, Sport, Shop.</p>
                    <form action="#" class="search-form">
                        <input type="text" placeholder="Where to go?" name="place">
                    </form>
                </div>
            </div>
        </div>
    </div>
</div>
```

```

        <input type="text" placeholder="Location" name="location">
        <select>
            <option value="Categroy">Categroy</option>
            <option value="1">Hotel</option>
            <option value="2">Restaurant</option>
            <option value="3">Property</option>
            <option value="4">Shopping</option>
        </select>
        <button type="submit">Search request</button>
    </form>
</div>
</div>
</div>
</div>
</div>
</div>

```

2.3 카드맵

```

<!-- 카드맵 ===== ->
<div class="col-lg-5 col-sm-12">

    <div class="row" id="my-top-n-div">
{% for dic in KEY_DF_JSON_STR %}
        <div class="col-xl-6 col-md-6 col-lg-6 col-sm-12">
            <div class="single-popular-item">
<div class="item-cover-image bg-cover" style="background-image: url('{{dic['thumb']} | safe}}')">
                <div class="tags">
                    <ul>
<li><a href="#">{{dic['tag']}}</a></li>
                    </ul>
<a href="#" class='btn-wishlist' value="{{dic['contentsid']}}"><i class="far fa-heart"></i></a>
                </div>
                <div class="item-details">
                    <div class="item-category">
                        <div class="cat-icon">
                            
                        </div>
                    </div>
                </div>
                <div class="item-content">
                    <h4><a href=javascript:window.open("/detail_view?contentsid=
{{dic['contentsid']}}",',', "status=no,menubar=no,toolbar=no,scrollbars=yes,resizable=yes,width=400,height=600")>
{{dic['title']}}</a></h4>
                    <div class="item-feedback">
                        <ul>
{% for i in range( (dic['evelpt'] | int )) %}

```

```

                                <li><i class="fas fa-star"></i></li>
{% endfor %}

                                </ul>

({{dic['reviewcnt']}} Reviewer)

                                </div>
                                <div class="item-store-location">
                                    <i class="fas fa-map-marker-alt"></i>
{{dic['address']}}

                                </div>

                                </div>
                                </div>
                                </div>
{% endfor %}

                                </div>

                                </div>

```

2.4 지도

```

<!-- 지도 ----->
    <div class="slides listico-slider">
        <div class="single-slide" id="div_travel">
            {{ KEY_MAP_HTML|safe if KEY_MAP_HTML is not none }}
        </div>
        <div class="single-slide">
            {{ KEY_MAP_HTML|safe if KEY_MAP_HTML is not none }}
        </div>
        <div class="single-slide">
            {{ KEY_MAP_HTML|safe if KEY_MAP_HTML is not none }}
        </div>
        <div class="single-slide">
            {{ KEY_MAP_HTML|safe if KEY_MAP_HTML is not none }}
        </div>
        <div class="single-slide">
            {{ KEY_MAP_HTML|safe if KEY_MAP_HTML is not none }}
        </div>
    </div>

<!-- 지도 네비 ----->
    <div class="slides slider-nav text-center">
<div class="single-nav {%if KEY_CATE=='쇼핑'%} slick-current {%endif%}" {%if KEY_CATE=='쇼핑'%}
tabindex="0" {%endif%} value="쇼핑">
    <div class="slide-icon">
        <span>쇼핑</span>
        
        2 Listing
    </div>
    </div>

```

```

<div class="single-nav {%if KEY_CATE=='음식점'%} slick-current {%endif%}" {%if KEY_CATE=='음식점'%}
tabindex="0" {%endif%} value="음식점">
    <div class="slide-icon" >
        <span>음식점</span>
        
        8 Listing
    </div>
</div>

<div class="single-nav {%if KEY_CATE=='숙박'%} slick-current {%endif%}" {%if KEY_CATE=='숙박'%}
tabindex="0" {%endif%} value="숙박">
    <div class="slide-icon" >
        <span>숙박</span>
        
        2 Listing
    </div>
</div>

<div class="single-nav {%if KEY_CATE=='관광지'%} slick-current {%endif%}" {%if KEY_CATE=='관광지'%}
tabindex="0" {%endif%} value="관광지">
    <div class="slide-icon" >
        <span>관광지</span>
        
        8 Listing
    </div>
</div>

<div class="single-nav {%if KEY_CATE=='숙박'%} slick-current {%endif%}" {%if KEY_CATE=='숙박'%}
tabindex="0" {%endif%} value="숙박">
    <div class="slide-icon" >
        <span>숙박</span>
        
        5 Listing
    </div>
</div>

</div>
</div>
</div>
</div>
</section>

```

2.5 AJAX(js)

```
<script>
```

```
$(document).ready(function(){
```

```

$(document).on("click",".btn-wishlist",function() {
    alert($(this).attr("value"))
    $.ajax({
        url: "/booking_add" ,
        data: {"contentsid":$(this).attr("value")} ,
        contentType : "application/x-www-form-urlencoded; charset=UTF-8",
        dataType : "text" ,
        success: function( resString ) {           //콜백함수처리 방식 : JSON 객체로 들어온다
            console.log(resString)                 //200
        },
        error: function( result ) {
            alert("error");                        //403, 500
        },
    });
});

```

```

$(document).on("click",".single-nav",function() {

    //----- /rest 비동기통신 -----
    $.ajax({
        url: "./search_map_html" ,
        //-----
        data: {"cate":$(this).attr("value")} ,
        contentType : "application/x-www-form-urlencoded; charset=UTF-8",
        //-----
        //data : JSON.stringify({"cate":$(this).val()}) ,
        //contentType : "application/json; charset=UTF-8",
        //=====
        //dataType : "text" ,
        //success: function( resString ) {           //콜백함수처리 방식 : 문자열로 들어온다
        //    console.log(resString)
        ///    resObject = JSON.parse(resString);    //{k1:val, k2:val2}
        //-----
        dataType : "json" ,
        success: function( resObject ) {           //콜백함수처리 방식 : JSON 객체로 들어온다
            console.log(resObject)                 //{k1:val, k2:val2}
        //-----
        // { KEY_MAP_HTML : '<iframe srcdoc="&lt;!DOCTYPE html&gt;\n&lt;html...&lt;/iframe>',
        //   KEY_DF_JSON_STR : '["title":"\\ub098\\ubb8\\", ..., "img":"3-9914-
e485793e3b5a.jpg"]]'
        // }

        var key_map_html = resObject["KEY_MAP_HTML"];
        var key_df_json = JSON.parse(resObject["KEY_DF_JSON_STR"]);
        console.log(key_map_html)
        console.log(key_df_json)                  //{k1:val, k2:val2}
        htmlstr = "";

        $.map( key_df_json, function( val, idx ) {
            console.log( val['thumb'] )

```


3. booking.html

3.1 top bar

```
<!-- top bar -->
<div class="top-bar-header">
  <div class="container">
    <div class="row">
      <div class="col-xl-6 col-md-8 col-12">
        <div class="top-bar-left">
          <span>Braking offer: 50% Offer  of our aparment for 1 month</span>
        </div>
      </div>
      <div class="col-xl-6 col-md-4 col-12 text-md-right">
        <div class="top-bar-right">
          <div class="user-setting">
            <ul>
{% if session['USER_ID_SESSION'] %}
  <li><a href="/logout"><i class="fas fa-sign-out-alt"></i>Logout</a></li>
{% else %}
  <li><a href="/login_form"><i class="fas fa-sign-out-alt"></i>Login</a></li>
  <li><a href="/register_form"><i class="fas fa-user"></i>Register</a></li>
{% endif %}
            </ul>
          </div>
        </div>
      </div>
    </div>
  </div>
</div>
```

3.2 main menu

```
{% if session['USER_ID_SESSION'] %}
  <a href="/booking" class="btn-booking-start">Booking Now</a>
{% endif %}
```

3.3 상단지도

```
<div class="banner-section">
  <div class="gmap-banner">
    {{ KEY_MAP_HTML|safe if KEY_MAP_HTML is not none }}
  </div>
</div>
```

3.4 하단 즐겨찾기 장소

```
<section class="tag-item-section section-padding page-bg">
    <div class="container">
        <div class="row">
{% for dic in KEY_DF_JSON %}
            <div class="col-md-4 col-sm-12">
                <div class="single-popular-item">
<div class="item-cover-image bg-cover" style="background-image: url('{{dic['thumb'] | safe}}')">
                    <div class="tags">
                        <ul>
<li><a href="#">{{dic['tag']}}</a></li>
                        </ul>
                        <a href="#" class="btn-wishlist"><i class="far fa-heart"></i></a>
                    </div>
                    <div class="item-details">
                        <div class="item-category">
                            <div class="cat-icon">
                                
                            </div>
                        </div>
                    </div>
                    <div class="item-content">
<h4><a href=javascript:window.open("/detail_view?contentsid=
{{dic['contentsid']}}", '', "status=no,menubar=no,toolbar=no,scrollbars=yes,resizable=yes,width=400,height=600")>
{{dic['title']}}</a></h4>
                        <div class="item-feedback">
{% for i in range( (dic['evelpt'] | int )) %}
                            <li><i class="fas fa-star"></i></li>
{% endfor %}
                        ({{dic['reviewcnt']}} Reviwer)
                        </div>
<div class="item-store-location">
                            <i class="fas fa-map-marker-alt"></i>
                            {{dic['address']}}
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
{% endfor %}

</div>
<div class="load-ajx text-center">
    <a href="#" class="btn-loadmore">Load More</a>
</div>
</div>
```

</section>

4. detail.html

4.1 single deatils content wrapper start

```
<section class="single-details-box-section section-padding page-bg">
  <div class="container">
    <div class="row">
      <div class="col-lg-12 col-sm-12">
        <div class="single-content-box-area">
          <div class="description_box box" id="des-box">
            <h3>{{KEY_DF['title']}}</h3><a href='#' class='btn-wishlist' value="{{KEY_DF['contentsid']}}"><i
            class="far fa-heart"></i></a>
            <p>{{KEY_DF['sbst']}}</p>
          </div>

          <!------- 포토 슬라이싱 ----->
          <div class="photos_box box" id="photo-box">
            <h3>관련 사진</h3>
            <div class="photo-gallery">
              <div class="single-g-slide">
                
              </div>

              <div class="single-g-slide">
                
              </div>

              <div class="single-g-slide">
                
              </div>

              <div class="single-g-slide">
                
              </div>
            </div>
            <div class="gallery_nav">
              <div class="single-gallery-img">
                
              </div>

              <div class="single-gallery-img">
                
              </div>

              <div class="single-gallery-img">
                
              </div>

              <div class="single-gallery-img">
                
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
</section>
```

```
        </div>
    </div>
</div>
```

4.2 지도

```
<div class="map_box box" id="map-box">
    <h3>지도 위치</h3>
    <div class="map-wrap">
        {{KEY_MAP_HTML | safe}}<br>
        {{KEY_DF['address']}}<br>
        {{KEY_DF['phoneno']}}
    </div>
</div>
```

4.3 동영상

```
<div class="video_box box" id="video-box">
    <h3>관련영상</h3>
    <div class="video-wrap">

        {% for dict in KEY_YT_LIST %}
            {{dict['title']}}<br>
            <a href="movies/suicide-squad/index.html">
                <br>
            </a>
        {% endfor %}

    </div>
</div>
```

4.4 관련글

```
<div class="menu_price box" id="menu-price">
    <h3>관련댓글</h3>
    <div class="menu-item-price">
        <div class="item-feedback">
            <hr>
            {% for dic in KEY_REVIEW_LIST %}
                {{dic["created"]}} &nbsp;&nbsp;&nbsp;
                {{dic["usernm"]}} &nbsp;&nbsp;&nbsp;
                {% for i in range( (dic['evelpt'] | int ) ) %}
                    <li><i class="fas fa-star"></i></li>
                {% endfor %}
            {% endfor %}
        </div>
    </div>
</div>
```

```

                                {% endfor %}
                                <br><font color="#6666CC"><b>{{dic["tag"]}}</b>
</font>

                                <br>{{dic['evelcontent']}} <span></span></li>
                                <hr>
                                {% endfor %}
                                <b><a href="#">[더보기]</a></b>
                                </div>
                                </div>
                                </div>

```

4.5 AJAX

```

<script>

$(document).ready(function(){

    $(document).on("click", ".btn-wishlist", function() {
        alert($(this).attr("value"))
        $.ajax({
            url: "/booking_add" ,
            data: {"contentsid":$(this).attr("value")} ,
            contentType : "application/x-www-form-urlencoded; charset=UTF-8",
            dataType    : "text" ,
            success: function( resString ) {           //콜백함수처리 방식 : JSON 객체로 들어온다
                console.log(resString)                 //200
            },
            error: function( result ) {
                alert("error");                         //403, 500
            },
        });
    });

});

});
</script>

```