



**django**



# **Managing static files (e.g. images, JavaScript, CSS) In Django**

Up to now we completed how to inject normal text data from python views.py to template file

**Requirement of Static file ?**

If we want to inject css , js , image file then we required static file

**what is static file ?**

Websites basically need to serve additional files such as images, JavaScript, or CSS. In Django, we refer to these files as “static files”.

Django provides `django.contrib.staticfiles` to help you manage them.

## Django Project : How to use Image file in Django

### Steps to include Static file(image) Project Level :

1. Create a folder named with 'static' in project level just like creating 'templates' folder
2. Create subfolder inside 'static' folder (you can create a subfolder named with 'images' then add image inside images folder)
3. Add static directory path into setting.py file , so that Django can aware of our images .

#### setting.py

```
from pathlib import Path
```

```
import os # import os manually
```

```
# Build paths inside the project like this: BASE_DIR / 'subdir'.
```

```
BASE_DIR = Path(__file__).resolve().parent.parent
```

```
TEMPLATE_DIR=os.path.join(BASE_DIR,'templates') # add this line
```



STATIC\_DIR=os.path.join(BASE\_DIR,'static') [# add this line](#)

## # Application definition

```
INSTALLED_APPS = [  
    'django.contrib.admin',  
    'django.contrib.auth',  
    'django.contrib.contenttypes',  
    'django.contrib.sessions',  
    'django.contrib.messages',  
    'django.contrib.staticfiles',  
    'staticApp' # add this app  
]  
  
TEMPLATES = [  
    {  
        'BACKEND': 'django.template.backends.django.DjangoTemplates',  
        'DIRS': [TEMPLATE_DIR], # add this line  
        'APP_DIRS': True,  
        'OPTIONS': {  
            'context_processors': [  
                'django.template.context_processors.debug',  
                'django.template.context_processors.request',  
                'django.contrib.auth.context_processors.auth',  
                'django.contrib.messages.context_processors.messages',  
            ],  
        },  
    ],  
]
```



# Static files (CSS, JavaScript, Images)

# <https://docs.djangoproject.com/en/3.2/howto/static-files/>

STATIC\_URL = '/static/' # already added by django

# Add this pre defined Variable STATICFILES\_DIRS

```
STATICFILES_DIRS = [  
    STATIC_DIR,  
]
```

4. Go to index.html which we created inside templates/staticApp folder then add {% load static %} after <!DOCTYPE html>

then we have to add image like this means we will add image by using



templates\staticApp\index.html

<!DOCTYPE html>

{% load static %}

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Static App projcets</title>

</head>

<body>

<h1>Working with static app projects</h1>





</body>  
</html>

#### **\staticApp\views.py**

```
from django.shortcuts import render
# Create your views here.
def displayData(request):
    return render(request, 'staticApp/index.html')
```

#### **\staticProject6\urls.py**

```
from django.contrib import admin
from django.urls import path
from staticApp import views

urlpatterns = [
    path('admin/', admin.site.urls),
    path('test/', views.displayData),
]
```

5. Run server see the out put

## **Django Project : How to use CSS file in Django**

### **Steps to include Static file(css) in Project Level :**

1. Create subfolder inside 'static' folder (you can create a subfolder named with 'css' then add style.css file inside css folder)

**Note:** other steps are completely same as previous Django project steps



**stetting.py**

all code same as previous project

**\templates\staticApp\index.html**

```
<!DOCTYPE html>
{% load static %}
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Static App projects</title>
  <!-- add this line -->
  <link rel="stylesheet" type="text/css" href="{% static 'css/style.css' %}">

</head>
<body>
  <h1>Working with static app projects</h1>
  
</body>
</html>
```

**\static\css\style.css**

```
body{
  background-color: turquoise;
}
.happyimg{
  height:450px;
```



```
width: 620px;  
}  
h1{  
  background-color: green;  
  text-decoration: underline;  
  border: 2px solid red;  
}
```

Note: all code same as previous project only here we made changes on index.html and we added a new file style.css

## Django Project : How to use JS file in Django

### Steps to include Static file(js) in Project Level :

1. Create subfolder inside 'static' folder (you can create a subfolder named with 'js' then add first.css file inside js folder)

Note: other steps are completely same as previous Django project steps

### stetting.py

all code same as previous project

### \templates\staticApp\index.html

```
<!DOCTYPE html>  
{% load static %}  
<html lang="en">  
<head>  
  <meta charset="UTF-8">  
  <meta http-equiv="X-UA-Compatible" content="IE=edge">  
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```



<title>Static App projcets</title>

<!-- add this line -->

<link rel="stylesheet" type="text/css" href="{% static 'css/style.css' %}">

</head>

<body>

<h1>Working with static app projects</h1>



<!-- add this line -->

<button onclick="myFunction()">Click me</button>

<!-- add this line -->

<script src="{% static 'js/first.js' %}"></script>

</body>

</html>

**\static\js\first.js**

function myFunction() {

    alert('Hy Thankx For clicking me')

}

Note: all code same as previous project only here we made changes on index.html and we added a new file first.js

## How to add Bootstrap CDN in Django

<!DOCTYPE html>

{% load static %}

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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





```
<!-- Bootstrap CSS -->
<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css/bootstrap.min.
css"
    integrity="sha384-
zCbKRCUGaJDkqS1kPbPd7TveP5iyJE0EjAuZQTgFLD2ylzuqKfdKlfG/eSrtxUkn"
crossorigin="anonymous">
<title>Welcome to Jini Blog Potal </title>
<link rel="stylesheet" type="text/css" href="{% static "css/index.css"%}">

</head>

<body>

<nav class="navbar navbar-expand-lg navbar-dark bg-dark">
    <a class="navbar-brand" href="#">Navbar</a>
    <button class="navbar-toggler" type="button" data-toggle="collapse"
data-target="#navbarSupportedContent"
        aria-controls="navbarSupportedContent" aria-expanded="false" aria-
label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
    </button>

    <div class="collapse navbar-collapse" id="navbarSupportedContent">
        <ul class="navbar-nav mr-auto">
            <li class="nav-item active">
                <a class="nav-link" href="#">Home <span class="sr-
only">(current)</span></a>
            </li>
            <li class="nav-item">
```

```
<a class="nav-link disabled text-warning">No.1 Bollywood Blog
Channel</a>
</li>
</ul>
<form class="form-inline my-2 my-lg-0">
  <button class="btn btn-success my-2 my-sm-0"
type="submit">Login</button>
</form>
</div>
</nav>
```

```
<h1 class="text-center mx-auto">Welcome to Jini Blog Application </h1>

<!-- all topic informations -->
<div class="container mt-4 ">
  <div class="row">
    <div class="col-lg">
      <button type="button" class="btn btn-primary"><a
href="/movies">Movie News</a></button>
    </div>
    <div class="col-lg">
      <button type="button" class="btn btn-secondary"><a
href="/cricket">Cricket News</a></button>
    </div>
    <div class="col-lg">
      <button type="button" class="btn btn-warning"><a
href="/education">Eductaion News</a></button>
    </div>
  </div>
</div>
```



```
<script
src="https://cdn.jsdelivr.net/npm/jquery@3.5.1/dist/jquery.slim.min.js"
  integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj
"
  crossorigin="anonymous"></script>
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/js/bootstrap.bundle.
min.js"
  integrity="sha384-
fQybjgWLrvvRgtW6bFIB7jaZrFsaBXjsOMm/tB9LTS58ONXgqbR9W8oWht/amn
pF"
  crossorigin="anonymous"></script>
</body>

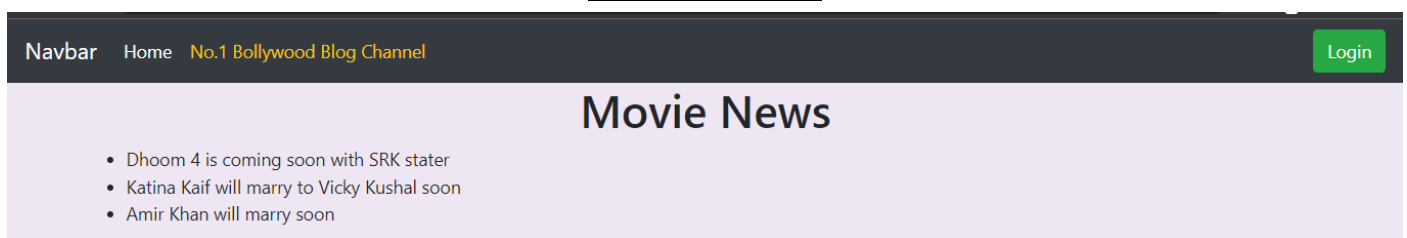
</html>
```

## Mini Project : Develop Jini Blog App

### Home Page



### Movie Page



### Cricket Page



# django



Navbar Home No.1 Bollywood Blog Channel

Login

## Cricket News

- IPL will start from 2022 march
- Rohit Sharma will be the next Indian Captain
- India will play next test series on Jan

## Education Page

Navbar Home No.1 Bollywood Blog Channel

Login

## Education News

- PhD is minimum qualification for Asst. Prof
- Now BTech CSE number 1 Branch in India
- IIT-Kanpur winter admission started from 20th Nov 2021

## Steps to develop Blog App

1. Create Django project & Django app then add this app inside setting.py file
2. Create templates and static folder in project level
3. Create 2 html file inside templates/blogApp  
index.html  
news.html
4. If required style then create css folder inside static folder and link css file to html

### setting.py

```
from pathlib import Path
import os
# Build paths inside the project like this: BASE_DIR / 'subdir'.
BASE_DIR = Path(__file__).resolve().parent.parent
TEMPLATE_DIR=os.path.join(BASE_DIR,'templates')
STATIC_DIR=os.path.join(BASE_DIR,'static')
```

```
INSTALLED_APPS = [
    'django.contrib.admin',
```



```
'django.contrib.auth',
'django.contrib.contenttypes',
'django.contrib.sessions',
'django.contrib.messages',
'django.contrib.staticfiles',
'blogApp'
]

TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [TEMPLATE_DIR],
        'APP_DIRS': True,
        'OPTIONS': {
            'context_processors': [
                'django.template.context_processors.debug',
                'django.template.context_processors.request',
                'django.contrib.auth.context_processors.auth',
                'django.contrib.messages.context_processors.messages',
            ],
        },
    },
]
```

# Static files (CSS, JavaScript, Images)

# <https://docs.djangoproject.com/en/3.2/howto/static-files/>

```
STATIC_URL = '/static/'
STATICFILES_DIRS=[
    STATIC_DIR,
]
```

## `\templates\blogApp\index.html`

```
<!DOCTYPE html>
{% load static %}
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <!-- Bootstrap CSS -->
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css/bootstrap.min.
css"
  integrity="sha384-
zCbKRCUGaJDkqS1kPbPd7TveP5iyJE0EjAuZQTgFLD2ylzuqKfdKlfG/eSrtxUkn"
crossorigin="anonymous">
  <title>Welcome to Jini Blog Potal </title>
  <link rel="stylesheet" type="text/css" href="{% static " css/index.css"%}">

</head>

<body>

  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
    <a class="navbar-brand" href="#">Navbar</a>
    <button class="navbar-toggler" type="button" data-toggle="collapse"
data-target="#navbarSupportedContent"
      aria-controls="navbarSupportedContent" aria-expanded="false" aria-
label="Toggle navigation">
```

```
<span class="navbar-toggler-icon"></span>
</button>
```

```
<div class="collapse navbar-collapse" id="navbarSupportedContent">
  <ul class="navbar-nav mr-auto">
    <li class="nav-item active">
      <a class="nav-link" href="#">Home <span class="sr-
only">(current)</span></a>
    </li>
    <li class="nav-item">
      <a class="nav-link disabled text-warning">No.1 Bollywood Blog
Channel</a>
    </li>
  </ul>
  <form class="form-inline my-2 my-lg-0">
    <button class="btn btn-success my-2 my-sm-0"
type="submit">Login</button>
  </form>
</div>
</nav>
```

```
<h1 class="text-center mx-auto">Welcome to Jini Blog Application </h1>
```

```
<!-- all topic informations -->
<div class="container mt-4 ">
  <div class="row">
    <div class="col-lg">
      <button type="button" class="btn btn-primary"><a
href="/movies">Movie News</a></button>
    </div>
    <div class="col-lg">
```



```
<button type="button" class="btn btn-secondary"><a href="/cricket">Cricket News</a></button>
```

```
</div>
```

```
<div class="col-lg">
```

```
<button type="button" class="btn btn-warning"><a href="/education">Eductaion News</a></button>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<script
```

```
src="https://cdn.jsdelivr.net/npm/jquery@3.5.1/dist/jquery.slim.min.js"
```

```
integrity="sha384-
```

```
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"
```

```
crossorigin="anonymous"></script>
```

```
<script
```

```
src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/js/bootstrap.bundle.min.js"
```

```
integrity="sha384-
```

```
fQybjgWLRvRgtW6bFlB7jaZrFsaBXjsOMm/tB9LTS58ONXgqbR9W8oWht/ampF"
```

```
crossorigin="anonymous"></script>
```

```
</body>
```

```
</html>
```

```
\templates\blogApp\news.html
```

```
<!DOCTYPE html>
```

```
{% load static %}
```





<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<!-- Bootstrap CSS -->

<link rel="stylesheet"

href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css/bootstrap.min.css"

integrity="sha384-

zCbKRCUGaJDkqS1kPbPd7TveP5iyJE0EjAuZQTgFLD2ylzuqKfdKlfG/eSrtxUkn"

crossorigin="anonymous">

<title>Welcome to Jini Blog Potal </title>

<link rel="stylesheet" type="text/css" href="{% static 'css/index.css'%}">

</head>

<body>

<nav class="navbar navbar-expand-lg navbar-dark bg-dark">

<a class="navbar-brand" href="#">Navbar</a>

<button class="navbar-toggler" type="button" data-toggle="collapse"

data-target="#navbarSupportedContent"

aria-controls="navbarSupportedContent" aria-expanded="false" aria-

label="Toggle navigation">

<span class="navbar-toggler-icon"></span>

</button>

<div class="collapse navbar-collapse" id="navbarSupportedContent">

<ul class="navbar-nav mr-auto">

<li class="nav-item active">

```

    <a class="nav-link" href="#">Home <span class="sr-
only">(current)</span></a>
  </li>
  <li class="nav-item">
    <a class="nav-link disabled text-warning">No.1 Bollywood Blog
Channel</a>
  </li>
</ul>
<form class="form-inline my-2 my-lg-0">
  <button class="btn btn-success my-2 my-sm-0"
type="submit">Login</button>
</form>
</div>
</nav>

```

```

<h1>{{heading}}</h1>

```

```

<div class="container">
  <ul>
    <li>{{news1}}</li>
    <li>{{news2}}</li>
    <li>{{news3}}</li>
  </ul>
</div>

```

```

<script
src="https://cdn.jsdelivr.net/npm/jquery@3.5.1/dist/jquery.slim.min.js"

```



```
integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj
"

crossorigin="anonymous"></script>
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/js/bootstrap.bundle.
min.js"
integrity="sha384-
fQybjgWLrvvRgtW6bFlB7jaZrFsaBXjsOMm/tB9LTS58ONXgqbR9W8oWht/amn
pF"
crossorigin="anonymous"></script>
</body>

</html>
```

**\blogApp\views.py**

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

```
# Create your views here.
```

```
def movieNews(request):
```

```
    dict={'heading':'Movie News',
'news1':'Dhoom 4 is coming soon with SRK stater',
'news2':'Katina Kaif will marry to Vicky Kushal soon',
'news3':'Amir Khan will marry soon '}
```

```
    return render(request,'blogApp/news.html',context=dict)
```

```
def cricketNews(request):
```

```
    dict={'heading':'Cricket News',
```



```
'news1': 'IPL will start from 2022 march',  
'news2': 'Rohit Sharma will be the next Indian Captain',  
'news3': 'India will play next test series on Jan'}
```

```
return render(request, 'blogApp/news.html', context=dict)
```

```
def educationNews(request):
```

```
    dict={'heading': 'Education News',  
        'news1': 'PhD is minimum qualification for Asst. Prof',  
        'news2': 'Now BTech CSE number 1 Branch in India',  
        'news3': 'IIT-Kanpur winter admission started from 20th Nov 2021'}
```

```
    return render(request, 'blogApp/news.html', context=dict)
```

```
def index(request):
```

```
    return render(request, 'blogApp/index.html')
```

```
\blogProject7\urls.py
```

```
from django.contrib import admin  
from django.urls import path  
from blogApp import views  
urlpatterns = [  
    path('admin/', admin.site.urls),  
    path('movies/', views.movieNews),  
    path('cricket/', views.cricketNews),  
    path('education/', views.educationNews),  
    path('index/', views.index),  
]
```