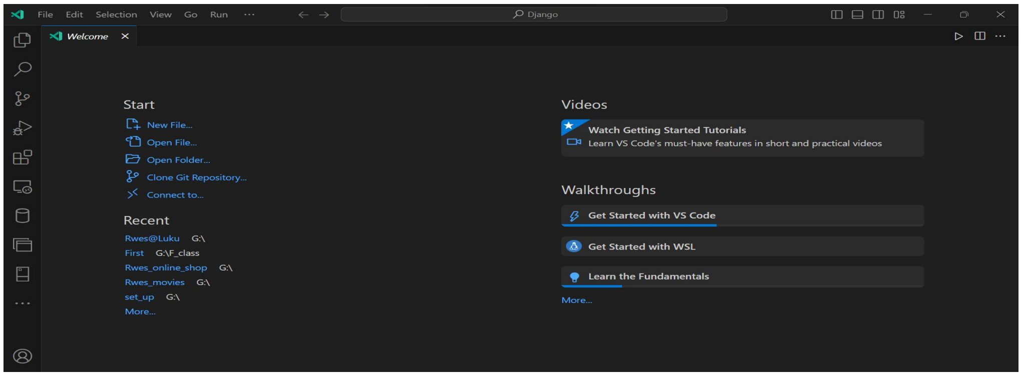
Development Environment Setup:

Part one:

➢ Step one:-

a. Install a Text Editor or Integrated Development Environment (IDE)

- ○ Visit Visual Studio Code Download.
- ○ Download and Install Visual Studio Code.
- ○ Run the installer and follow the setup instructions.



b. **Set up Version Control System**

i. Visit Git Download.

- Install Git and configure it on your local machine.
- Run the installer and follow the setup instructions.

ii. Visit GitHub and sign up.

- Create a GitHub account for hosting your repositories

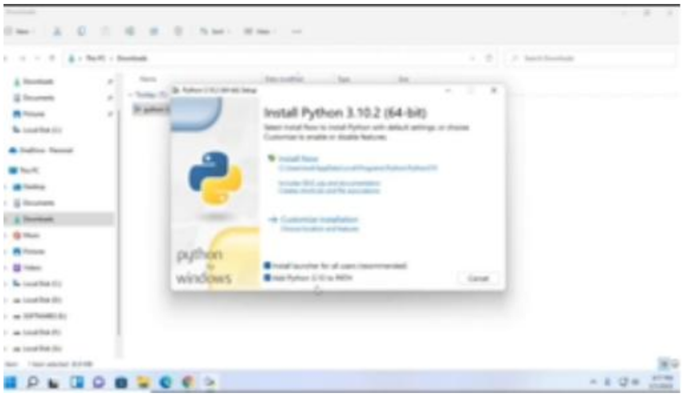
➢ Step two:-

a. Install Necessary Programming Languages and Runtimes

i. Install Python required for your project.

- ▪ Visit Python Download.

ii. Download and run the installer. Ensure you check the box to add Python to your PATH.



Python 3.10.2 (64-bit) Setup

Install Python 3.10.2 (64-bit)

Select Install Now to install Python with default settings, or choose Customize to enable or disable features.

Install Now
[illegible]

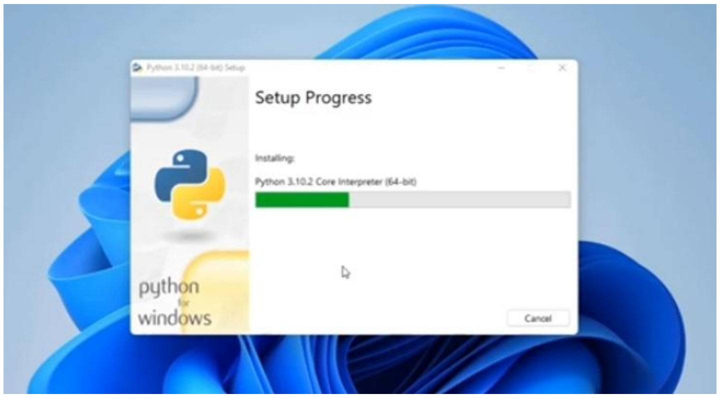
Include IDLE, pip and documentation
Create shortcuts and file associations

Customize installation
Choose location and features

■ Install launcher for all users (recommended)
■ Add Python 3.10 to PATH

Cancel

iii. Install



Python 3.10.2 (64-bit) Setup

Setup Progress

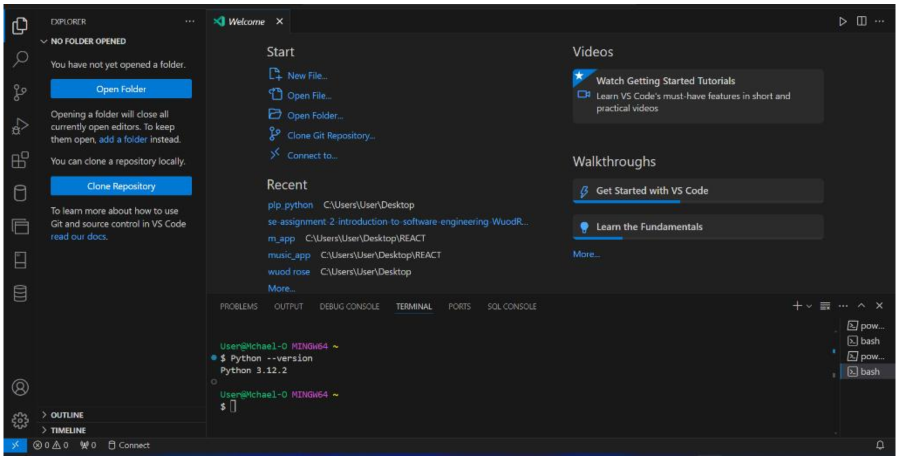
Installing:

Python 3.10.2 Core Interpreter (64-bit)

Cancel

iv. Verify the installation by running:

- Run the following commands:
  - Git bash
  - Python –version



EXPLORER

NO FOLDER OPENED

You have not yet opened a folder.

Open Folder

Opening a folder will close all currently open editors. To keep them open, add a folder instead.

You can clone a repository locally.

Clone Repository

To learn more about how to use Git and source control in VS Code read our docs.

Welcome

Start
New File...
Open File...
Open Folder...
Clone Git Repository...
Connect to...

Recent
plp_python C:\Users\User\Desktop
se-assignment-2-introduction-to-software-engineering-WuodR...
m_app C:\Users\User\Desktop\REACT
music_app C:\Users\User\Desktop\REACT
wuod rose C:\Users\User\Desktop
More...

Videos
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Learn VS Code's must-have features in short and practical videos

Walkthroughs
Get Started with VS Code
Learn the Fundamentals
More...

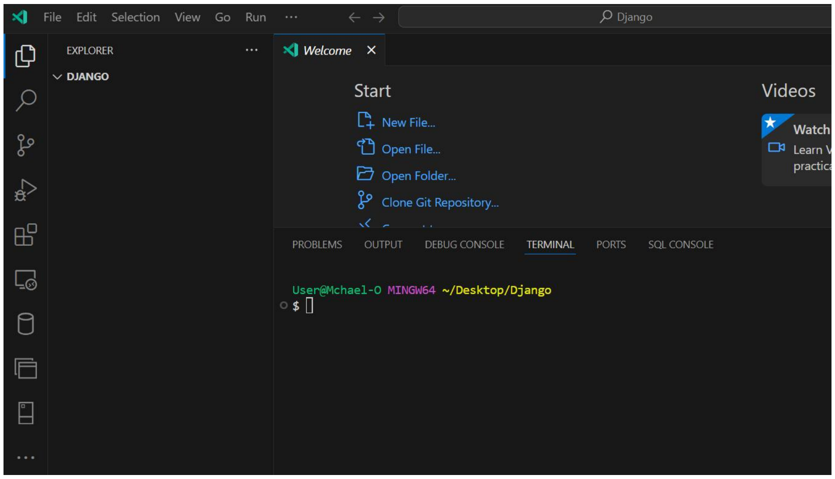
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

```
User@Mchael-O MINGW64 ~
$ Python --version
Python 3.12.2

User@Mchael-O MINGW64 ~
$ 
```

➢ Step three:-

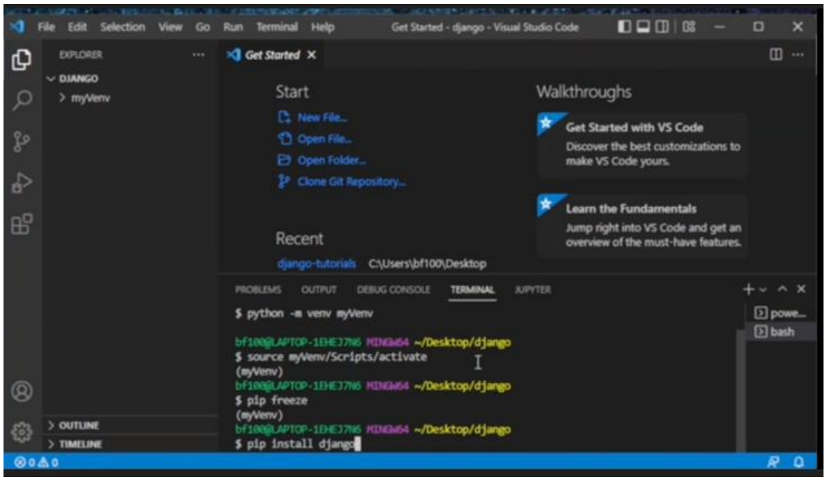
- Create a folder on your local machine
- Open it on vs code
- Open the terminal and choose Git Bash



```
User@Mchael-O MINGW64 ~/Desktop/Django
$
```

➢ Step four:-

- Create a virtual environment for your project
  Command: **python –m virtualenv Myenv** (you can set a name of your choice)
- Activate the virtual environment
  Command: **source Myenv/Scripts/activate**
- Pip freeze –
  Command**: pip freeze**
- Install Django
  Command: **python –m install pip Django**

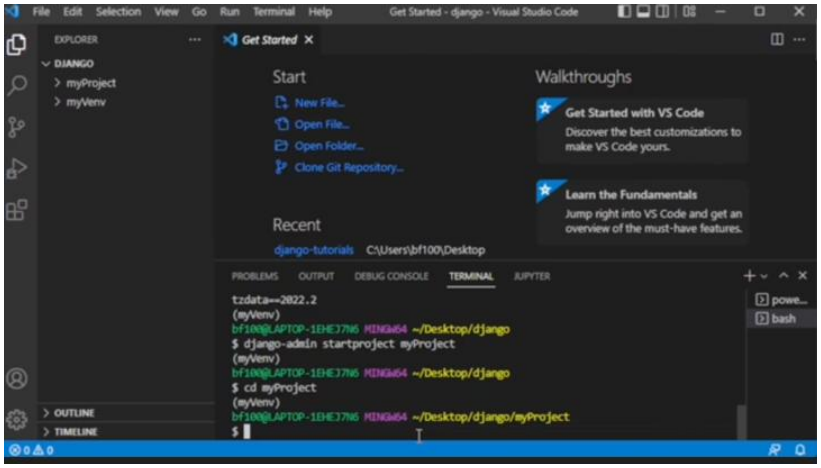

File Edit Selection View Go Run Terminal Help
Get Started - django - Visual Studio Code
EXPLORER
DJANGO
myVenv
Get Started
Start
New File...
Open File...
Open Folder...
Clone Git Repository...
Recent
django-tutorials C:\Users\bf100\Desktop
Walkthroughs
Get Started with VS Code
Discover the best customizations to make VS Code yours.
Learn the Fundamentals
Jump right into VS Code and get an overview of the must-have features.
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
powe...
bash
OUTLINE
TIMELINE
⊗0 ⚠0

```
$ python -m venv myVenv

bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django
$ source myVenv/Scripts/activate
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django
$ pip freeze
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django
$ pip install django
```

➢ Step five:-

- Starting Django project (set a name of your choice)
  Command: **Django-admin startproject Myproject**
- Moving inside the project
  Command: **cd Myproject**



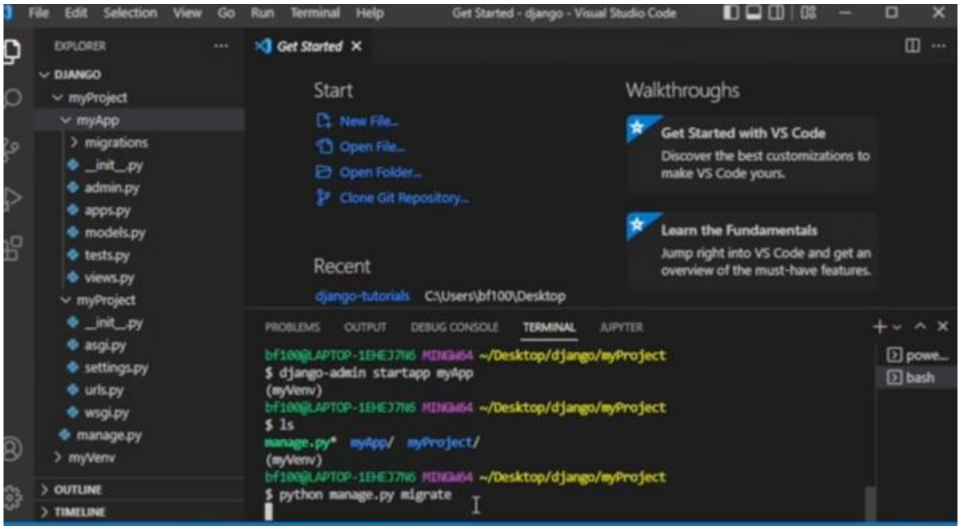
Discover the best customizations to make VS Code yours.

Jump right into VS Code and get an overview of the must-have features.

```
tzdata==2022.2
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django
$ django-admin startproject myProject
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django
$ cd myProject
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django/myProject
$ 
```

➢ Step six:-

- Start my project app
  Command: **Django-admin startapp Myapp**
- Check the list
  Command: **ls**
- Create database for your project
  Command: **python manage.py migrate**



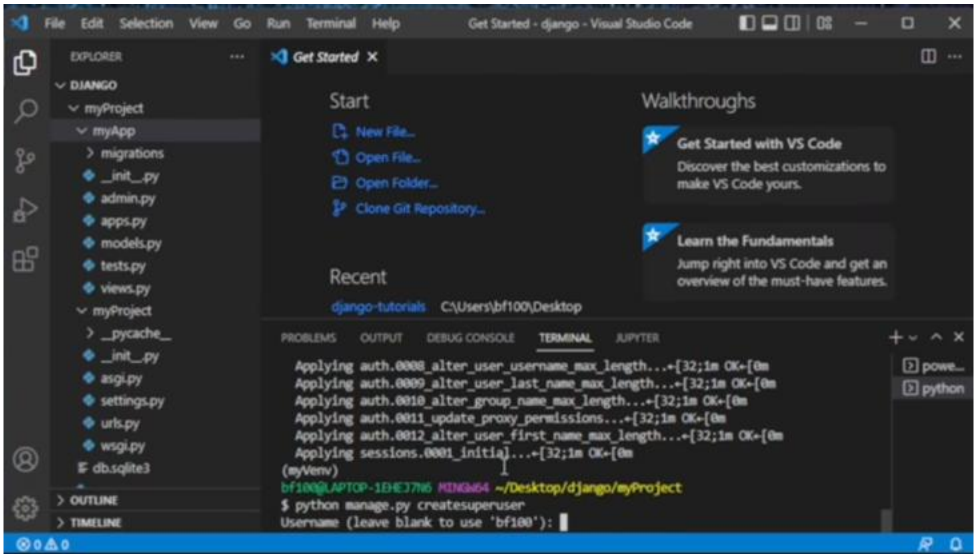
Discover the best customizations to make VS Code yours.

Jump right into VS Code and get an overview of the must-have features.

```
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django/myProject
$ django-admin startapp myApp
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django/myProject
$ ls
manage.py*  myApp/  myProject/
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django/myProject
$ python manage.py migrate
```

➢ Step seven:-

- Create a super user account
  Command: **python manage.py createsuperuser**



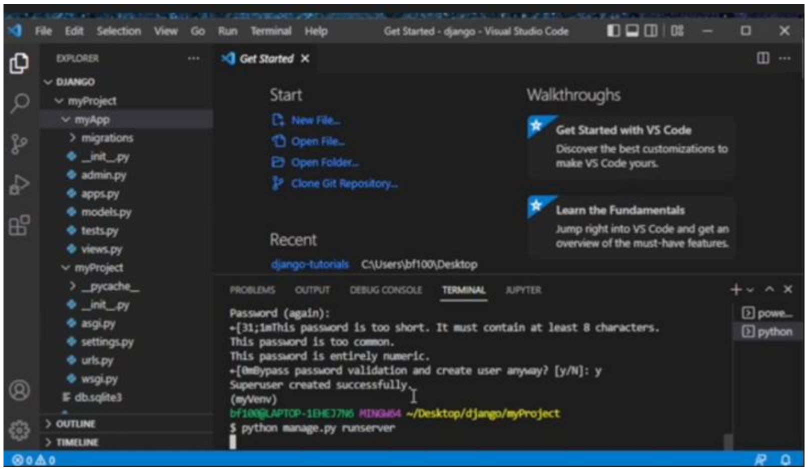
Discover the best customizations to make VS Code yours.

Jump right into VS Code and get an overview of the must-have features.

```
  Applying auth.0008_alter_user_username_max_length...←[32;1m OK←[0m
  Applying auth.0009_alter_user_last_name_max_length...←[32;1m OK←[0m
  Applying auth.0010_alter_group_name_max_length...←[32;1m OK←[0m
  Applying auth.0011_update_proxy_permissions...←[32;1m OK←[0m
  Applying auth.0012_alter_user_first_name_max_length...←[32;1m OK←[0m
  Applying sessions.0001_initial...←[32;1m OK←[0m
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django/myProject
$ python manage.py createsuperuser
Username (leave blank to use 'bf100'):
```

➢ Step eight:-

- To run the app
  Command: python manage.py runserver

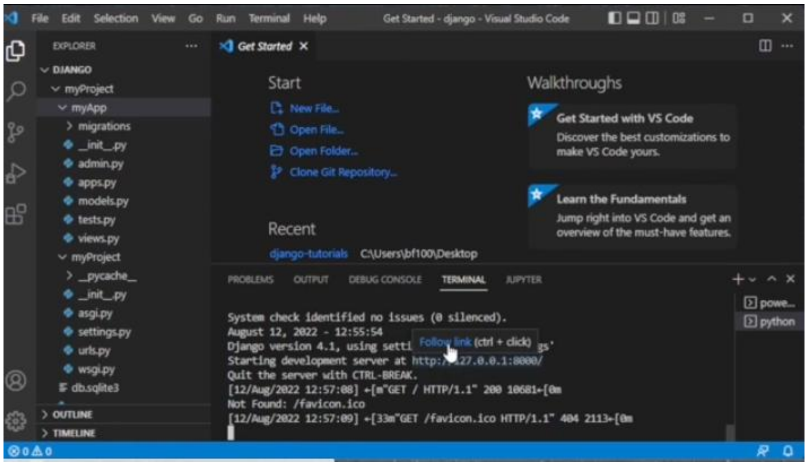


Discover the best customizations to make VS Code yours.

Jump right into VS Code and get an overview of the must-have features.

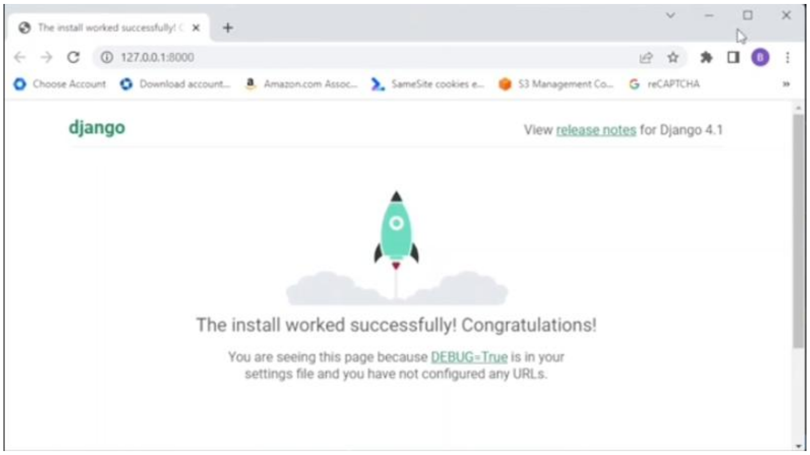
```
Password (again):
←[31;1mThis password is too short. It must contain at least 8 characters.
This password is too common.
This password is entirely numeric.
←[0mBypass password validation and create user anyway? [y/N]: y
Superuser created successfully.
(myVenv)
bf100@LAPTOP-1EHEJ7N6 MINGW64 ~/Desktop/django/myProject
$ python manage.py runserver
```

- Open the git bash on the terminal the ru the myapp by {python manage.py runserver}



```
System check identified no issues (0 silenced).
August 12, 2022 - 12:55:54
Django version 4.1, using setti                        gs'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
[12/Aug/2022 12:57:08] ←[m"GET / HTTP/1.1" 200 10681←[0m
Not Found: /favicon.ico
[12/Aug/2022 12:57:09] ←[33m"GET /favicon.ico HTTP/1.1" 404 2113←[0m
```

- Successful installation of Django



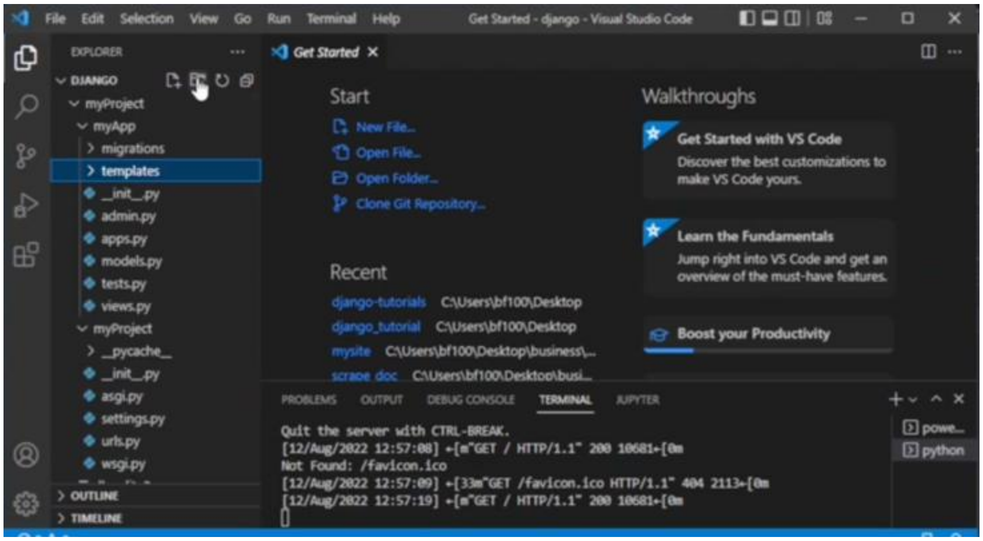
View release notes for Django 4.1

The install worked successfully! Congratulations!

You are seeing this page because DEBUG=True is in your settings file and you have not configured any URLs.

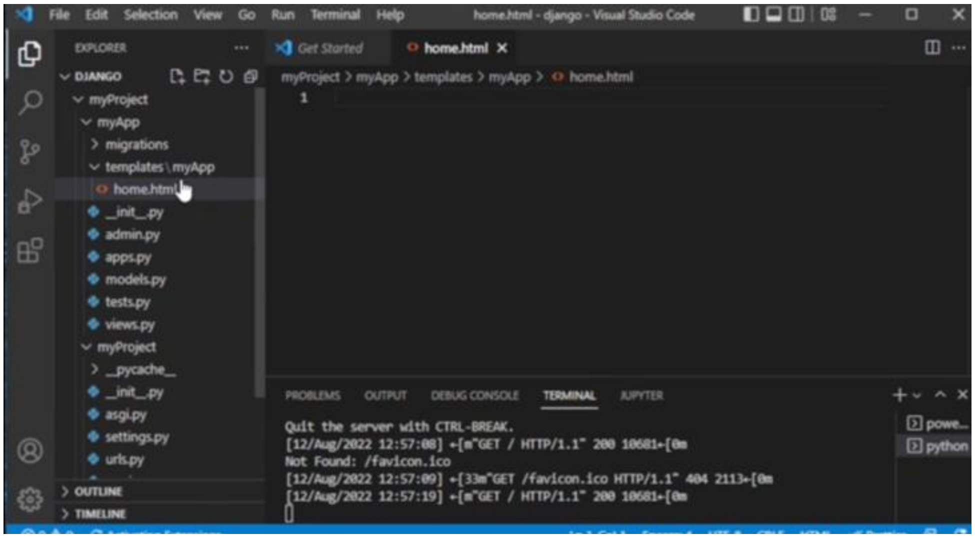
PART TWO

- Create a new folder and name it **template**



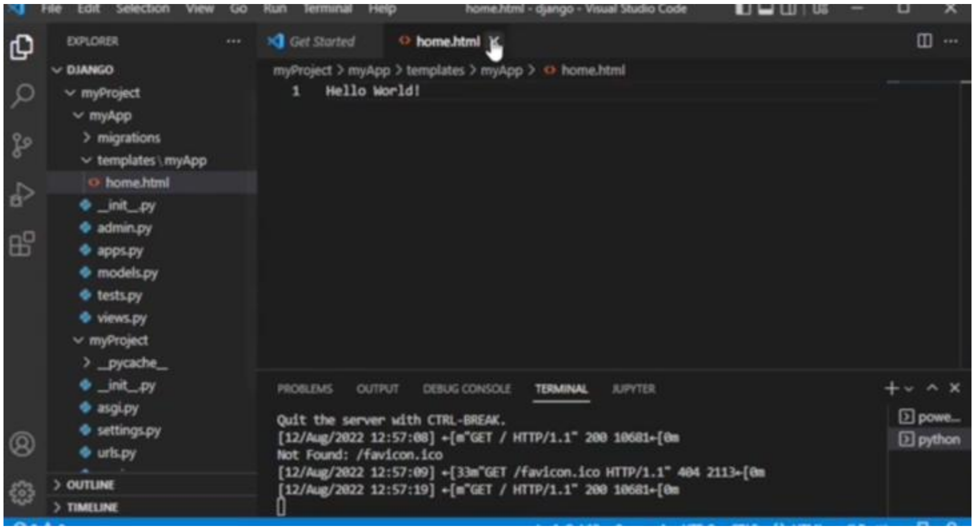
```
Quit the server with CTRL-BREAK.
[12/Aug/2022 12:57:08] ←[m"GET / HTTP/1.1" 200 10681←[0m
Not Found: /favicon.ico
[12/Aug/2022 12:57:09] ←[33m"GET /favicon.ico HTTP/1.1" 404 2113←[0m
[12/Aug/2022 12:57:19] ←[m"GET / HTTP/1.1" 200 10681←[0m
```

- Highlight the folder template and add new folder {give it the same name as your app} Myapp
- Highlight the folder {template\Myapp} and add new file name it {product_list.html}



```
Quit the server with CTRL-BREAK.
[12/Aug/2022 12:57:08] ←[m"GET / HTTP/1.1" 200 10681←[0m
Not Found: /favicon.ico
[12/Aug/2022 12:57:09] ←[33m"GET /favicon.ico HTTP/1.1" 404 2113←[0m
[12/Aug/2022 12:57:19] ←[m"GET / HTTP/1.1" 200 10681←[0m
```

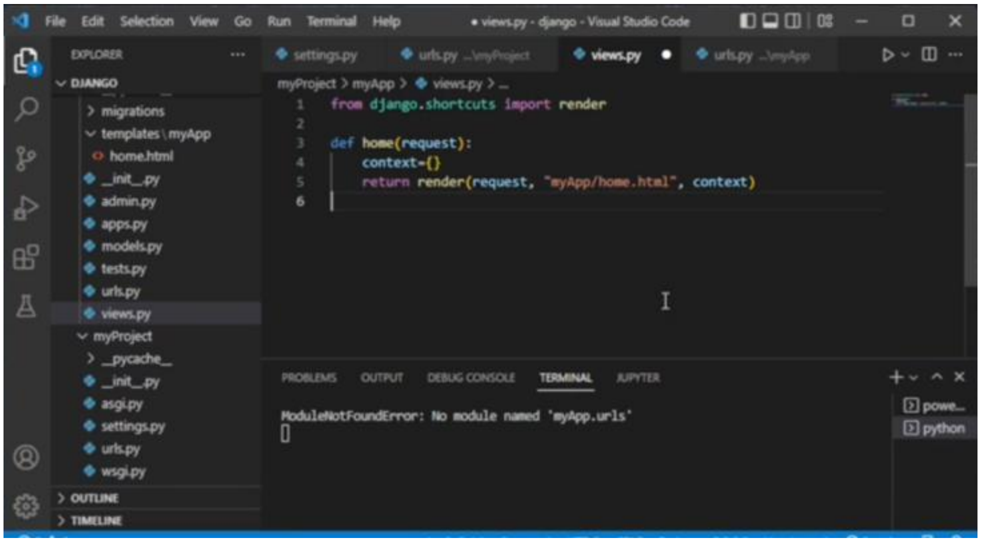
- Open the html file {then write your code }



```
Hello World!
```

```
Quit the server with CTRL-BREAK.
[12/Aug/2022 12:57:08] ←[m"GET / HTTP/1.1" 200 10681←[0m
Not Found: /favicon.ico
[12/Aug/2022 12:57:09] ←[33m"GET /favicon.ico HTTP/1.1" 404 2113←[0m
[12/Aug/2022 12:57:19] ←[m"GET / HTTP/1.1" 200 10681←[0m
```

- Open view.py file and edit it to look like this



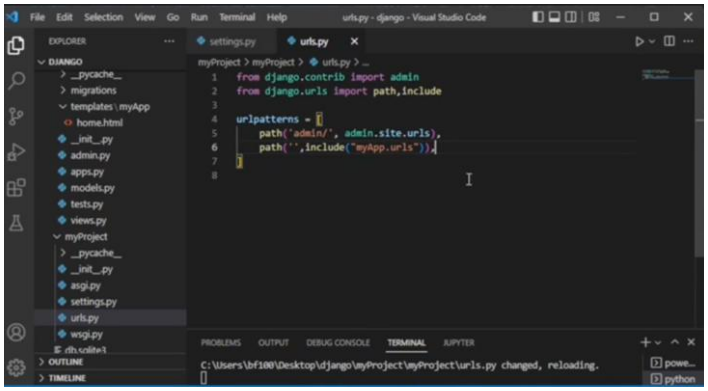
```python
from django.shortcuts import render

def home(request):
    context={}
    return render(request, "myApp/home.html", context)

```

```
ModuleNotFoundError: No module named 'myApp.urls'
```

- Open urls.py {myproject} file and edit to look like this



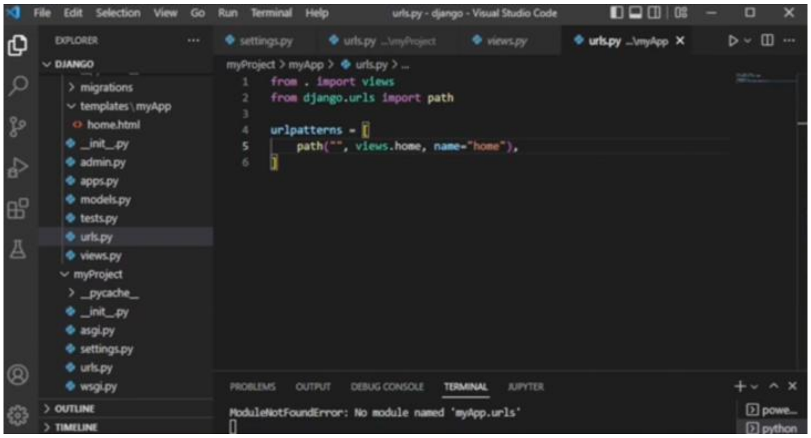
```python
from django.contrib import admin
from django.urls import path,include

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

```

```
C:\Users\bf100\Desktop\django\myProject\myProject\urls.py changed, reloading.
```

- Create a urls.py file on {myapp}

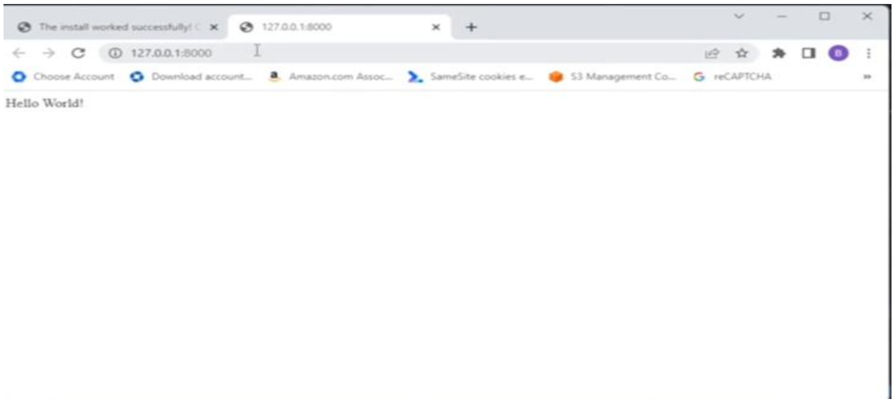


```
from . import views
from django.urls import path

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

```
ModuleNotFoundError: No module named 'myApp.urls'
```

- Go back to Git Bash terminal { python manage.py runserver }
- To run the app
- Open it to the brewers



Hello World!