

PG-Diploma in Artificial Intelligence

Shruti : The News Companion



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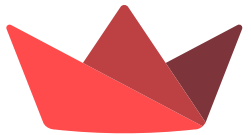
Objective

- **Classify the web scrapped news into a particular domain**
- **Automated News Summarization – Extract key points from news articles using BART.**
- **Text-to-Speech Conversion – Convert summarized news into speech using gTTS for an audio experience.**
- **Question-Answering from News – Allow users to ask questions about a news article using DistilBERT.**
- **User-Provided Text Summarization – Summarize any text input by the user for quick understanding**



Technologies Used

- **Programming Language: Python**
- **UI : Streamlit**
- **Machine Learning Models:**
 - BART (Hugging Face) – For news summarization**
 - DistilBERT (Hugging Face) – For question-answering**
 - Text-to-Speech (TTS): gTTS (Google Text-to-Speech)**
- **Main Libraries Used : Sklearn, Pandas, Nltk, Newspaper3k**





Snapshots

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☀ Shruti - The NEWS Companion ☀ ☰

India

World

Business

Technology

Sports

Generate Summary

About

About Shruti - The News Companion

Shruti is an innovative and comprehensive news companion that combines cutting-edge AI technologies to help users stay updated with the latest news, get quick summaries, and even interact with news content using question answering. 📰 🗨

GitHub Profiles:

- [👤 _Aryan.Pal](#)
- [👤 _Adarsh.Sharma](#)
- [👤 _Ashutosh.Awasthi](#)
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A NLP project. [GitHub Link](#). Disclaimer: Educational use only. Web scraping without authorization is not endorsed.




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India 📰

[Read Full Article](#)

🔪 Delhi assembly election results 2025: What worked for BJP and what did not for AAP?

📰 Bjp secured a resounding victory in all parliamentary constituency areas, winning 48 out of 70 assembly seats. Aam aadmi party, however, maintained a stronghold in muslim- and dalit-dominated constituencies. What seemed to have worked in favour of the bjp was the, middle class and factor (excise policy case)

💬 Ask a question about this article (Q0)

Who won the delhi election?

💡 Answer: Bjp

[🔊 Convert to Audio](#)

▶ 0:00 / 0:25

🔊 ⋮

🔪 KejriWall to KejriFall: How a crusader lost his way & vision

📰 Arvind kejriwal was an icon of hope for a new, fearless india. The multi-crore liquor case, which is still in court, led to kejriwal spending five months in tihar. Journalist ashutosh says that two things massively damaged kejriwal's image. Kejriwal created a positive playbook for freebies that exhilarated the lower-income classes.

💬 Ask a question about this article (Q1)



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Generate a Custom Summary

Enter text to summarize:

The final result of the effort was the PARAM 8000, released in 1991.[9]

The National Centre for Software Technology (NCST), Electronic Research and Development Centre (ER&DC) and CEDTI were merged into C-DAC in 2003.[

Summarize

Generated Summary:

C-dac was created in november 1987 as the centre for development of advanced computing technology. The us government refused to sell india a cray supercomputer due to concerns about india using it to develop nuclear weapons. In response india started development of its own supercomputer.

0:00 / 0:22

Your question about this summary:

Get Answer



Results

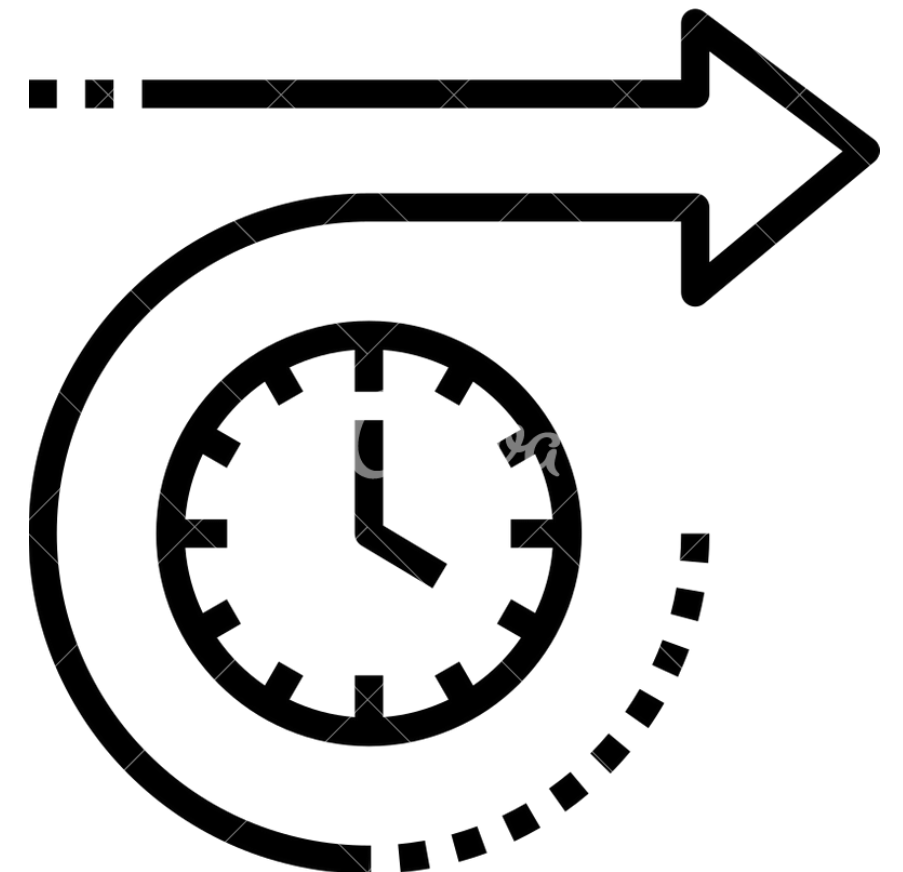
- **Concise News Summarization** – Extracts key information efficiently.
- **Natural Text-to-Speech** – Converts summaries into clear audio.
- **Interactive Q&A** – Answers user queries on news articles.
- **Custom Text Summarization** – Summarizes user-provided content.
- **Accurate News Classification** – Sorts articles into relevant categories.





Future Improvemnet

- **Future Improvements**
- **Enhance summarization accuracy with fine-tuned models**
- **Add multilingual support for broader accessibility**
- **Expand news classification with more categories**
- **Develop a mobile-friendly version**





References

- Lewis, M., Liu, Y., Goyal, N., et al. (2020). BART: Denoising Sequence-to-Sequence Pre-training for Natural Language Generation, Translation, and Comprehension. [arXiv:1910.13461](https://arxiv.org/abs/1910.13461)
- Sanh, V., Debut, L., Chaumond, J., Wolf, T. (2019). DistilBERT, a distilled version of BERT: smaller, faster, cheaper and lighter. [arXiv:1910.01108](https://arxiv.org/abs/1910.01108)



Thank You