

Name:

PRN:

Batch:

PRACTICAL: 6

AIM: . Design a django project for “News App”

THEORY

INTRODUCTION:

In this practical we are going to design the news app, where we are going to be using news API and fetch all headline news from api.

STARTING THE PROJECT

To initiate a project of Django on Your PC, open Terminal and Enter the following command

```
django-admin startproject newsproject
```

A New Folder with the name projectName will be created. To enter in the project using the terminal enter command

```
cd newsproject
```

Now let's run the server and see everything is working fine or not. To run the server, type the below command in the terminal.

```
python manage.py runserver
```

CREATING APP

Till now we have created the Django project and now we will create an app. Django is famous for its unique and fully managed app structure. To create an app we need to go to the directory containing manage.py and run the following command –

```
python manage.py startapp newsapp
```

➤ **Settings.py:**

Add your app name in settings.py

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

    'newsapp',
]

TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [os.path.join(BASE_DIR, "templates")],
        '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',
            ],
        },
    ],
]
```

➤ **Urls.py:**

Now add your apps urls in the project

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

urlpatterns = [
    path("", views.index, name='index'),
    path('admin/', admin.site.urls),
]
```

➤ **Views.py:**

Create views.py in your app

```
from django.shortcuts import render
from newsapi import NewsApiClient
```

```

from .forms import NewsFilterForm

def news_list(request):
    api_key = 'e2286ca54ac749bb80e7a3c681a4d5e3' # Replace with your News
    API key
    newsapi = NewsApiClient(api_key=api_key)

    # Default values for country and category
    country = 'us'
    category = 'general'

    if request.method == 'GET':
        form = NewsFilterForm(request.GET)
        if form.is_valid():
            country = form.cleaned_data['country']
            category = form.cleaned_data['category']

    # Fetch news articles based on user selections
    articles = newsapi.get_top_headlines(country=country, category=category,
    page_size=10)

    return render(request, 'news_list.html', {'articles': articles['articles'], 'form': form})

```

➤ **index.html:**

Create a index.html in templates folder.

```

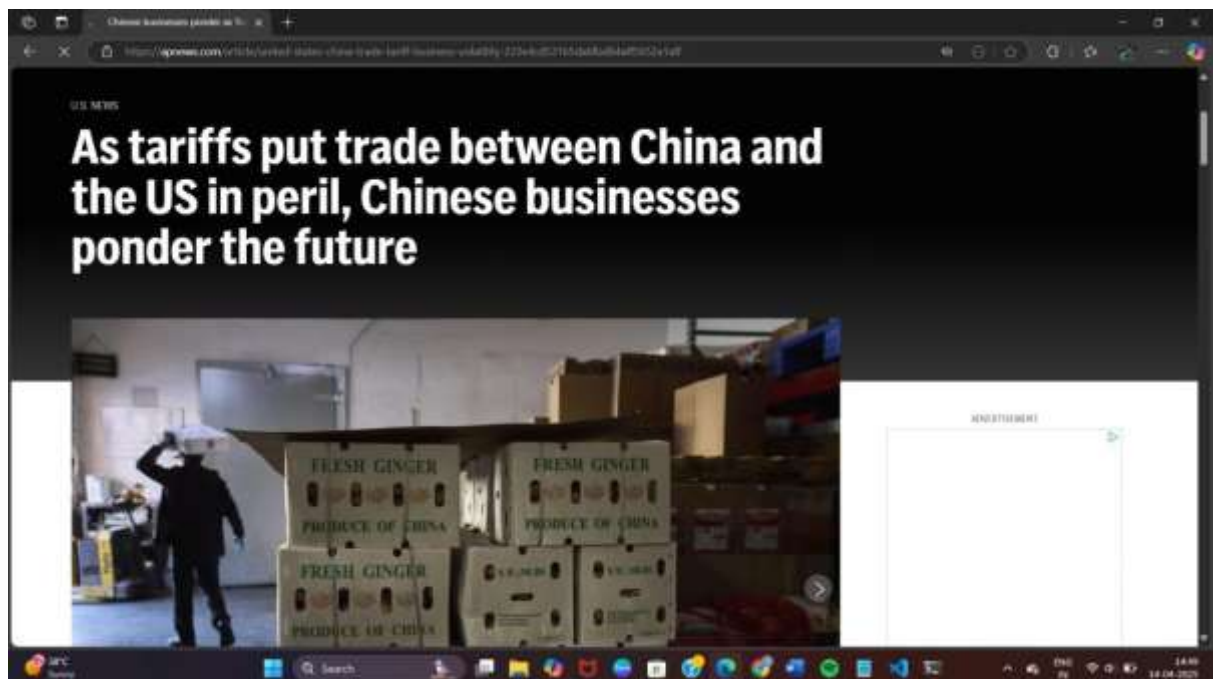
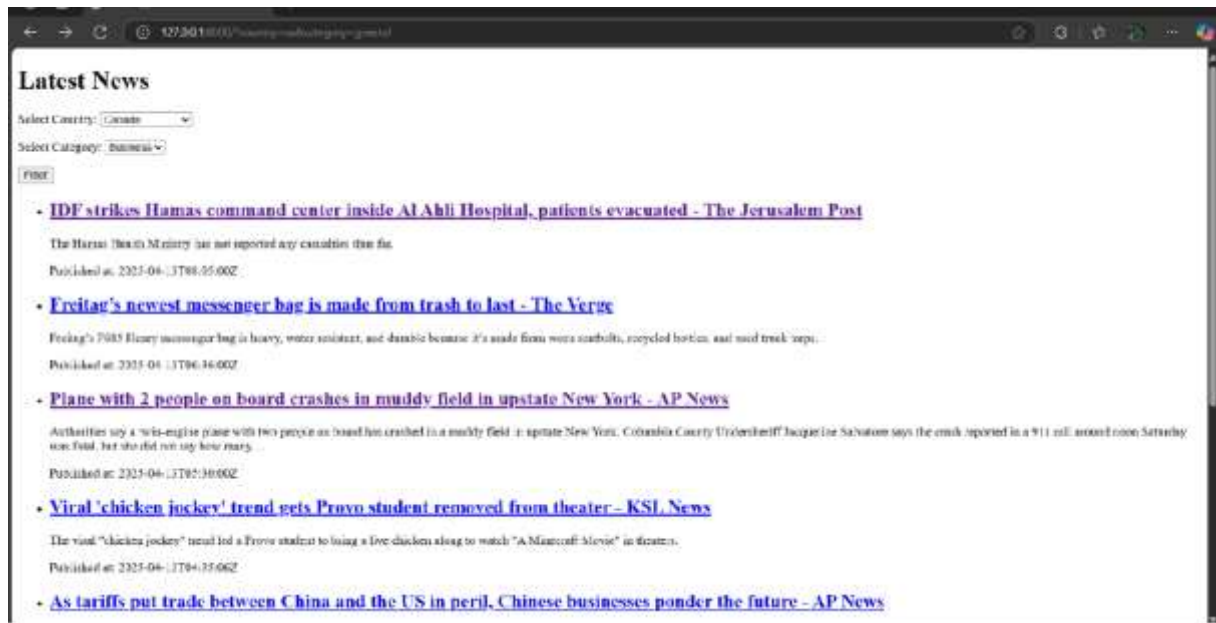
<!DOCTYPE html>
<html>
<head>
    <title>News App</title>
</head>
<body>
    <h1>Latest News</h1>

    <form method="get">
        {{ form.as_p }}
        <button type="submit">Filter</button>
    </form>

    <ul>
        {% for article in articles %}
        <li>
            <h2><a href="{{ article.url }}">{{ article.title }}</a></h2>
            <p>{{ article.description }}</p>
            <p>Published at: {{ article.publishedAt }}</p>
        </li>
        {% endfor %}
    </ul>
</body>
</html>

```

OUTPUT:



CONCLUSION:

Hence, in this practical we learnt to make news application in django

Sign of Teacher