

# Django Framework Project

Lab -2-A

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# Working with Django Framework

- Create Project and application
- Create Template
- Views
- Urls

# Create Project and application Using Pycharm

- File > New > Project > Django



## New Project



Pure Python

Python



Django



FastAPI



Flask



Google App Engine



Pyramid



Scientific

Other



Angular CLI



Bootstrap



Express



HTML5 Boilerplate



Next.js



Node.js



React



React Native



Vite



Vue.js

Name:

djangoProject

2

Location:

C:\Users\DotNet\PycharmProjects



Project will be created in:

C:\Users\DotNet\PycharmProjects\djangoProject



Create Git repository



Create a main.py welcome script

Interpreter type:

Project venv

Base conda

Custom environment

Python version:



C:\Users\DotNet\AppData\Local\Programs\Python\Python39\python



Python virtual environment will be created in the project root:

C:\Users\DotNet\PycharmProjects\djangoProject\venv

More Settings

Template language:

Django

3



Templates folder:

templates

Application name:

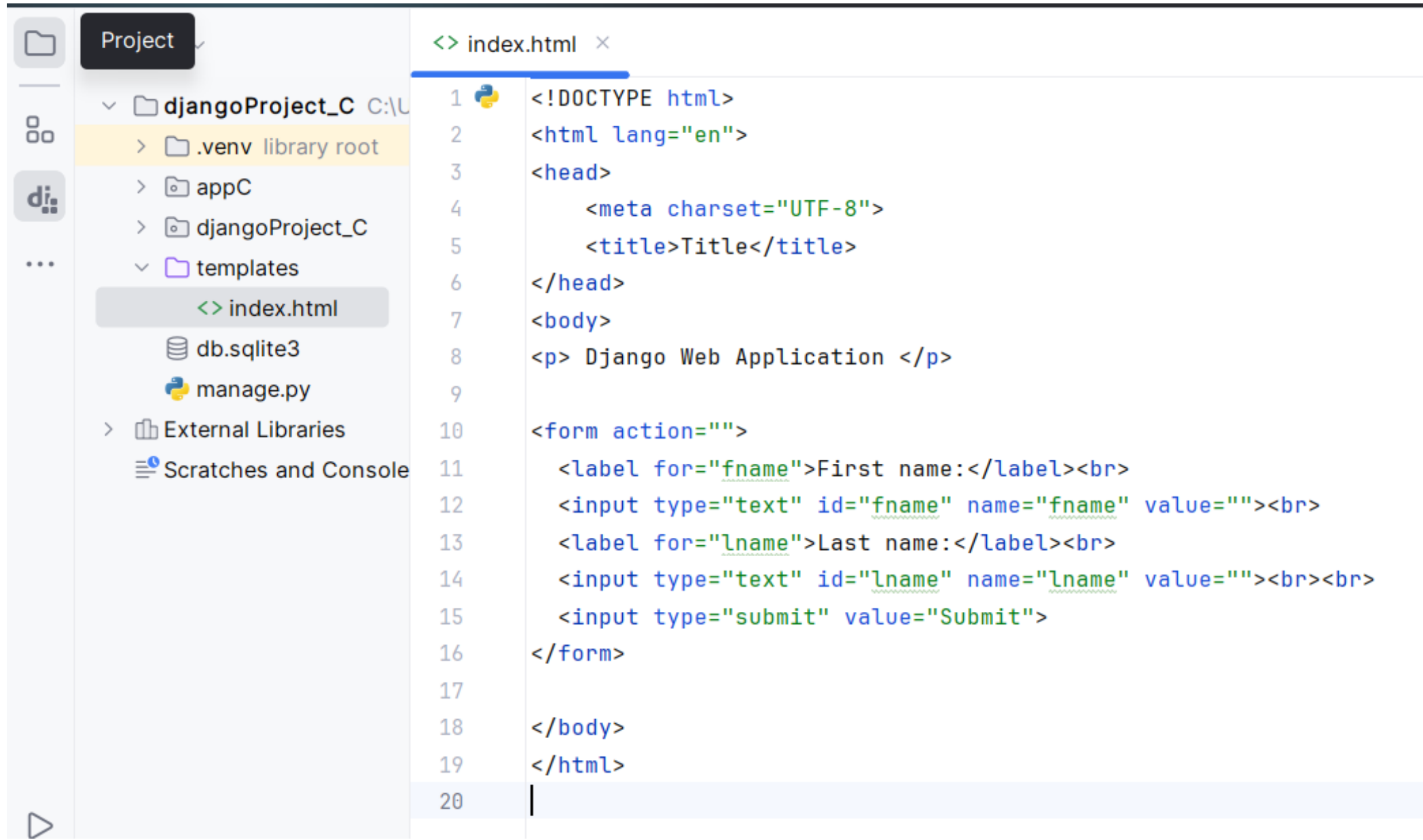


Enable Django admin

4

Create

# Create Template



The image shows a code editor interface with a project explorer on the left and a code editor on the right. The project explorer shows a Django project named 'djangoProject\_C' with a 'templates' directory. The 'index.html' file is selected in the 'templates' directory. The code editor displays the content of 'index.html', which is a basic HTML template for a Django web application. The template includes a DOCTYPE declaration, a head section with a meta charset and a title, a body section with a paragraph and a form. The form has three input fields: a text field for 'fname', a text field for 'lname', and a submit button. The form action is empty, and the input values are empty strings.

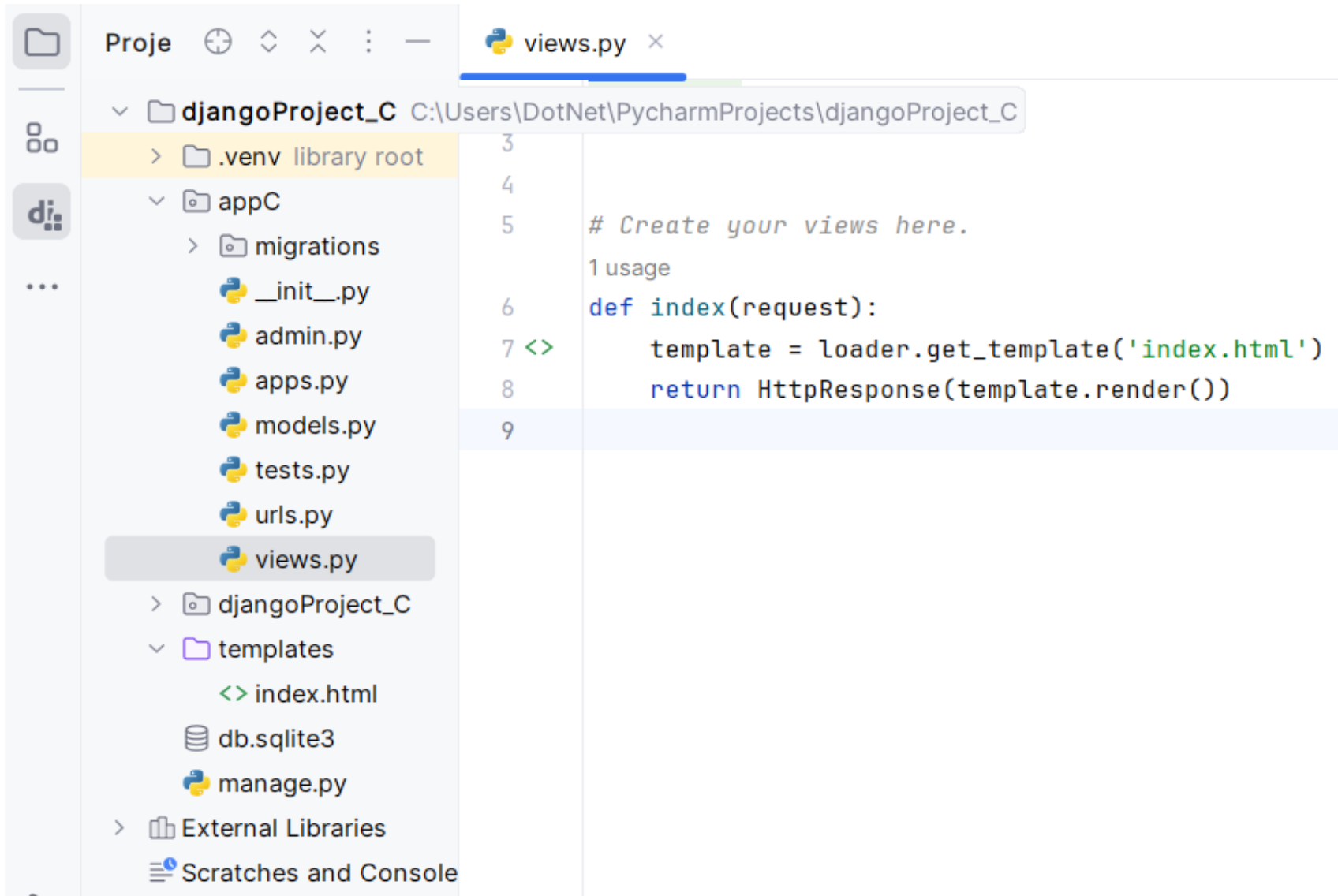
Project

- djangoProject\_C C:\U
  - .venv library root
  - appC
  - djangoProject\_C
  - templates
    - index.html
    - db.sqlite3
    - manage.py
  - External Libraries
  - Scratches and Console

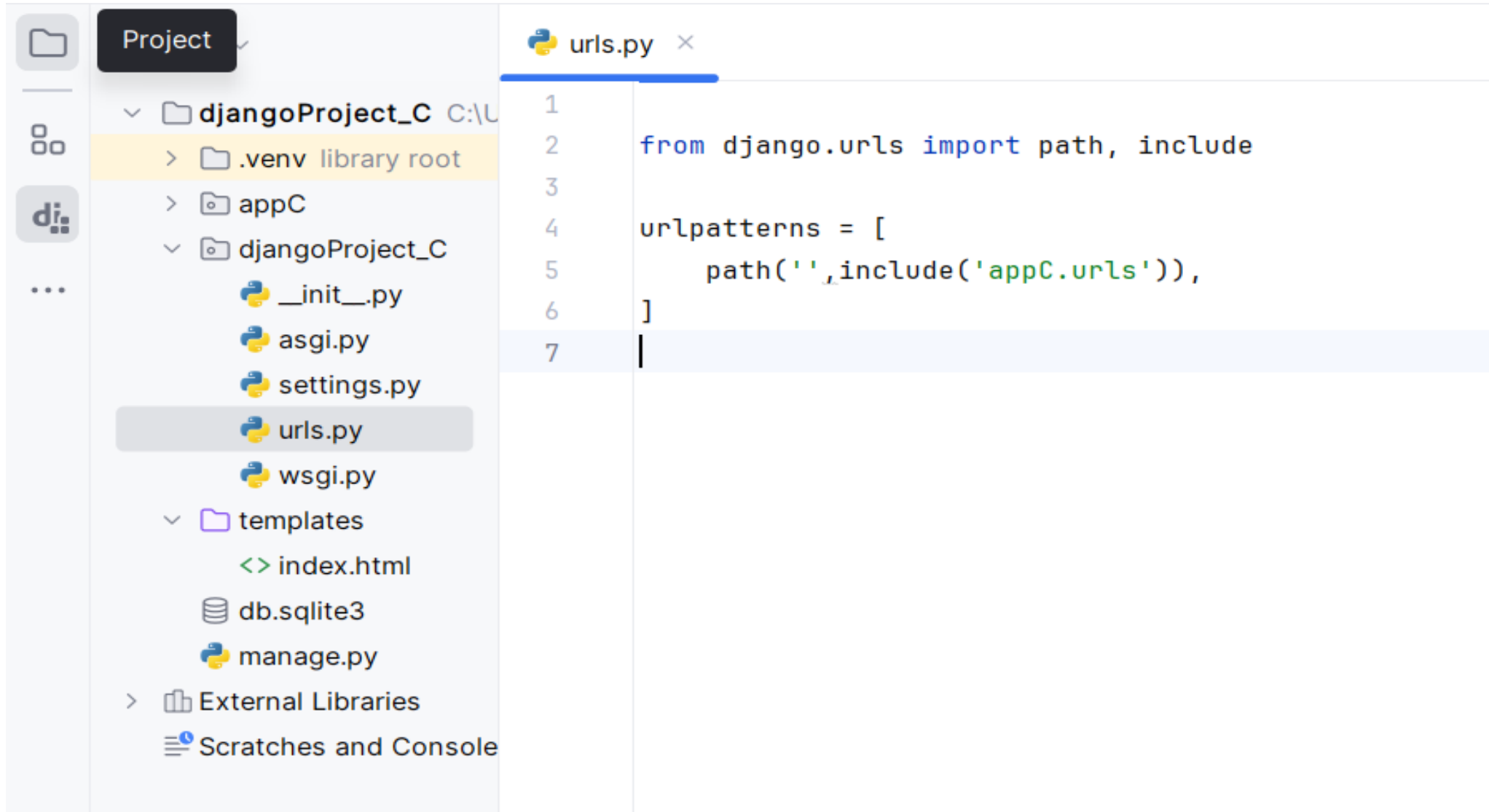
index.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <title>Title</title>
6 </head>
7 <body>
8 <p> Django Web Application </p>
9
10 <form action="">
11     <label for="fname">First name:</label><br>
12     <input type="text" id="fname" name="fname" value=""><br>
13     <label for="lname">Last name:</label><br>
14     <input type="text" id="lname" name="lname" value=""><br><br>
15     <input type="submit" value="Submit">
16 </form>
17
18 </body>
19 </html>
20
```

# Views



# Urls



The image shows a screenshot of an IDE interface. On the left, a file explorer pane displays the project structure. The 'Project' tab is active, showing a tree view of the project files. The file 'urls.py' is highlighted. On the right, the code editor shows the content of 'urls.py'.

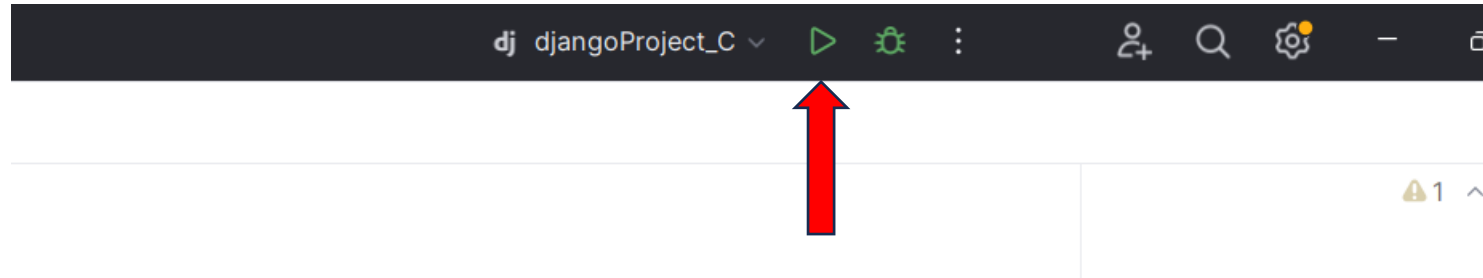
**Project Structure:**

- Project
  - djangoProject\_C
    - .venv library root
    - appC
    - djangoProject\_C
      - \_\_init\_\_.py
      - asgi.py
      - settings.py
      - urls.py
      - wsgi.py
    - templates
      - index.html
    - db.sqlite3
    - manage.py
  - External Libraries
  - Scratches and Console

**urls.py Code:**

```
1
2 from django.urls import path, include
3
4 urlpatterns = [
5     path('', include('appC.urls')),
6 ]
7
```

# Run Project



The image shows the terminal window of the PyCharm IDE. The terminal output is as follows:

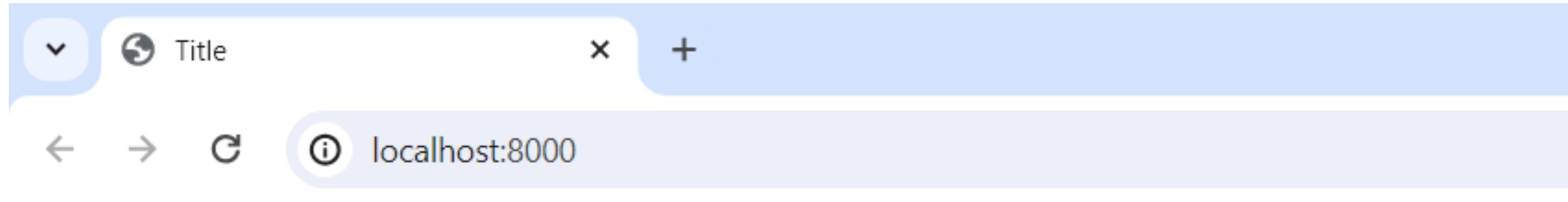
```
C:\Users\DotNet\PycharmProjects\djangoProject_C\.venv\Scripts\python.exe C:\Users\DotNet\PycharmProjects\dj
Performing system checks...

Watching for file changes with StatReloader
System check identified no issues (0 silenced).
May 17, 2024 - 23:39:22
Django version 4.2.13, using settings 'djangoProject_C.settings'
Starting development server at http://localhost:8000/
Quit the server with CTRL-BREAK.
```

A red arrow points upwards to the URL <http://localhost:8000/> in the terminal output.



# Output



Django Web Application

First name:

Last name:

Submit