Django App

- Django application consists of project and app; it also generates an automatic base directory for the app, so we can focus on writing code (business logic) rather than creating app directories.
- The difference between a project and app is, a project is a collection of configuration files and apps whereas the app is a web application which is written to perform business logic.

For Example:

Bank project consists of many applications like loan application, insurance application, marketing application, customer application.

Application means which is responsible to perform particular task.

Django provides Pluggable applications.

These applications are independent and can be used any project.

Creating an App

• To create an app, we can use the following command.

python manage.py startapp appname

or

django-admin startapp appname

Django App Example

python manage.py startapp firstapp

- Once you created the firstapp, this app consists of 1 folder and 6 files
- Folder name

migrations

• Files names are

```
__init__.py
admin.py
apps.py
models.py
tests.py
views.py
```

views.py

- Service logic will be placed in views.py
- In Python django based application where required service to enduser is defined in views.py file.
- For every action we will create views.
 - 2 types of views are available
 - 1. Function based views
 - 2. Class based views
- For every response we have to provide a separate function inside view.

Open views.py file and type below code

Views.py

from django.shortcuts import render

```
# Create your views here.
from django.http import HttpResponse
```

```
def welcome(request):
    s='<h1>Hello, Welcome to Django</h1>'
    return HttpResponse(s)
```

• After finishing the views logic and add application in settings.py in project folder

Settings.py

• In this settings.py file and go to the Installed_Apps and add the application 'firstapp' and put the comma and save it.

Open urls.py in the project folder

urls.py

```
from django.contrib import admin
from django.urls import path
from myapp import views

urlpatterns = [
   path('admin/', admin.site.urls),
   path('hello/', views.welcome),
]
```

To run the application

python manage.py runserver

- Go to browser window and type this url http://127.0.0.1:8000
- It will shows the view action and choose the view action hello

http://127.0.0.1:8000/hello

• hello is an action that we are representing in urls.py in project folder to calling the particular view defining logic.

Summary of the Project and first application:

- Creating a Project by using this command django-admin startproject projectname
- 2. Creating an application by using this command django-admin startapp appname

or

python manage.py startapp appname

- 3. Add Application in settings.py in the Installed_Apps
- 4. Creating a view functions for every action
- 5. Defining url patterns in project level urls.py file
- 6. To run the server by using this command python manage.py runserver
- 7. Send the request in browser and typing this url http://127.0.0.1:8000/hello