

Notes

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-----Basic_SETUP-----
Install python and pip (package installer for python) for your system first:
Download an IDE (VsCode and install Following Extensions:)
|- python 3.9
|- pylance
|- autopep8 (For auto formatting)

Create Directory Practical:
[Inside Directory]----cmd: python3 -m venv virtualEnvName (create virtual Env)
|-cmd: source .venv/bin/activate (activate virtual env)
|-cmd: pip install django
|-cmd: django-admin startproject projectName(mypage)
|-cmd: python3 manage.py runserver

GO inside project folder
|-cmd: python3 manage.py startapp appName(challenger)
|-Add templates/appname Folder
|(1. You need to register your app in setting.py file of Project Directory.)
|(2. Check inside settings.py file : if inside "APP_DIRS" is True.)
TEMPLATES = [
    {
        "DIRS": [],
        "APP_DIRS": True,
        "OPTIONS": {
            ...
        },
    },
]
(3. If APP_DIRS is true : What happens is : While django searches particular html doc ;
It also searches for templates inside APP folder)

|-Add urls.py file inside that app

Simply Defining a function in views:
|-inside APP's views.py ----> from django.shortcuts import render
def Appreview():
    pass

Importing path and views : in urls.py of APP:
|-inside APP's urls.py ----> from django.urls import path
from . import views

urlpatterns = [
    path("", views.Appreview)
]

Adding APP's urls inside PROJECT urls using "include method":
|-include APP's urls inside PROJECT's urls.py ----> from django.urls import path, include

urlpatterns = [
    path("admin/", admin.site.urls),
    path("", include("Appreviews.urls"))
]

[TEMPLATES]

TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [
            BASE_DIR / 'templates' #It instructs django even to parse/looking global template
        ],
        'APP_DIRS': True, # For APP-Specific templates Files Search
        'OPTIONS': {
            ...
        },
    },
]

[STATIC FILES Settings]

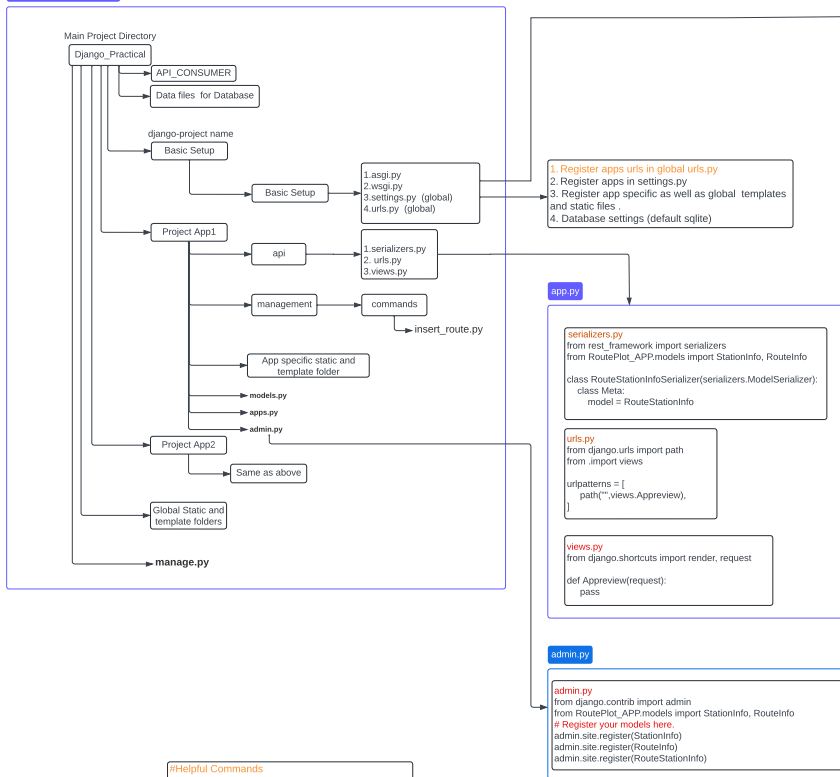
# For APP-Specific Static Files Search
STATIC_URL = 'static/'
#Global ----> Project SPCific
STATICFILES_DIRS = [
    BASE_DIR / "static"
]

-----URLS AND VIEWS-----
Initialize Git if Possible
Creating Static URLs :
Creating Dynamic Urls : Approach 1 - Use Simple code logics
Approach 2 - Use Reverse function

-----TEMPLATES-----

-----Super User-----
python manage.py createsuperuser
```

Django_Project Hierarchy



#Helpful Commands
1.pip install tree
\$tree -L 9
(9 means level of tree)

Setting.py

```
Configuration for templates.
-----
TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [
            BASE_DIR / 'templates' #It instructs django even to parse/looking global template
        ],
        'APP_DIRS': True, # For APP-Specific templates Files Search
        'OPTIONS': {
            ...
        },
    },
]

Configuration for static folder.
-----
# For APP-Specific Static Files Search
STATIC_URL = 'static/'
#Global ----> Project SPCific
STATICFILES_DIRS = [
    BASE_DIR / "static"
]

Configuration for Database
-----
# Database
# https://docs.djangoproject.com/en/4.1/ref/settings/#databases
DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.sqlite3',
        'NAME': BASE_DIR / 'db.sqlite3',
    }
}

#Engine
#PHP: MyAdmin Setup
# DATABASES = {
#     'default': {
#         'ENGINE': 'django.db.backends.mysql',
#         'NAME': 'PROJECT_MAP_API',
#         'USER': 'root',
#         'PASSWORD': '',
#         'HOST': '127.0.0.1',
#         'PORT': '3306',
#         'OPTIONS': {
#             'init_command': "SET sql_mode='STRICT_TRANS_TABLES'",
#         },
#     },
# }

#ElephantSQL Database SetUp
# DATABASES = {
#     'default': {
#         'ENGINE': 'django.db.backends.postgresql_psycopg2',
#         'NAME': 'hgokiy',
#         'USER': 'hgokiy',
#         'PASSWORD': 'b2-TzmdWZOLzBa6zm40MR0b8AQeUaWCZ',
#         'HOST': 'horion.db.elephantsql.com',
#         'PORT': '5432',
#     },
# }
```