**Configuration of Django in VScode**

1. Click on Extensions
2. Select Python
3. Install Python
4. Open Terminal
5. Click Terminal 🡪 New Terminal
6. Pip install django
7. Django-admin startproject <project-name>
8. Open project folder
9. Python manage.py startapp <application-name>

**Views**

**What is model in Django?**

Model represent a database table

Mapping python objects with database table is done using model

Django uses ORM (Object-Relational-Mapping) for communicating with database.

**What is view?**

View is a python program which receives request send by client, process it and generate output.

A view can developed in two ways

1. Function based views (FBV)
2. Class based views (CBV)

**Function based views**

Representing a view as function

A function based view is function which takes input/request from client process it and generate output/response.

def <view-name>(request):

statement-1

statement-2

django.http package provides two predefined classes

1. HttpRequest
2. HttpResponse

**What is http?**

http stands for Hyper Text Transfer Protocol

It is an application protocol used by two applications in internet to exchange data or information.

**HttpRequest** 🡪 HttpRequest is a predefined class/data type provided by django.http package. HttpRequest class object is created by django server and send to view.

HttpRequest object contain information send by client to server/view.

**HttpResponse** 🡪 HttpResponse is a predefind class/data type provided by django.http package. HttpResponse object is used by view to generate output. View generate output in the form of HTML

**First Application**

**Views.py**

from django.shortcuts import render

from django.http import HttpResponse

# Create your views here.

def display(request):

    msg="Hello this is View"

    output=HttpResponse(msg)

    return output

**url mapping**

view is a public to application but it is private to client

client always call the view or send request to view using url.

url is name which is used by client to call/invoke view

this url mapping is done inside urls.py exist project folder

**urls.py**

from django.contrib import admin

from django.urls import path

from app1 import views

urlpatterns = [

    path('admin/', admin.site.urls),

   path('welcome/',views.display),

]

Install application

**Settings.py**

INSTALLED\_APPS = [

    'django.contrib.admin',

    'django.contrib.auth',

    'django.contrib.contenttypes',

    'django.contrib.sessions',

    'django.contrib.messages',

    'django.contrib.staticfiles',

    'app1'

]