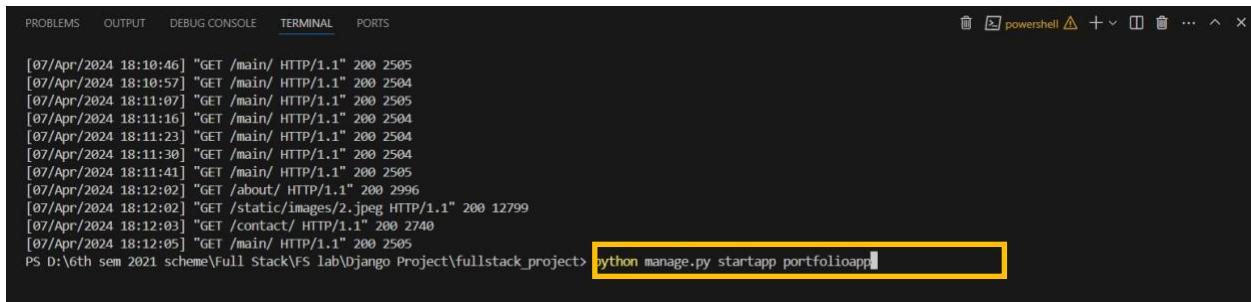


## Experiment-06

Develop a layout.html with a suitable header (containing navigation menu) and footer with copyright and developer information. Inherit this layout.html and create 3 additional pages: contact us, About Us and Home page of any website.

**Step-01:** This app will be created in the Django project we made earlier.

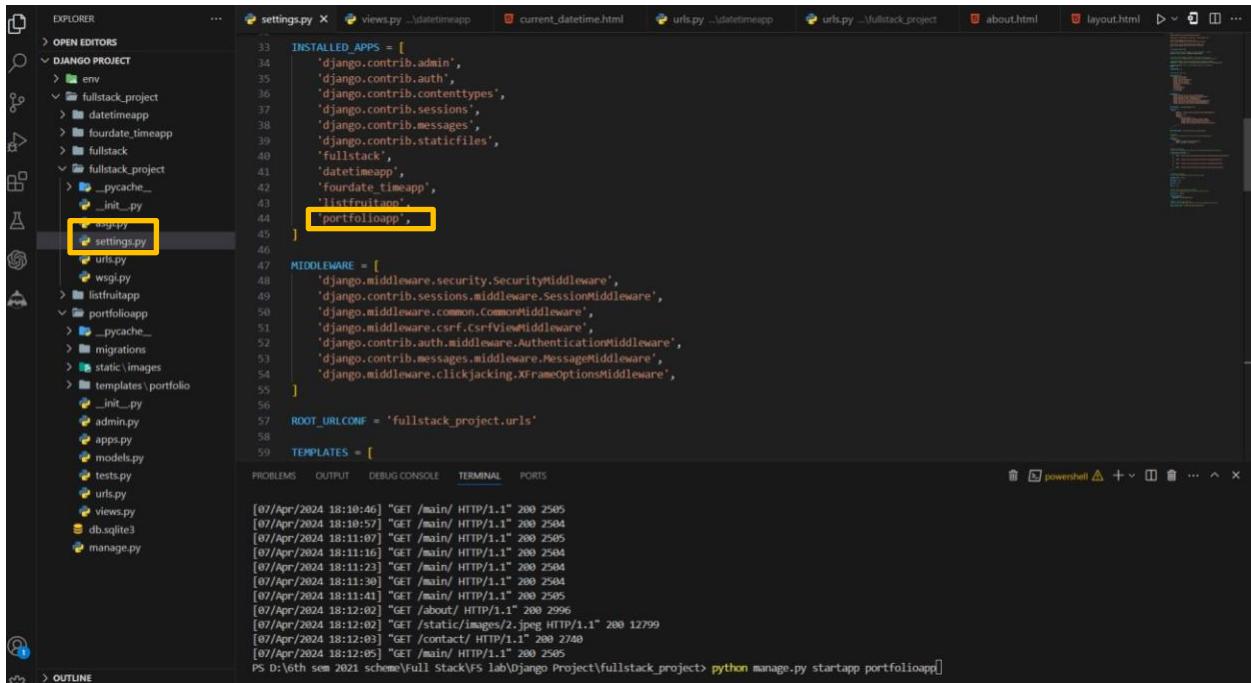


```
[07/Apr/2024 18:10:46] "GET /main/ HTTP/1.1" 200 2505
[07/Apr/2024 18:10:57] "GET /main/ HTTP/1.1" 200 2504
[07/Apr/2024 18:11:07] "GET /main/ HTTP/1.1" 200 2505
[07/Apr/2024 18:11:16] "GET /main/ HTTP/1.1" 200 2504
[07/Apr/2024 18:11:23] "GET /main/ HTTP/1.1" 200 2504
[07/Apr/2024 18:11:30] "GET /main/ HTTP/1.1" 200 2504
[07/Apr/2024 18:11:41] "GET /main/ HTTP/1.1" 200 2505
[07/Apr/2024 18:12:02] "GET /about/ HTTP/1.1" 200 2996
[07/Apr/2024 18:12:02] "GET /static/images/2.jpeg HTTP/1.1" 200 12799
[07/Apr/2024 18:12:03] "GET /contact/ HTTP/1.1" 200 2740
[07/Apr/2024 18:12:05] "GET /main/ HTTP/1.1" 200 2505
PS D:\6th sem 2021 scheme\Full Stack\F5 lab\django Project\fullstack_project> python manage.py startapp portfolioapp
```

**Step-02:** Add the app to INSTALLED\_APPS

Open the settings.py file in your project's directory (e.g., **fullstack\_project/settings.py**).

Locate the **INSTALLED\_APPS** list and add the name of your new app to the list:



```
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'fullstack',
    'datetimeapp',
    'foundate_timeapp',
    'listfruitapp',
    'portfolioapp',
]
```

### Step-03: Create a new template

- Inside the portfolioapp/templates/ portfolio directory, create the following files:

#### **layout.html**

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>{ % block title % }{ % endblock % }</title>

<!-- Include Bootstrap CSS from CDN -->

<link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">

<style>

/* Add some basic styling */

body {

font-family: Arial, sans-serif;

margin: 0;

padding: 0;

}

header {

background-color: #333;

color: #fff;
```

```
padding: 10px;  
  
text-align: center; /* Center align header content */  
  
}  
  
nav ul {  
  
list-style-type: none;  
  
margin: 0;  
  
padding: 0;  
  
display: inline-block; /* Display nav items inline-block */  
  
}  
  
nav ul li {  
  
display: inline;  
  
margin-right: 10px;  
  
}  
  
nav ul li a {  
  
color: #fff;  
  
text-decoration: none;  
  
}  
  
footer {  
  
background-color: #333;  
  
color: #fff;  
  
padding: 10px;
```

```
text-align: center;

}

/* Center align content */

.content-wrapper {

    display: flex;

    justify-content: center;

    align-items: center;

    min-height: 80vh; /* Set minimum height for content area */

}

</style>

{% load static %}

</head>

<body>

<header>

    <nav>

        <ul>

            <li><a href="{% url 'main' %}" style="text-decoration:none;">Home</a></li>

            <li><a href="{% url 'about' %}" style="text-decoration:none;">About Us</a></li>

            <li><a href="{% url 'contact' %}" style="text-decoration:none;">Contact Us</a></li>

        </ul>

    </nav>

</header>
```

```
</nav>

</header>

<div class="content-wrapper">

    { % block content % }

    { % endblock % }

</div>

<footer>

    <p>&copy; 2024 Search Creators. Developed by Hanumanthu.</p>

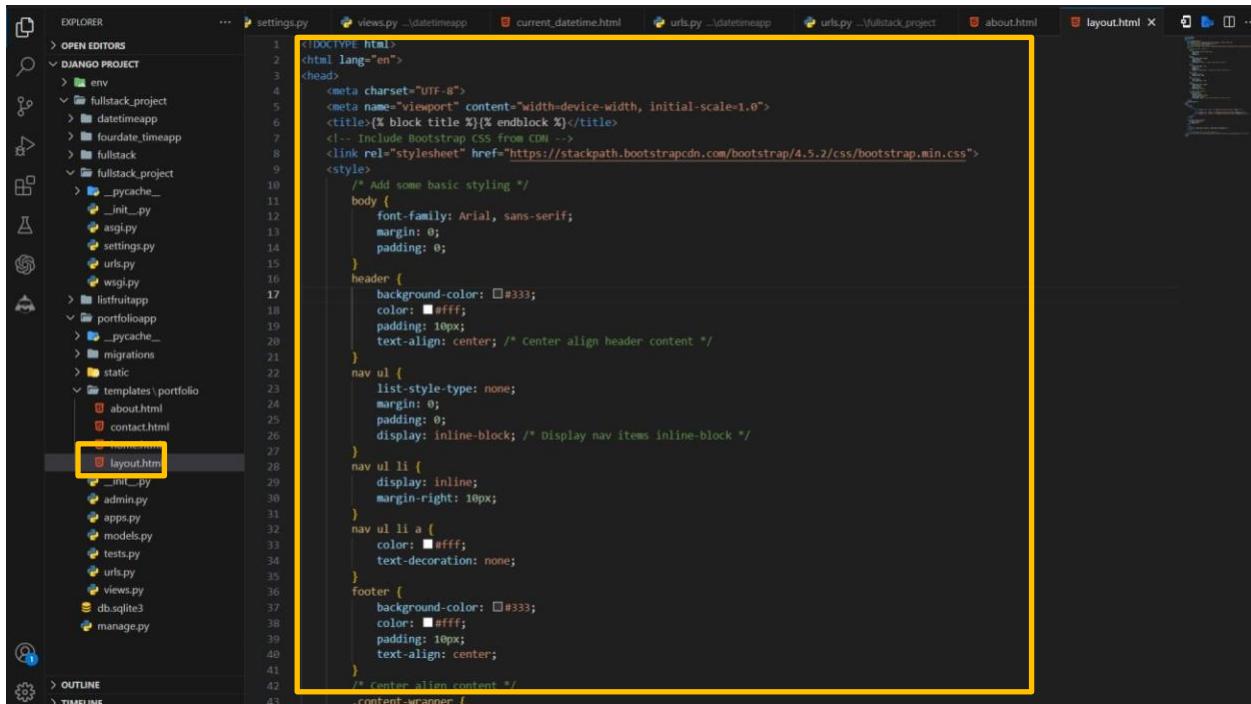
</footer>

<!-- Include Bootstrap JS from CDN (Optional) -->

<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>

</body>

</html>
```



```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>{% block title %}{% endblock %}</title>
    <!-- Include Bootstrap CSS from CDN -->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
<style>
    /* Add some basic styling */
    body {
        font-family: Arial, sans-serif;
        margin: 0;
        padding: 0;
    }
    header {
        background-color: #333;
        color: #fff;
        padding: 10px;
        text-align: center; /* Center align header content */
    }
    nav ul {
        list-style-type: none;
        margin: 0;
        padding: 0;
        display: inline-block; /* Display nav items inline-block */
    }
    nav ul li {
        display: inline;
        margin-right: 10px;
    }
    nav ul li a {
        color: #fff;
        text-decoration: none;
    }
    footer {
        background-color: #333;
        color: #fff;
        padding: 10px;
        text-align: center;
    }
    /* Center align content */
    .center-content {
        display: flex;
        justify-content: center;
    }
</style>
```

## home.html

```
{% extends 'portfolio/layout.html' %}
```

```
{% block title %}Home{% endblock %}
```

```
{% block extra_css %}
```

```
<!-- Include Bootstrap CSS from CDN -->
```

```
<link rel="stylesheet"
```

```
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
```

```
<style>
```

```
/* Custom CSS to center align content */
```

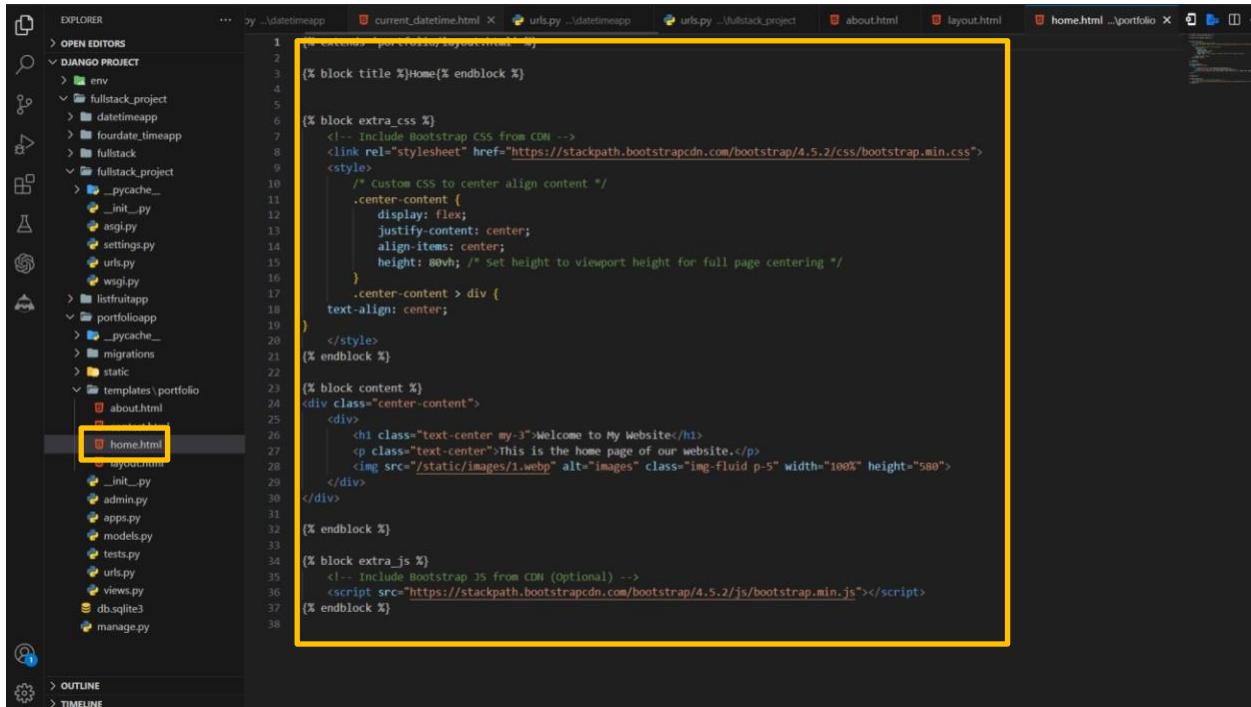
```
.center-content {
```

```
    display: flex;
```

```
    justify-content: center;
```

```
align-items: center;  
  
height: 80vh; /* Set height to viewport height for full page centering */  
  
}  
  
.center-content > div {  
  
text-align: center;  
  
}  
  
</style>  
  
{% endblock %}  
  
{% block content %}  
  
<div class="center-content">  
  
<div>  
  
<h1 class="text-center my-3">Welcome to My Website</h1>  
  
<p class="text-center">This is the home page of our website.</p>  
  
  
  
</div>  
  
</div>  
  
{% endblock %}  
  
{% block extra_js %}  
  
<!-- Include Bootstrap JS from CDN (Optional) -->  
  
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
```

{% endblock %}



```
1  {% extends 'portfolio/layout.html' %} 
2
3  {% block title %}Home{% endblock %}
4
5
6  {% block extra_css %}
7      <!-- Include Bootstrap CSS from CDN -->
8      <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
9      <style>
10         /* Custom CSS to center align content */
11         .center-content {
12             display: flex;
13             justify-content: center;
14             align-items: center;
15             height: 80vh; /* set height to viewport height for full page centering */
16         }
17         .center-content > div {
18             text-align: center;
19         }
20     </style>
21  {% endblock %}
22
23  {% block content %}
24      <div class="center-content">
25          <h1 class="text-center my-3">Welcome to My Website</h1>
26          <p class="text-center">This is the home page of our website.</p>
27          
28      </div>
29  {% endblock %}
30
31  {% block extra_js %}
32      <!-- Include Bootstrap JS from CDN (Optional) -->
33      <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
34  {% endblock %}
35
```

## about.html

{% extends 'portfolio/layout.html' %}

{% block title %}About Us{% endblock %}

{% block extra\_css %}

<!-- Include Bootstrap CSS from CDN -->

<link rel="stylesheet"

href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">

{% endblock %}

{% block content %}

<div class="container">

<div class="row justify-content-center">

```
<div class="col-md-8">

    <h1 class="text-center">About Us</h1>

    <p class="text-center">We are a company that provides awesome products and
services.</p>

</div>

</div>

<!-- Service Images -->

<div class="row justify-content-center mt-5">

    <div class="col-md-3 text-center">

        <p>Web Development</p>

    </div>

    <div class="col-md-3 text-center">

        <p>Boost Your Skill With ChatGPT</p>

    </div>

    <!-- Add more service images here -->

</div>

</div>

{ % endblock % }

{ % block extra_js % }
```

<!-- Include Bootstrap JS from CDN (Optional) -->

```
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
```

```
{% endblock %}
```

```
% extends 'portfolio/layout.html' %}

{% block title %}About Us{% endblock %}

{% block extra_css %}
    <!-- Include Bootstrap CSS from CDN -->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
{% endblock %}

{% block content %}
<div class="container">
    <div class="row justify-content-center">
        <div class="col-md-8">
            <h1 class="text-center">About Us</h1>
            <p class="text-center">We are a company that provides awesome products and services.</p>
        </div>
    </div>

    <!-- Service Images -->
    <div class="row justify-content-center mt-5">
        <div class="col-md-3 text-center">
            
            <p>Web Development</p>
        </div>
        <div class="col-md-3 text-center">
            
            <p>Boost Your Skill With ChatGPT</p>
        </div>
        <!-- Add more service images here -->
    </div>
</div>
{% endblock %}

{% block extra_js %}
    <!-- Include Bootstrap JS from CDN (Optional) -->
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
{% endblock %}
```

## contact.html

```
{% extends 'portfolio/layout.html' %}
```

```
{% block title %}Contact Us{% endblock %}
```

```
{% block extra_css %}
```

<!-- Include Bootstrap CSS from CDN -->

```
<link rel="stylesheet"
```

```
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
```

```
{% endblock %}
```

```
{% block content %}
```

```
<div class="container">  
    <div class="row justify-content-center">  
        <div class="col-md-6">  
            <h1 class="text-center">Contact Us</h1>  
            <p class="text-center">You can reach us at:</p>  
            <ul class="list-unstyled">  
                <li class="text-center">Email: contact@mywebsite.com</li>  
                <li class="text-center">Phone: 123-456-7890</li>  
                <li class="text-center">Address: 123 Main Street, City, State</li>  
            </ul>  
        </div>  
    </div>  
</div>  
{% endblock %}  
{% block extra_js %}  
    <!-- Include Bootstrap JS from CDN (Optional) -->  
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>  
{% endblock %}
```

The screenshot shows the Visual Studio Code interface with the Django project structure in the Explorer sidebar. The current file open is 'contact.html' located in the 'portfolio' directory under 'templates/portfolio'. The code in 'contact.html' is highlighted with a yellow box. It contains HTML and Django template code for a contact page, including Bootstrap styling and a list of contact information.

```
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
{%
    block content %}
<div class="container">
    <div class="row justify-content-center">
        <div class="col-md-6">
            <h1 class="text-center">Contact Us</h1>
            <p class="text-center">You can reach us at:</p>
            <ul class="list-unstyled">
                <li class="text-center">Email: contact@mywebsite.com</li>
                <li class="text-center">Phone: 123-456-7890</li>
                <li class="text-center">Address: 123 Main Street, City, State</li>
            </ul>
        </div>
    </div>
{%
    block extra_js %}
    <!-- Include Bootstrap JS from CDN (Optional) -->
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
{%
    endblock %}
```

## Step-04: Create a view function

- Open the views.py file in your Django app's directory (e.g., **portfolioapp/views.py**).

```
from django.shortcuts import render
```

```
def main(request):
```

```
    return render(request, 'portfolio/home.html')
```

```
def about(request):
```

```
    return render(request, 'portfolio/about.html')
```

```
def contact(request):
```

```
    return render(request, 'portfolio/contact.html')
```

The screenshot shows a code editor interface with a dark theme. On the left is the Explorer sidebar, which lists the project structure. It includes a 'Django Project' section with 'fullstack\_project' and 'listfruitapp' subfolders, and a 'portfolioapp' folder containing files like \_\_init\_\_.py, migrations, static, and templates\portfolio. Inside 'templates\portfolio', there are four HTML files: about.html, contact.html, home.html, and layout.html. Below these are \_\_init\_\_.py, admin.py, apps.py, models.py, tests.py, and urls.py. A file named 'views.py' is also present in the portfolioapp directory. The 'views.py' file is open in the main editor area and contains the following Python code:

```
from django.shortcuts import render

def main(request):
    return render(request, 'portfolio/home.html')

def about(request):
    return render(request, 'portfolio/about.html')

def contact(request):
    return render(request, 'portfolio/contact.html')
```

The 'views.py' file is highlighted with a yellow box. The 'views.py' file in the Explorer sidebar is also highlighted with a yellow box.

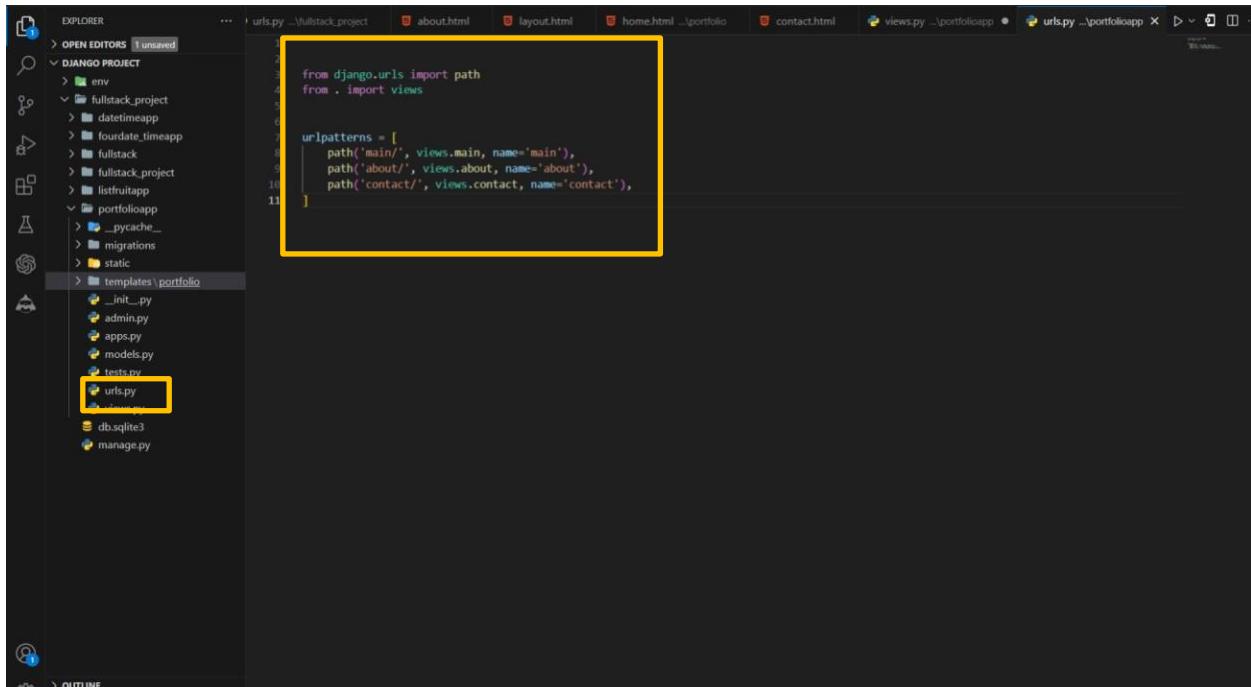
## Step-05: Map the view function to a URL

- Open the **urls.py** file in your Django app's directory (e.g., listfruitapp/urls.py).
- Import the view function at the top of the file
- Add a new URL pattern to the urlpatterns list

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

```
from . import views
```

```
urlpatterns = [
    path('main/', views.main, name='main'),
    path('about/', views.about, name='about'),
    path('contact/', views.contact, name='contact'),
]
```



```

from django.urls import path
from . import views

urlpatterns = [
    path('main/', views.main, name='main'),
    path('about/', views.about, name='about'),
    path('contact/', views.contact, name='contact'),
]

```

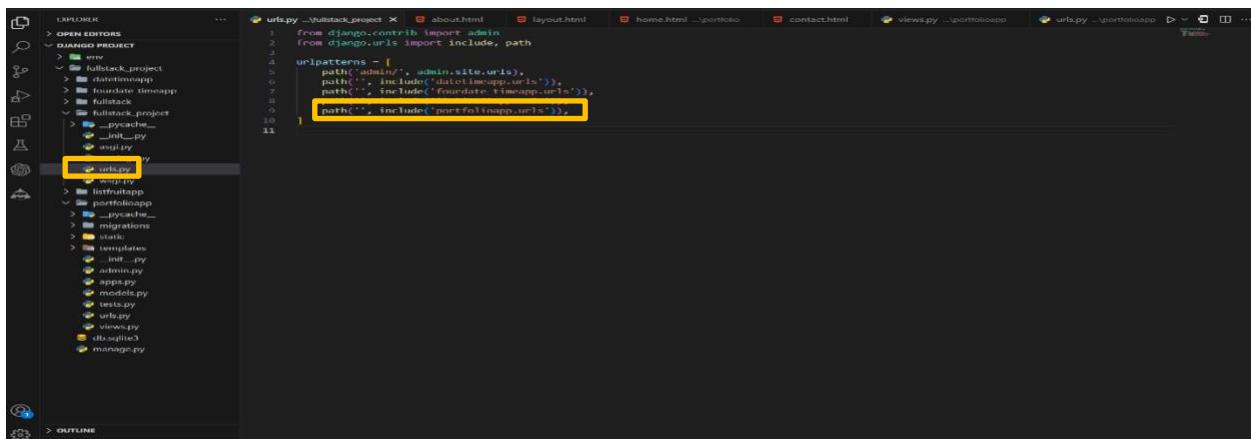
## Step-06: Include the app's URLs in the project's URL patterns

- Open the **urls.py** file in your project's directory (e.g., `fullstack_project/urls.py`).
- Import the `include` function from `django.urls` and the `path` function from `django.urls`:
- Add a new URL pattern to the `urlpatterns` list

**from django.urls import include, path [if does not exists]**

**path('', include('portfolioapp.urls')),**

- This includes the URL patterns from your app's **urls.py** file.



```

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

urlpatterns = [
    path('admin/', admin.site.urls),
    path('', include('dateformat.urls')),
    path('', include('fullstack.urls')),
    path('', include('portfolioapp.urls')),
]

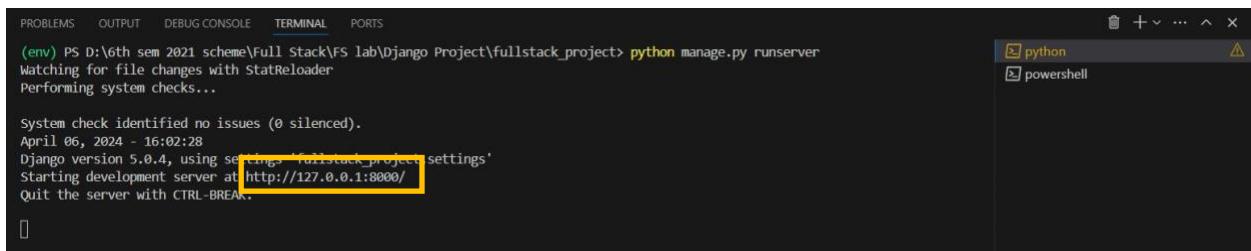
```

### Step-07: Run the development server

- In the VS Code terminal, navigate to your Django project's directory (the one containing manage.py).
- Run the development server

**python manage.py runserver**

- Open your web browser and visit <http://127.0.0.1:8000/>.



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
(env) PS D:\6th sem 2021 scheme\Full Stack\VS lab\ Django Project\fullstack_project> python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...
System check identified no issues (0 silenced).
April 06, 2024 - 16:02:28
Django version 5.0.4, using settings 'fullstack_project.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

- Type or copy this <http://127.0.0.1:8000/main/>

**Final Output By Clicking Above Navbar Home, About Us, Contact Us Buttons**



**Fig: Home Page Screen**

Home About Us Contact Us

## About Us

We are a company that provides awesome products and services.



© 2024 Search Creators. Developed by Hanumanthu.

**Fig: About Us Screen**

Home About Us Contact Us

## Contact Us

You can reach us at:

Email: contact@mywebsite.com  
Phone: 123-456-7890  
Address: 123 Main Street, City, State

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**Fig: About Us Screen**