

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

X

Pure Python

Python

Django 1

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 2Location: C:\Users\DotNet\PycharmProjects Project will be created in:
C:\Users\DotNet\PycharmProjects\djangoProject Create Git repository Create a main.py welcome scriptInterpreter type: Project venv Base conda Custom environmentPython 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 3Templates folder: templatesApplication name: Enable Django admin

4

Create

Create Template

The screenshot shows a code editor interface with a sidebar and a main workspace.

Project Sidebar:

- Project dropdown
- djangoProject_C (C:\U) folder
 - .venv library root
 - appC
 - djangoProject_C
 - templates
 - index.html
 - db.sqlite3
 - manage.py
- External Libraries
- Scratches and Console

Main Workspace:

File: index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Title</title>
</head>
<body>
    <p> Django Web Application </p>
    <form action="">
        <label for="fname">First name:</label><br>
        <input type="text" id="fname" name="fname" value=""><br>
        <label for="lname">Last name:</label><br>
        <input type="text" id="lname" name="lname" value=""><br><br>
        <input type="submit" value="Submit">
    </form>
</body>
</html>
```

Views

The screenshot shows the PyCharm IDE interface with a Django project named "djangoProject_C". The project structure is displayed in the left sidebar, and the code editor shows the "views.py" file.

Project Structure:

- djangoProject_C (root)
 - .venv (library root)
 - appC
 - migrations
 - __init__.py
 - admin.py
 - apps.py
 - models.py
 - tests.py
 - urls.py
 - views.py
 - templates
 - index.html
 - db.sqlite3
 - manage.py
- External Libraries
- Scratches and Console

Code Editor (views.py):

```
3
4
5 # Create your views here.
6 usage
7 <>
8     def index(request):
9         template = loader.get_template('index.html')
10        return HttpResponseRedirect(template.render())
```

Urls

The screenshot shows the PyCharm IDE interface with the following details:

- Project View:** On the left, the project tree shows a Django project structure:
 - djangoProject_C**:
 - .venv
 - appC
 - djangoProject_C**:
 - __init__.py**
 - asgi.py**
 - settings.py**
 - urls.py** (highlighted)
 - wsgi.py
 - templates
 - index.html
 - db.sqlite3
 - manage.py
 - urls.py Content:** The right pane displays the contents of the urls.py file.

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

Run Project

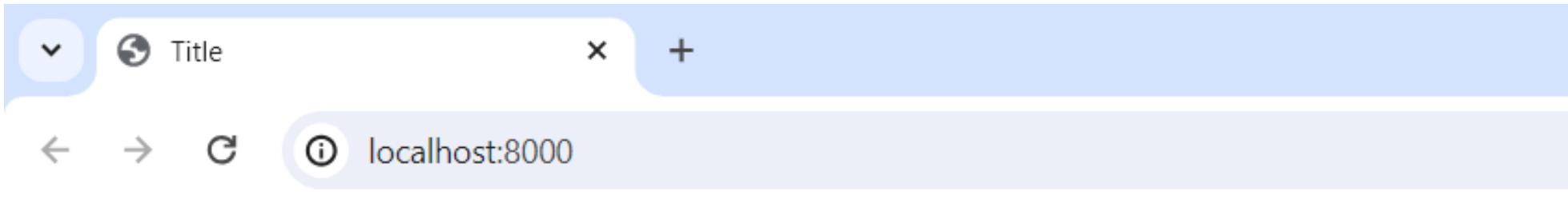
The screenshot shows the PyCharm IDE interface. At the top, there is a dark header bar with project navigation, file operations, and search functions. A red arrow points upwards from the bottom of this bar towards the toolbar icons.

The main area is a terminal window displaying the following output:

```
C:\Users\DotNet\PycharmProjects\djangoProject_C\.venv\Scripts\python.exe C:\Users\DotNet\PycharmProjects\djangoProject_C\manage.py runserver
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 second red arrow points upwards from the bottom of the terminal window towards the start of the log output.

Output



Django Web Application

First name:

Last name:

Submit