

■ Assignment-4: News Portal using NewsAPI

■ Objective

Create a Django web application that displays a homepage with news categories and fetches real-time news using NewsAPI.

■ Project Structure Overview

newproject/ ■■■■ newapp/ ■■■■ newproject/ ■■■■ static/newapp/style.css ■■■■
templates/newapp/ ■ ■■■■ base.html ■ ■■■■ home.html ■ ■■■■ news_list.html ■■■■ db.sqlite3
■■■■ manage.py

■■■ Commands to Create Project and App

1. django-admin startproject newproject 2. cd newproject 3. python manage.py startapp newapp
4. Create 'templates/newapp/' and 'static/newapp/' folders manually. 5. In settings.py: - Add
'newapp' to INSTALLED_APPS - Add TEMPLATES DIR: BASE_DIR / 'templates' - Add
STATICFILES_DIRS = [BASE_DIR / 'static']

■ Steps to Get NewsAPI Key

1. Visit <https://newsapi.org> 2. Sign up for a free account 3. Go to Account → Copy your API key 4.
Example: b588106fbc340959933e546689cc32c

■ Assignment Instructions

1. Create Django project and app as shown. 2. Add templates and static folders properly. 3. Create
`home_view()` for category links. 4. Create `news_view()` to: - Call NewsAPI using requests. -
Extract 'articles' from JSON. - Pass to `news_list.html`. 5. Use 'us' as country in API call. 6. Test by
clicking links on homepage. 7. No use of filters or template inheritance. 8. Use your own API key.

■ Workflow Steps

Step	Action
1	Open homepage → see categories
2	Click a category → fetch news using API
3	API returns JSON → extract articles
4	Display articles in template

■ Project Level URLs

URL Pattern	Linked File	Description
admin/	admin.site.urls	Django Admin

	include('newsapp.urls')	Routes to app-level URLs
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■ App Level URLs

URL Pattern	View Function	Description
/	home_view	Shows category list
/news/<category>/	news_view	Shows news for category

■ NewsAPI Call Details

Parameter	Value
API Base URL	https://newsapi.org/v2/top-headlines
Params	country, category, apiKey
Example	https://newsapi.org/v2/top-headlines?country=us&category=technology&apiKey=YOUR_
Response Type	JSON