



# Django Installation and Setup

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Installing and setting up Django is a straightforward process. Below are the step-by-step instructions to install Django and set up a new Django project on your system.

***Prerequisites:** Before installing Django, make sure you have [Python installed on your system](#).*

## How to Install Django?

To Install Django in Linux and Mac is similar, here I am showing it in Windows for Linux and Mac just open the terminal in place of the command prompt and go through the following commands.

### Step 1: Install Pip

Open the command prompt and enter the following command-

```
python -m pip install -U pip
```

```
C:\Windows\System32>python -m pip install -U pip
Requirement already satisfied: pip in c:\program files\python\python311\python.exe (23.2.1)
Collecting pip
  Using cached pip-24.0-py3-none-any.whl.metadata (3.1 kB)
Using cached pip-24.0-py3-none-any.whl (2.1 MB)
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 23.2.1
    Uninstalling pip-23.2.1:
      Successfully uninstalled pip-23.2.1
Successfully installed pip-23.3.2
```

*Install Pip*

## Step 2: Set Virtual environment:

Setting up the virtual environment will allow you to edit the dependency which generally your system wouldn't allow. Follow these steps to set up a virtual environment-

## Step 3: Create virtual environment in Django:

We should first go the directory where we want to create the [virtual environment](#) then we type the following command to create virtual environment in django.

```
python -m venv env_site
```

```
• (env_site) PS C:\Users\GFG0371\Downloads\New folder\geeks_site> python -m venv env_site
○ (env_site) PS C:\Users\GFG0371\Downloads\New folder\geeks_site> 
```

*Create Virtual Environment*

then we need to activate virtual environment in django

## Step 4: Activate the virtual environment:

Run the activation script located in the `bin` directory within the virtual environment folder

- For Windows:

```
.\env_site\Scripts\activate.ps1
```

- For MacOS/Linux:

```
source env_site/bin/activate
```

## Step 5: Install Django:

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```
pip install django
```

```
(env_site) PS C:\Users\GFG0371\Downloads\New folder> pip install django
Collecting django
  Using cached Django-5.0.3-py3-none-any.whl.metadata (4.2 kB)
Collecting asgiref<4,>=3.7.0 (from django)
  Using cached asgiref-3.8.1-py3-none-any.whl.metadata (9.3 kB)
Collecting sqlparse>=0.3.1 (from django)
  Using cached sqlparse-0.4.4-py3-none-any.whl.metadata (4.0 kB)
Collecting tzdata (from django)
  Using cached tzdata-2024.1-py2.py3-none-any.whl.metadata (1.4 kB)
Using cached Django-5.0.3-py3-none-any.whl (8.2 MB)
Using cached asgiref-3.8.1-py3-none-any.whl (23 kB)
```

*Install Django*

## Django Setup

Once Django is installed, we can start to create a new Django project.

### Step 1: Start a new Django Project

Start a project by following command-

```
django-admin startproject geeks_site
```

```
(env_site) PS C:\Users\GFG0371\Downloads\New folder> django-admin startproject geeks_site
(env_site) PS C:\Users\GFG0371\Downloads\New folder> cd geeks_site
```

*Start a new Project Django*

## Step 2: Navigate to the Project Directory

Change directory to `geeks_site`

```
cd geeks_site
```

```
(env_site) PS C:\Users\GFG0371\Downloads\New folder> django-admin startproject geeks_site  
(env_site) PS C:\Users\GFG0371\Downloads\New folder> cd geeks site
```

## Step 3: Start the server

Start the server by typing following command in cmd-

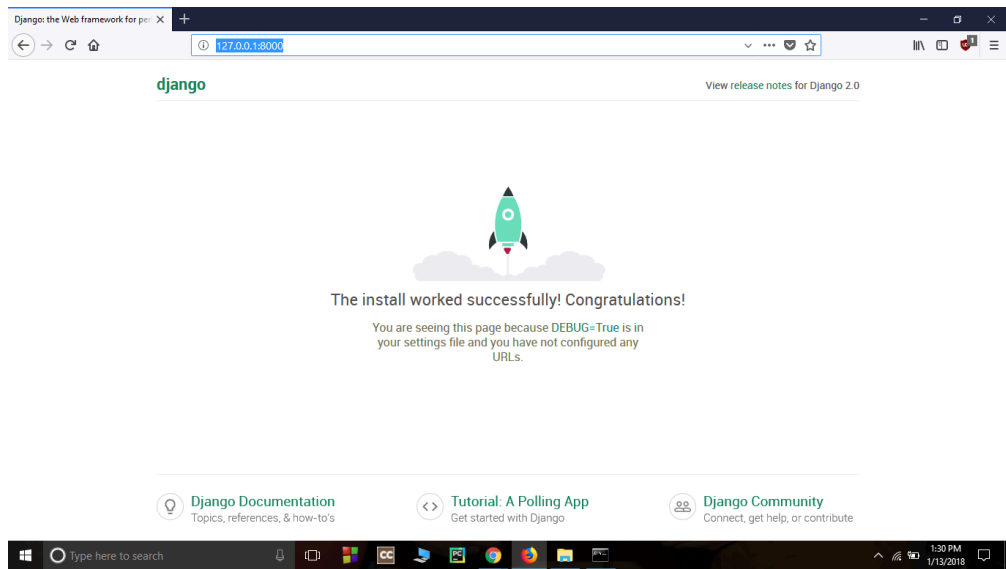
```
python manage.py runserver
```

```
(env_site) PS C:\Users\GFG0371\Downloads\New folder\geeks_site> 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.  
Run 'python manage.py migrate' to apply them.  
April 03, 2024 - 16:42:27  
Django version 5.0.3, using settings 'geeks_site.settings'  
Starting development server at http://127.0.0.1:8000/  
Quit the server with CTRL-BREAK.
```

*Start Django Server*

## Step 4: Verify Server Status

To check whether server is running or not go to web browser and enter `http://127.0.0.1:8000/` as URL.



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