

Django Web Framework



NEWS PORTAL PROJECT

In this project we are going to use all the features we have learned till now.

[Templates, Template variable and tags, Views, URLs, Static files]

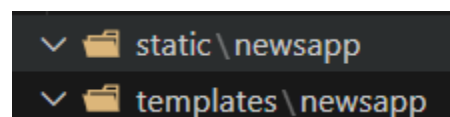
Practical 1- News Portal- A main page that has three sections – movies, technology and sports. And by clicking on one of the menu the user will be redirected to the particular page and can read the news.

Step 1: Create a new project and application. Configure application in settings.py.

```
C:\Users\LENOVO\Documents\djangocourse>django-admin startproject newsportalproject
C:\Users\LENOVO\Documents\djangocourse>cd newsportalproject
C:\Users\LENOVO\Documents\djangocourse\newsportalproject>python manage.py startapp newsapp
```

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

Step 2: Create templates and static folder at root directory and configure them in settings.py.



Configure templates-

```
'DIRS': [BASE_DIR, 'templates'],
```

Configure static files-

```
import os

STATIC_URL = 'static/'
STATIC_DIR=os.path.join(BASE_DIR, 'static')
STATICFILES_DIRS=[
    STATIC_DIR,
]
```

Step 3: Create our first template index.html.

```
templates > newsapp > index.html > html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>NEWS PORTAL</title>
7  </head>
8  <body>
9      <header>
10         <h1>ALL IN ONE NEWS PORTAL</h1>
11         <ul>
12             <li><a href="{%url 'movies'%}">Movies</a></li>
13             <li><a href="{%url 'technology'%}">Technology</a></li>
14             <li><a href="{%url 'sports'%}">Sports</a></li>
15         </ul>
16     </header>
17 </body>
18 </html>
```

Step 4: Create different views for the news category (movies, technology and sports) and one `index_view` for the home page.

```
def index_view(request):
    return render(request, 'newsapp/index.html')

def movies_view(request):
    movie_name="Jawan"
    lead_actor="Shahrukh Khan"
    Available_on="Netflix"
    article="As of May 13, 2024, Jawan has a worldwide total box office collection of over ₹1,148.32 crore (US$140 million), with ₹761.98 c
    context={
        'movie_name':movie_name,
        'actor':lead_actor,
        'available_on':Available_on,
        'article':article,
    }
    return render(request, 'newsapp/movies.html',context)

def technology_view(request):
    article="OpenAI launches GPT-4o, offering free access to users in India. The new model enhances human-computer interaction and supports
    context={
        'article':article,
    }
    return render(request, 'newsapp/technology.html',context)

def sports_view(request):
    article="KKR reaches to the final of the IPL 2024 by winning against SRH in the play-offs."
    context={
        'article':article,
    }
    return render(request, 'newsapp/sports.html',context)
```

Step 5: Map URLs with the views-

```
from django.urls import path
from newsapp import views

urlpatterns=[
    path('',views.index_view),
    path('movies/',views.movies_view,name='movies'),
    path('tech/',views.technology_view,name='technology'),
    path('sports/',views.sports_view,name='sports'),
]
```

```
from django.contrib import admin
from django.urls import path,include

urlpatterns = [
    path('admin/', admin.site.urls),
    path('',include('newsapp.urls'))
]
```

Step 6: Create template for movies, technology and sports

movies.html-

```

templates > newsapp > 📄 movies.html > 📄 html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Movie News</title>
7  </head>
8  <body>
9      <div class="content">
10         <h1>Latest Movie News</h1>
11         <ul>
12             <li>Name of the movie: {{movie_name}}</li>
13             <li>Lead actor: {{actor}}</li>
14             <li>Movie available on: {{available_on}}</li>
15             <li>{{article}}</li>
16         </ul>
17     </div>
18 </body>
19 </html>

```

technology.html-

```

templates > newsapp > 📄 technology.html > 📄 html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Technology News</title>
7  </head>
8  <body>
9      <div class="content">
10         {{article}} <br/>
11     </div>
12 </body>
13 </html>

```

sports.html-

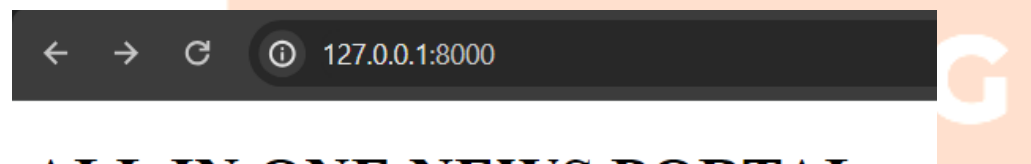
```

templates > newsapp > sports.html > html > head > title
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Sports News</title>
7  </head>
8  <body>
9      <div class="content">
10         {{article}} <br/>
11     </div>
12 </body>
13 </html>

```

Step 7: Start the development server and visit the URL-

python manage.py runserver



ALL IN ONE NEWS PORTAL

- [Movies](#)
- [Technology](#)
- [Sports](#)



Latest Movie News

- Name of the movie: Jawan
- Lead actor: Shahrukh Khan
- Movie available on: Netflix
- As of May 13, 2024, Jawan has a worldwide total box office collection of over ₹1,148.32 crore (US\$140 million), with ₹761.98 crore (US\$95 million) in India and ₹386.34 crore (US\$48 million) overseas. This makes it the fifth highest-grossing Indian film of all time and the second-biggest Bollywood movie at the global box office.






Now for styling and to add images we have to use static files. We already configured static files in settings.py at step-2.

Step 8: Update templates and create CSS file in static folder for styling.

```
templates > newsapp > index.html > html > head
1 <!DOCTYPE html>
2 {%load static%}
3 <html lang="en">
4 <head>
5     <meta charset="UTF-8">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>NEWS PORTAL</title>
8     <link rel="stylesheet" href="{%static 'newsapp/css/style.css'%}">
9 </head>
10 <body>
11 <header>
12     <h1>ALL IN ONE NEWS PORTAL</h1>
13 <ul>
14     <li><a href="{%url 'movies'%}">Movies</a></li>
15     <li><a href="{%url 'technology'%}">Technology</a></li>
16     <li><a href="{%url 'sports'%}">Sports</a></li>
17 </ul>
18 </header>
19 </body>
20 </html>
```


```
templates > newsapp > movies.html > html
1 <!DOCTYPE html>
2 {%load static%}
3 <html lang="en">
4 <head>
5     <meta charset="UTF-8">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>Movie News</title>
8     <link rel="stylesheet" href="{%static 'newsapp/css/movies.css'%}">
9 </head>
10 <body>
11 <div class="content">
12     <h1>Latest Movie News</h1>
13 <ul>
14     <li>Name of the movie: {{movie_name}}</li>
15     <li>Lead actor: {{actor}}</li>
16     <li>Movie available on: {{available_on}}</li>
17     <li>{{article}}</li>
18     <li></li>
19 </ul>
20 </div>
21 </body>
22 </html>
```

```

templates > newsapp >  technology.html >  html >  body >  div.content >  img
1  <!DOCTYPE html>
2  {%load static%}
3  <html lang="en">
4  <head>
5      <meta charset="UTF-8">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>Technology News</title>
8      <link rel="stylesheet" href="{%static 'newsapp/css/tech.css'%}">
9  </head>
10 <body>
11     <div class="content">
12         {{article}} <br/>
13         
14     </div>
15 </body>
16 </html>

```

```

templates > newsapp >  sports.html >  html >  body >  div.content >  img
1  <!DOCTYPE html>
2  {%load static%}
3  <html lang="en">
4  <head>
5      <meta charset="UTF-8">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>Sports News</title>
8      <link rel="stylesheet" href="{%static 'newsapp/css/sports.css'%}">
9  </head>
10 <body>
11     <div class="content">
12         {{article}} <br/>
13         
14     </div>
15 </body>
16 </html>

```

style.css-

```

static > newspapp > css > style.css > a:hover
1  header{
2      background-color: gray;
3      color: white;
4      padding: 15px;
5      text-align: center;
6  }
7
8  h1{
9      letter-spacing: 4px;
10     font-family: 'Times New Roman', Times, serif;
11 }
12
13 ul{
14     list-style-type: none;
15     display: flex;
16     justify-content: center;
17     align-items: center;
18 }
19
20 li{
21     display: inline-block;
22     margin-right: 20px;
23 }
24
25 a {
26     text-decoration: none;
27     color: #ecf0f1;
28     transition: border-bottom 0.3s ease;
29 }
30
31 a:hover {
32     border-bottom: 2px solid #ecf0f1; /* Light color for underline on hover */
33 }

```

movies.css-

```

static > newspapp > css > movies.css > ...
1  .content{
2      text-align: center;
3      font-family: 'Times New Roman', Times, serif;
4      border: 2px solid brown;
5  }
6
7  h1{
8      letter-spacing: 5px;
9      color: brown;
10     border-bottom: 2px solid brown;
11     font-weight: bold;
12 }
13
14 ul{
15     list-style-type: none;
16 }
17
18 li{
19     font-size: 20px;
20     color: black;
21 }
22
23
24 img{
25     margin-top: 10px;
26     height: 300px;
27     width: 400px;
28 }

```


tech.css-

```
static > newsapp > css > tech.css > img
1  .content{
2      text-align: center;
3      font-family: 'Times New Roman', Times, serif;
4      font-size:20px;
5      border: 2px solid brown;
6  }
7
8  img{
9      height:400px;
10     margin-top: 5px;
11     width:300px;
12 }
```

sports.css-

```
static > newsapp > css > sports.css > img
1  .content{
2      text-align: center;
3      font-family: 'Times New Roman', Times, serif;
4      font-size:20px;
5      border: 2px solid brown;
6  }
7
8  img{
9      height:400px;
10     margin-top: 5px;
11     width:300px;
12 }
```

Add images of your choice in the templates.

Step 9: Start the server and visit the web pages.

127.0.0.1:8000

ALL IN ONE NEWS PORTAL


MoviesTechnologySports

127.0.0.1:8000/movies/

Latest Movie News


Name of the movie: Jawan
Lead actor: Shahrukh Khan
Movie available on: Netflix

As of May 13, 2024, Jawan has a worldwide total box office collection of over ₹1,148.32 crore (US\$140 million), with ₹761.98 crore (US\$95 million) in India and ₹386.34 crore (US\$48 million) overseas. This makes it the fifth highest-grossing Indian film of all time and the second-biggest Bollywood movie at the global box office.




127.0.0.1:8000/tech/

OpenAI launches GPT-4o, offering free access to users in India. The new model enhances human-computer interaction and supports audio, vision, and text in real time.



127.0.0.1:8000/sports/

KKR reaches to the final of the IPL 2024 by winning against SRH in the play-offs.



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