



GENAI PROJECT UNIT-1

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SECTION: C

PROBLEM STATEMENT

TL;DR for News Articles

- **Goal:** Paste a long news article URL or text and get a 3-sentence summary.
- **Tech:** `distilbart` for speed.

ABSTRACT

This project implements an automated TL;DR (Too Long; Didn't Read) system for articles available online using Natural Language Processing techniques . The system uses pre-trained **DistilBART** transformer model to generate short summaries from long texts .

WHAT I UNDERSTOOD

News articles contain a lot of information that is background explanation , extended descriptions which are not necessary sometimes , BART understands the context of the article and sumamrises it while preserving the original meaning of text.

WHAT I BUILT

I built a news summarization tool using Hugging Face pipeline("summarization") API with the sshleifer/distilbart-cnn-12-6 model.

The system accepts long news article text as input and returns a summarized paragraph in

two to three lines as output.

It takes parameters such as `max_length` , `min_length` , `text` and `do_sample`

INPUT GIVEN

Who was Ajit Pawar?

Pawar, 66, was a key political figure and served as the second-highest elected official in Maharashtra, India's wealthiest state.

He was an ally of Prime Minister Narendra Modi's Bharatiya Janata Party (BJP) in the state government, leading a faction that split in 2023 from the opposition Nationalist Congress Party (NCP).

He wielded considerable influence in the state's sugar belt and was known for his ability to mobilise rural voters.

Born on July 22, 1959, Pawar started his political career with the Indian National Congress, commonly known as the Congress party, in the late 1980s, influenced by his uncle Sharad Pawar, according to a report in India's The Hindu newspaper.

In 1991, he was first elected as a member of the Maharashtra Legislative Assembly from the Baramati constituency, which he represented for a record eight terms.

In 1999, when his powerful uncle formed the NCP, Pawar joined it and served several terms as Maharashtra's deputy chief minister in coalitions led by the NCP over the past two decades.

OUTPUT RECEIVED

Ajit Pawar, 66, served as the second-highest elected official in Maharashtra . He was an ally of Prime Minister Narendra Modi's Bharatiya Janata Party (BJP) in the state government .

OUTPUT SCREENSHOT

pes2ug23cs148_genai_project.ipynb

File Edit View Insert Runtime Tools Help

Commands Code Text Run All

20s

✓ 20s

...

```
!./usr/local/lib/python3.12/dist-packages/huggingface_hub/utils/_auth.py:94: UserWarning:
The secret 'hf_TOKEN' does not exist in your Colab secrets.
To authenticate with the Hugging Face Hub, create a token in your settings tab (https://huggingface.co/settings/tokens), set it as secret in your Google Colab and restart your session.
You will be able to reuse this secret in all of your notebooks.
Please note that authentication is recommended but still optional to access public models or datasets.
warnings.warn(

config.json: 1.80K/7 [00:00<00:00, 25.4KB/s]

pytorch_model.bin: 100% 1.22Gi/1.22Gi [00:11<00:00, 268MB/s]

model.safetensors: 47% 569Mi/1.22Gi [00:09<00:18, 35.7MB/s]

tokenizer_config.json: 100% 26.0KiB/26.0KiB [00:00<00:00, 37.5KiB/s]

vocab.json: 899K/7 [00:00<00:00, 3.04MB/s]

merges.txt: 458K/7 [00:00<00:00, 3.94MB/s]
Device set to use cpu
```

14s

✓ 14s

```
article_text = """Who was Ajit Pawar?
Pawar, 66, was a key political figure and served as the second-highest elected official in Maharashtra, India's wealthiest state.

He was an ally of Prime Minister Narendra Modi's Bharatiya Janata Party (BJP) in the state government, leading a faction that split in 2023 from the opposition Nationalist Congress Party (NCP).

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In 1999, when his powerful uncle formed the NCP, Pawar joined it and served several terms as Maharashtra's deputy chief minister in coalitions led by the NCP over the past two decades."""
```

14s

✓ 14s

```
summary = summarizer(
    article_text,
    max_length=80, # controls summary size
    min_length=40, # avoids too short summaries
    do_sample=False # deterministic (good for exams)
)
```

17s

✓ 17s

```
print(f"TL;DR Summary:\n")
print(summary[0]["summary_text"])

TL;DR Summary:
Ajit Pawar, 66, served as the second-highest elected official in Maharashtra . He was an ally of Prime Minister Narendra Modi's Bharatiya Janata Party (BJP) in the state government .
```

Variables Terminal

✓ 12:30 AM Python 3