



## Lazy Programming Series - Challenge 7

### Problem Statement: News-to-Audio Converter

In the era of fast-paced lifestyles and multitasking, staying updated with the latest news while engaged in other activities can be challenging. To address this issue, we aim to develop a News-to-Audio Converter program that fetches the latest news headlines and descriptions, converts them into audio format, saves the audio files, and provides the user with an option to listen to the news conveniently.

### Features:

1. **Latest News Retrieval:** The program will fetch the latest news headlines and descriptions from a reliable news source using an API (e.g., News API).
2. **Text-to-Speech Conversion:** It will utilize a Text-to-Speech (TTS) library (e.g., gTTS - Google Text-to-Speech) to convert the news text into audio format.
3. **Audio File Saving:** The program will save each news item as an audio file (e.g., MP3) for future playback.
4. **User Interface:** It will provide a simple user interface to interact with the program, allowing the user to choose whether to fetch the latest news, convert it to audio, and save the audio files.
5. **Playback Option:** The user will have the option to play the saved audio files to listen to the news conveniently.

### Implementation:

The program will be implemented in Python using the following libraries:



- `requests`: to make HTTP requests to fetch the latest news.
- `gTTS` (Google Text-to-Speech): to convert the news text into audio format.
- File I/O operations: to save the audio files locally.
- User input handling: to interact with the user and provide options for fetching, converting, and listening to the news.

## Usage:

1. Run the program.
2. Choose the option to fetch the latest news.
3. After fetching, select the option to convert the news to audio format.
4. The program will save each news item as an audio file.
5. Optionally, listen to the news by selecting the playback option.

## Expected Output:

- Audio files containing the latest news headlines and descriptions.
- User-friendly interface for interaction.
- Seamless conversion of text to audio format.
- Convenient playback option for listening to the news.

## CODE:

```
import requests
from gtts import gTTS
import os

def get_latest_news(api_key):
    try:
        # Make a GET request to the news API
```



```
url = f"https://newsapi.org/v2/top-
headlines?country=us&pageSize=10&apiKey={api_key
}"

response = requests.get(url)
data = response.json()

# Extract the latest news headlines and
descriptions
if data['status'] == 'ok' and
data['totalResults'] > 0:
    news_list = []
    for article in data['articles']:
        headline = article['title']
        description =
article['description']
        news_list.append((headline,
description))
    return news_list
else:
    return None
except Exception as e:
    print("Error:", e)
    return None

def read_news_in_audio(news_text, filename):
    try:
        # Initialize gTTS with news text
        tts = gTTS(news_text, lang='en')

        # Save the audio to the specified file
        tts.save(filename)
```



```
        print(f"News saved as {filename}")
    except Exception as e:
        print("Error:", e)

if __name__ == "__main__":
    # News API key (Get your API key from
    # https://newsapi.org/)
    NEWS_API_KEY = ""

    # Get the latest news
    news_list = get_latest_news(NEWS_API_KEY)

    # Check if news is available
    if news_list:
        for i, news in enumerate(news_list, 1):
            headline, description = news

            # Combine headline and description
            news_text = f"{headline}.
{description}"

            # Generate filename for the news
            filename = f"news_{i}.mp3"

            # Read the news in audio format and
            save
            read_news_in_audio(news_text,
            filename)
        else:
```



```
print("Failed to fetch the latest  
news.")
```

## **Output:**

```
C:\Users\saksh\PycharmProjects\pythonProject\.venv\Scripts\python.exe C:\Users\saksh\PycharmProjects\pythonProject\42.py  
News saved as news_1.mp3  
News saved as news_2.mp3  
News saved as news_3.mp3  
News saved as news_4.mp3  
News saved as news_5.mp3  
News saved as news_6.mp3  
News saved as news_7.mp3  
News saved as news_8.mp3  
News saved as news_9.mp3  
News saved as news_10.mp3
```