Django

Getting Started with Django: Creating a Project and App

Step 1: Setup Django Environment

- Make sure to install Python and Django before proceeding.

- To install Django use the following command:

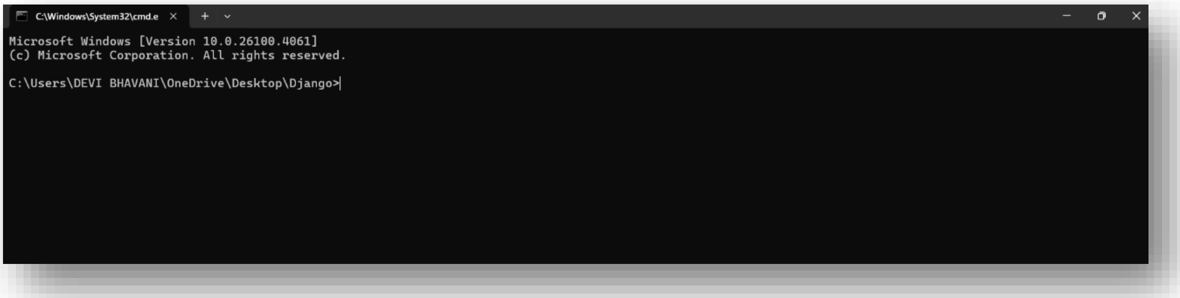
  - **pip install django**

Step 2: Create a folder for the Project

- Create a folder on your desktop to organize your work.

Step 3: Create a Django Project

- Open the command prompt and navigate to the folder you have created.



```
Microsoft Windows [Version 10.0.26100.4061]
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C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>
```
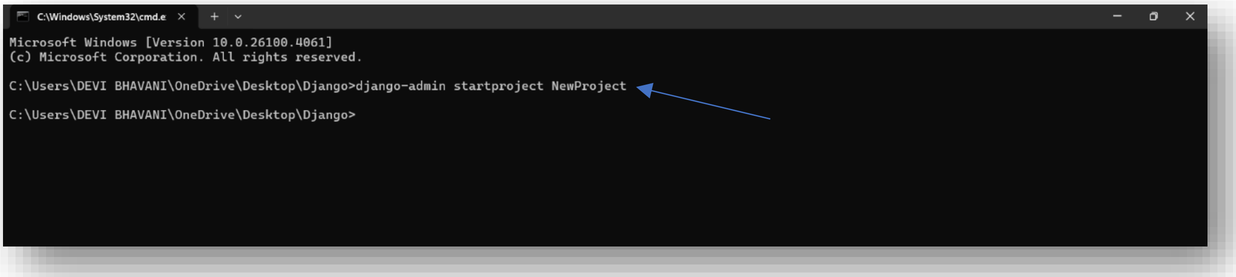

- Use the following command to create a Django project.
  - **django-admin startproject project_name**
- Use camel case notation for the project name.
- You can observe the command in the below figure.



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Microsoft Windows [Version 10.0.26100.4061]
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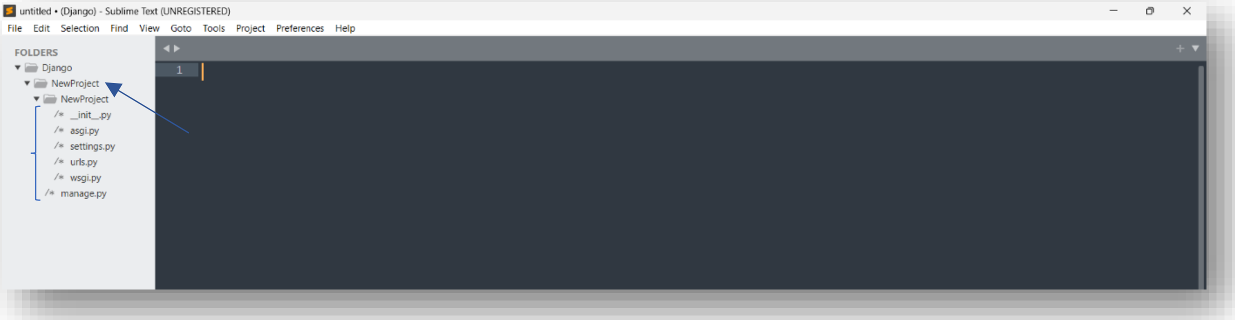
C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>django-admin startproject NewProject

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>
```

- ❖ Open the folder containing your project in any code editor such as Sublime Text, Visual Studio Code, or others.
- ❖ After opening the folder, you will see the following files and structure in the editor.



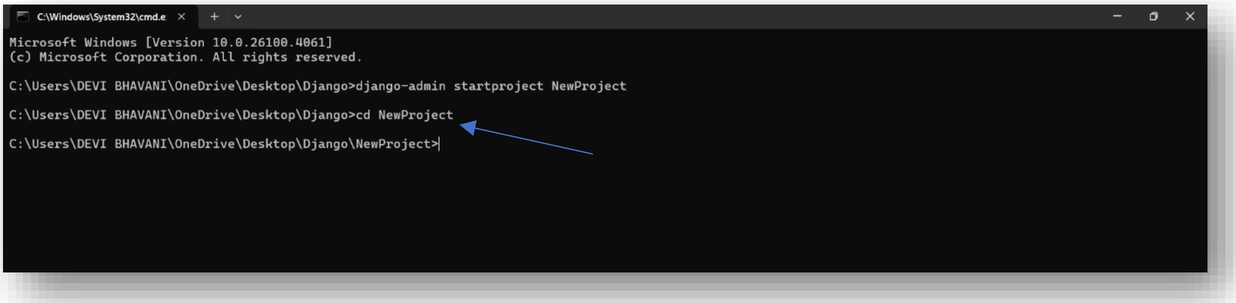
untitled • (Django) - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
FOLDERS
Django
NewProject
NewProject
__init__.py
asgi.py
settings.py
urls.py
wsgi.py
manage.py
1

- ❖ Here is an explanation of the files visible in the project directory structure.
  - ➢ **__init__.py :** An empty file that marks this directory as a Python package.
  - ➢ **asgi.py :** Used for deploying your project using ASGI (Asynchronous Server Gateway Interface).
  - ➢ **settings.py :** Contains all the settings and configuration for your Django project, such as installed apps, middleware, database settings, and templates.
  - ➢ **urls.py :** This file is used to define the URL patterns for your project. It maps URLs to their corresponding views.
  - ➢ **wsgi.py :** Used for deploying your project using WSGI (Web Server Gateway Interface).

- **manage.py :** This script is used to manage various aspects of your Django project. Without this python file, we can’t run the Django server. You use it to run the development server, create apps, and manage migrations.

Step 4: Create a Django App

- Navigate to the project directory which contains manage.py, is used to create app.
  - **cd project_name**



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Microsoft Windows [Version 10.0.26100.4061]
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C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>django-admin startproject NewProject

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>cd NewProject

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django\NewProject>
```
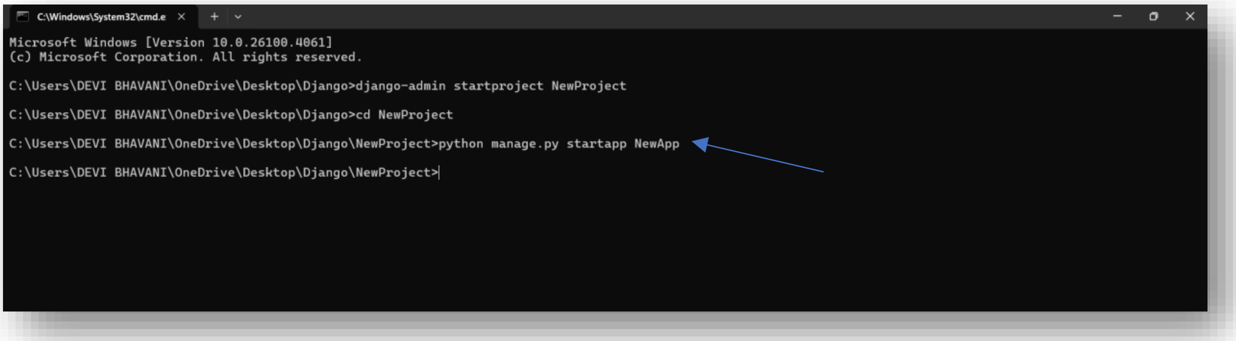

- Use the following command to create App
  - **python manage.py startapp app_name**
- You can observe the command in the below figure.



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Microsoft Windows [Version 10.0.26100.4061]
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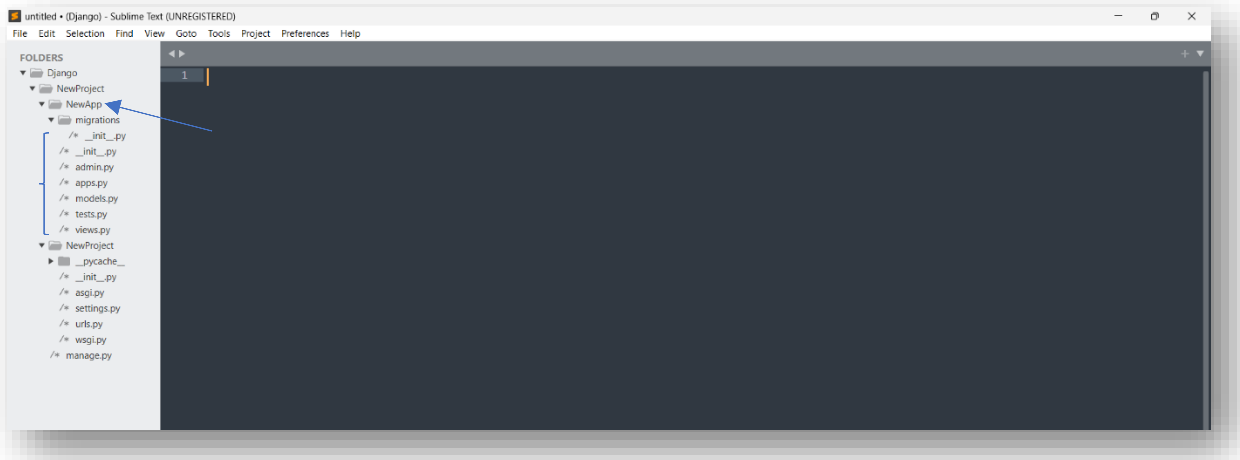
C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>django-admin startproject NewProject

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>cd NewProject

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django\NewProject>python manage.py startapp NewApp

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django\NewProject>
```

- After creating the App, you will see the following files and structure in the editor.



- Here is an explanation of the files
  - **__init__.py :** Identifies the folder as a Python package.
  - **admin.py :** Used to register models for the Django admin panel.
  - **apps.py :** Configures the app settings in the project.
  - **models.py** : Defines the database structure through models.
  - **tests.py :** Contains test cases to verify app functionality.
  - **views.py :** Handles HTTP requests and defines the app's logic for what users see.

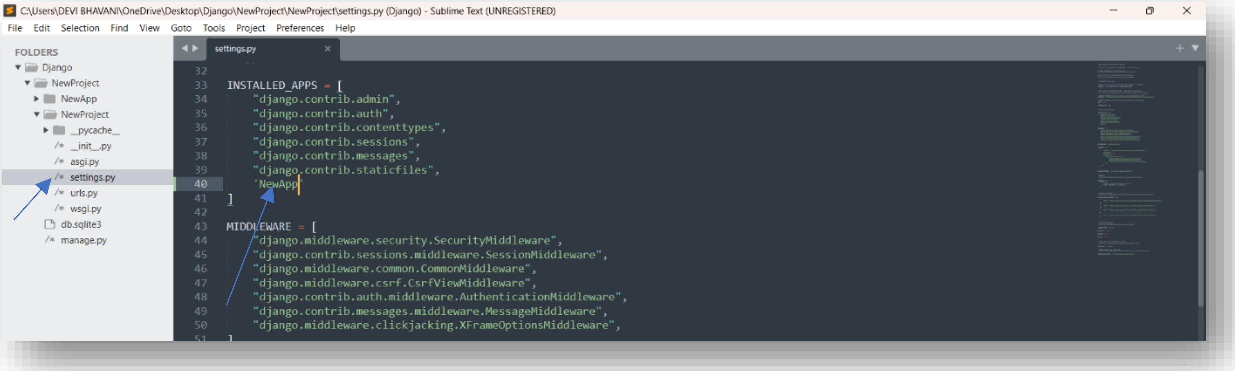
Step 5: Register the App

- Open the **settings.py** file located in the Django/NewProject/NewProject/ folder.
- Add your app_name to the INSTALLED_APPS list.
  - INSTALLED_APPS = [

    ...

    'app_name',

    ]



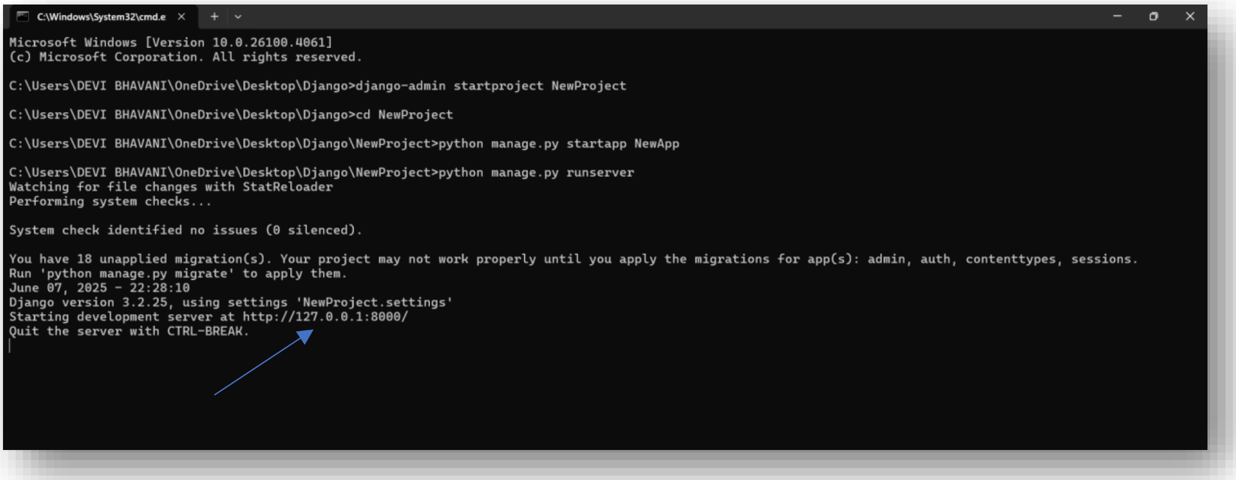
C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django\NewProject\NewProject\settings.py (Django) - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
FOLDERS
Django
NewProject
NewApp
NewProject
__pycache__
__init__.py
asgi.py
settings.py
urls.py
wsgi.py
db.sqlite3
manage.py
settings.py

```
INSTALLED_APPS = [
    "django.contrib.admin",
    "django.contrib.auth",
    "django.contrib.contenttypes",
    "django.contrib.sessions",
    "django.contrib.messages",
    "django.contrib.staticfiles",
    'NewApp'
]

MIDDLEWARE = [
    "django.middleware.security.SecurityMiddleware",
    "django.contrib.sessions.middleware.SessionMiddleware",
    "django.middleware.common.CommonMiddleware",
    "django.middleware.csrf.CsrfViewMiddleware",
    "django.contrib.auth.middleware.AuthenticationMiddleware",
    "django.contrib.messages.middleware.MessageMiddleware",
    "django.middleware.clickjacking.XFrameOptionsMiddleware",
]
```

How to run the Development Server

- Run the Server by using the following command
  - **python manage.py runserver**
- After running the command, you'll see output indicating that the starting development server at http://127.0.0.1:8000/



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Microsoft Windows [Version 10.0.26100.4061]
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C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>django-admin startproject NewProject

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django>cd NewProject

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django\NewProject>python manage.py startapp NewApp

C:\Users\DEVI BHAVANI\OneDrive\Desktop\Django\NewProject>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.
June 07, 2025 - 22:28:10
Django version 3.2.25, using settings 'NewProject.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```
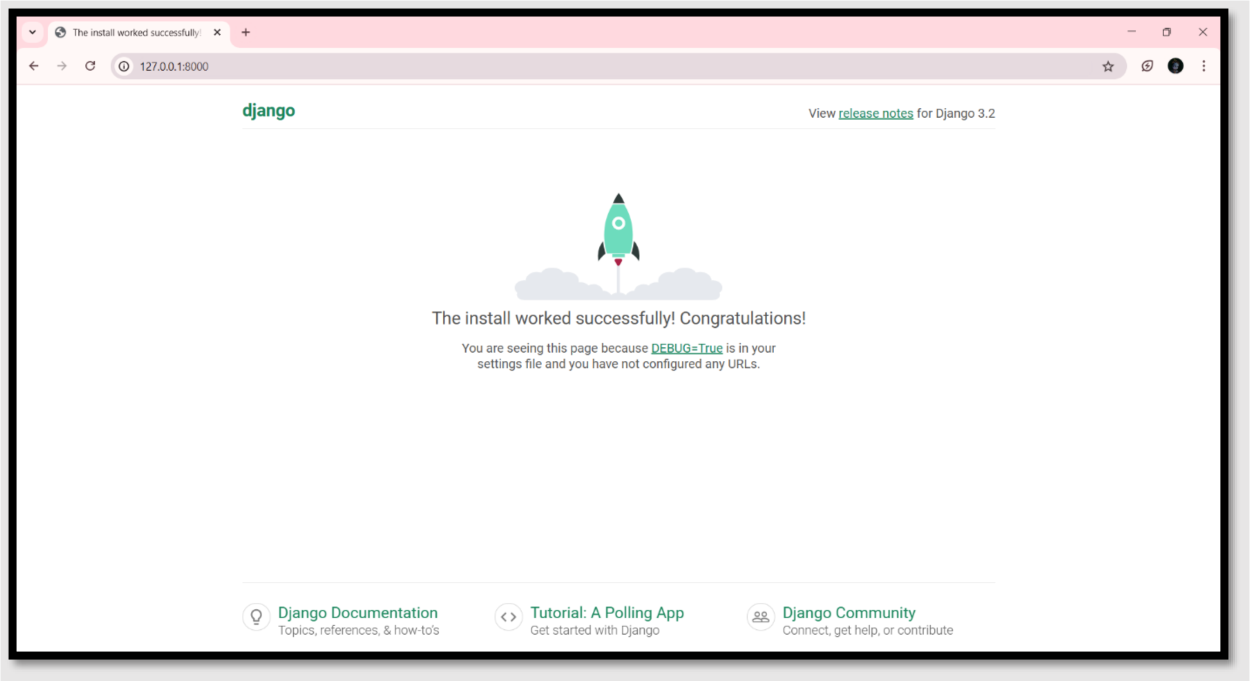

- Access the application
  - Open a browser and go to http://127.0.0.1:8000/
- You should see the Django welcome page.



django

View release notes for Django 3.2

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.

Django Documentation
Topics, references, & how-to's

Tutorial: A Polling App
Get started with Django

Django Community
Connect, get help, or contribute

❖ To stop the server, press **Ctrl+C**