IP Experiment – 8

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TE - IT : 46

Aim :

Design a web application to display "Hello World" using Django framework.

Algorithm :

1. Create a new virtual environment.

2. Create a folder in which you will store all the files inside the virtual environment.

3. Install django inside the virtual environment

4. Create a new project in the folder.

5. Create app('app_1') inside project('hello_world')
    Structure: `Virtual_env/folder/project_folder/app_folder`

6. Create new file 'urls.py' inside app_1 folder

7. Modify views.py inside 'app_1' folder

8. Modify urls.py inside project('hello_world') folder

9. Run the server
    `(hello_world) C:\Users\rusha\exp8\hello_world>python manage.py runserver`

hello_world is the virtual environment name...
exp8 is the folder name...
hello_world is the project name...

Code :

< 1. Create Virtual Environment (Open cmd) >

Step 1 : Install Virtual Environment Wrapper

```
C:\Users\rusha>pip install virtualenvwrapper-win
```

Step 2 : Create new virtual environment

```
C:\Users\rusha>mkvirtualenv hello_world
created virtual environment CPython3.7.5.final.0-64 in 14314ms

(hello_world) C:\Users\rusha>
```

< 2. Create new folder inside vir env >

```
(hello_world) C:\Users\rusha>mkdir exp8

(hello_world) C:\Users\rusha>cd exp8

(hello_world) C:\Users\rusha\exp8>
```

< 3. Install django >

```
(hello_world) C:\Users\rusha>pip install django
Collecting django
  Downloading Django-3.1.3-py3-none-any.whl (7.8 MB)
    |████████████████████████████████| 7.8 MB 819 kB/s
```

```
Collecting sqlparse>=0.2.2
  Downloading sqlparse-0.4.1-py3-none-any.whl (42 kB)
     |████████████████████████████████| 42 kB 276 kB/s
Collecting pytz
  Downloading pytz-2020.4-py2.py3-none-any.whl (509 kB)
     |████████████████████████████████| 509 kB 409 kB/s
Collecting asgiref<4,>=3.2.10
  Downloading asgiref-3.3.1-py3-none-any.whl (19 kB)
Installing collected packages: sqlparse, pytz, asgiref, django
Successfully installed asgiref-3.3.1 django-3.1.3 pytz-2020.4 sqlparse-0.4.1

(hello_world) C:\Users\rusha>django-admin --version
3.1.3
```

< 4. Create a new project in the folder >

```
(hello_world) C:\Users\rusha\exp8>django-admin startproject hello_world

Destination directory 'C:\Users\rusha\exp8\hello_world'
```

< 5. Create an app inside the django project folder >

```
C:\Users\rusha\exp8\hello_world>workon hello_world

(hello_world) C:\Users\rusha\exp8\hello_world>python manage.py startapp app_1
```

< 6. Create a new file 'urls/py' inside app(app_1) folder >

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

urlpatterns = [
    path('',views.home, name='home')
]
```

< 7. views.py >

```python
from django.shortcuts import render
from django.http import HttpResponse


# Create your views here.
def home(request):
    return HttpResponse("Hello World");
```

< 8. urls.py in project(hello_world) folder >

```python
from django.contrib import admin
from django.urls import path, include

urlpatterns = [
    path('', include('app_1.urls')),
    path('admin/', admin.site.urls),
]
```
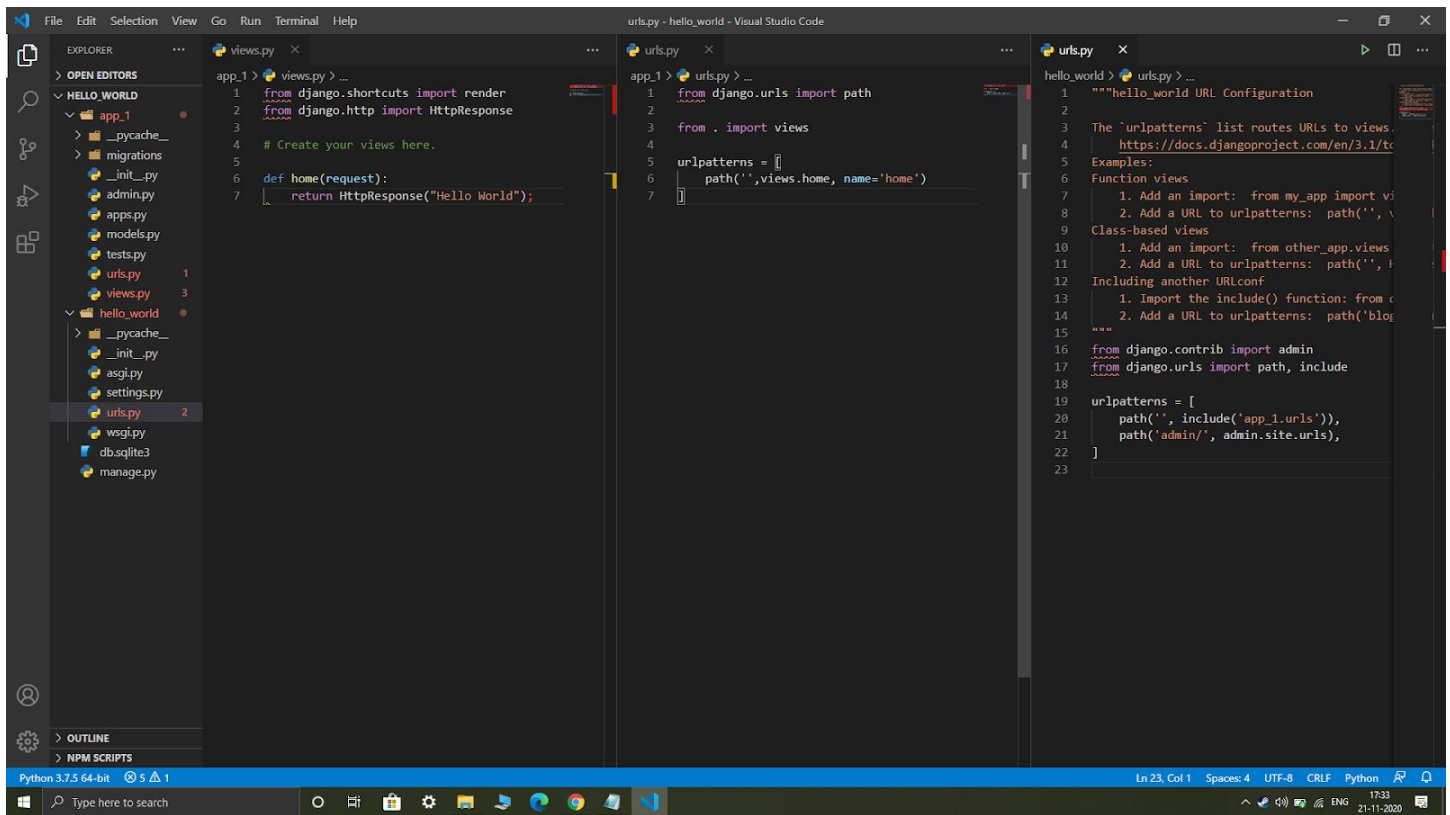
< 9. Run django lightweight server >

```
(hello_world) C:\Users\rusha\exp8\hello_world>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).

You have 18 unapplied migration(s). Your project may not work properly until you apply
the migrations for app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.
November 21, 2020 - 17:31:44
Django version 3.1.3, using settings 'hello_world.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

File Structure :

Output :

Hello World

Conclusion :

Hence we have successfully used python django framework to print "Hello World".

THANK YOU