

# Assignment-4: Django News Portal using NewsAPI

## Objective

Build a Django project that:

- Displays news categories.
- Fetches real-time news using NewsAPI.
- Renders news articles based on selected categories.

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## Required Setup and Commands

### Step-by-Step Setup

Step	Command / Action
1. Create project	<code>django-admin startproject newsproject</code>
2. Navigate into it	<code>cd newsproject</code>
3. Create app	<code>python manage.py startapp newsapp</code>
4. Run server	<code>python manage.py runserver</code>
5. Make migrations	<code>python manage.py makemigrations</code>
6. Migrate DB	<code>python manage.py migrate</code>

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## Folder Structure (Expected)

```
newsproject/
├── newsapp/
│   ├── views.py
│   └── urls.py
├── newsproject/
│   └── settings.py
├── templates/
│   ├── newsapp/
│   │   ├── base.html
│   │   ├── home.html
│   │   └── news_list.html
├── static/
└── newsapp/
```

```
|   └─ style.css
|   └─ db.sqlite3
|   └─ manage.py
```

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## □ API Key Setup Instructions

### 🔑 Get a NewsAPI Key

1. Visit: <https://newsapi.org>
  2. Sign up for a free account.
  3. Copy your API Key from the dashboard.
  4. Use the key in your views.py.
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## 🔗 URL Configuration

### 📁 Project-Level urls.py

```
# newsproject/urls.py
from django.contrib import admin
from django.urls import path, include
```

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

### 📁 App-Level urls.py

```
# newsapp/urls.py
from django.urls import path
from . import views
```

```
urlpatterns = [
    path("", views.home_view, name='home'),
    path('news/<str:category>/', views.news_view, name='news'),
]
```

URL	View	Description
/	home_view	Displays category list
/news/<category>/	news_view	Shows news for the selected category

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## ⚡ Static & Template Configuration

📖 Add to settings.py

# settings.py

import os

# Templates

TEMPLATES[0]['DIRS'] = [BASE\_DIR / 'templates']

# Static

STATICFILES\_DIRS = [BASE\_DIR / 'static']

## 📁 Folders to Create

Manually create:

- templates/newsapp/
- static/newsapp/

Put:

- All .html files inside templates/newsapp/
- style.css inside static/newsapp/

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## 🌐 News API Details

Attribute	Value
API URL	https://newsapi.org/v2/top-headlines
Required Params	country, category, apiKey
Sample	https://newsapi.org/v2/top-headlines?country=us&category=technology&apiKey=YOUR_KEY

Attribute	Value
Response	JSON with articles[]

## □ JSON Response Sample

```
{
  "status": "ok",
  "articles": [
    {
      "title": "Some News Title",
      "description": "Short summary",
      "url": "https://...",
      "urlToImage": "https://..."
    }
  ]
}
```

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## Instructions (Short & Clear)

1. Create Django project and app.
  2. Setup template & static folders as shown.
  3. Create category list in `home_view()`.
  4. Fetch news from NewsAPI in `news_view()`.
  5. Use `requests.get()` to get API data.
  6. Pass articles to the template.
  7. Use only basic template syntax, no template inheritance.
  8. Show category-wise news with image, description, and read-more link.
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# Deliverable

A working Django app where:

- Home page shows categories.
  - Clicking a category fetches and displays real news.
  - News is shown using title, description, image, and link.
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