

Name:-

PRN: -

Class:- Ty (btech)

Batch:

PRACTICAL: 2

AIM: Create a simple “Hello World” page using django framework

THEORY

INTRODUCTION:

Python Django is a web framework that is used to create web applications very efficiently and quickly. Django is based on MVT (Model-View-Template) architecture. MVT is a software design pattern for developing a web application.

- **Model:** The model is going to act as the interface of your data. It is responsible for maintaining data. It is the logical data structure behind the entire application and is represented by a database (generally relational databases such as MySQL, Postgres).
- **View:** The View is the user interface — what you see in your browser when you render a website. It is represented by HTML/CSS/Javascript and Jinja files.
- **Template:** A template consists of static parts of the desired HTML output as well as some special syntax describing how dynamic content will be inserted

SETTING THE VIRTUAL ENVIRONMENT

It is always advisable to use a virtual environment before starting any Django project because sometimes when you are working on multiple projects you might need different versions of Django.

python3 -m venv <name>

After creating the virtual environment let's activate it. To activate it type the below command in the terminal.

source ./venv/bin/activate

INSTALLING DJANGO

We can install Django using the pip command. To install this, type the below command in the terminal.

pip install django

STARTING THE PROJECT

To initiate a project of Django on Your PC, open Terminal and Enter the following command

django-admin startproject project_name (HelloProject)

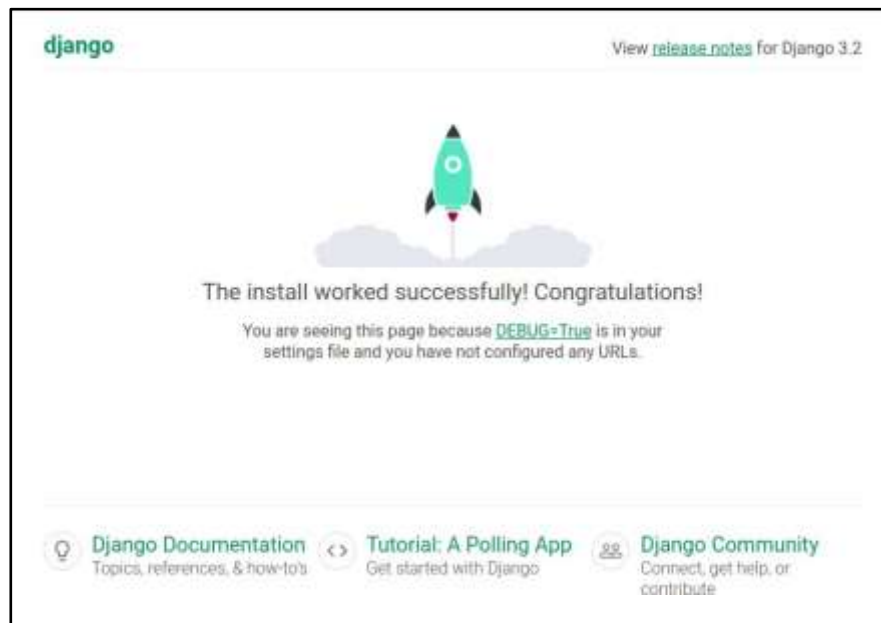
A New Folder with the name projectName will be created. To enter in the project using the terminal enter command

cd projectName (HelloProject)

Now let's un the server and see everything is working fine or not. To run the server type the below command in the terminal.

python manage.py runserver

After running the server go to <http://127.0.0.1:8000/> and you'll see something like this –



CREATING APP

Till now we have created the Django project and now we will create an app. Django is famous for its unique and fully managed app structure. To create an app we need to go to the directory containing manage.py and run the following command –

python manage.py startapp appname (hello)

To consider the project, in our project we need to specify the project name in the `INSTALLED_APPS` list in `settings.py` –

➤ **Settings.py:**

Add your app name in `settings.py`

```
INSTALLED_APPS = [  
    'django.contrib.admin',  
    'django.contrib.auth',  
    'django.contrib.contenttypes',  
    'django.contrib.sessions',  
    'django.contrib.messages',  
    'django.contrib.staticfiles',  
  
    'hello',  
]
```

➤ **Urls.py:**

Create an `urls.py` in your app

```
from django.http import HttpResponse # ☒ This import is required  
from django.urls import path  
  
def home(request):  
    return HttpResponse("Hello, world!")  
  
urlpatterns = [  
    path("", home),  
]
```

➤ **Views.py:**

Create `views.py` in your app

```
from django.http import HttpResponse  
  
# Create your views here.  
  
def myfunction(request):  
    return HttpResponse("<h1>Hello, World!</h1>")
```

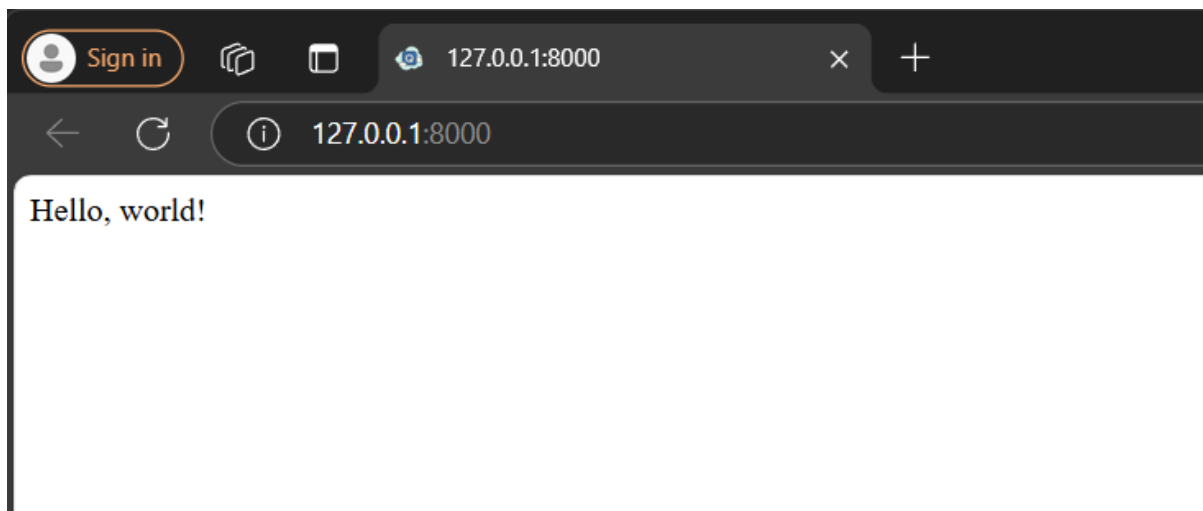
➤ **Urls.py:**

Now add your apps urls in the project

```
from django.urls import path
from . import views

urlpatterns = [
    path("hello/", views.myfunction, name="hello"),
]
```

OUTPUT:



CONCLUSION:

Hence, in this practical we learnt to make hello project in django

Sign of Teacher