**📘 Wikipedia Article Summary Generator with Voice**

**📝 Overview**

This Python program fetches a brief summary from Wikipedia about a user-specified topic and reads it aloud using a text-to-speech (TTS) engine (pyttsx3). It also handles ambiguous queries, missing pages, and unexpected errors.

**💡 Features**

* 🌐 Search any topic using Wikipedia's API
* 📄 Generate a summary with a specified number of sentences (default is 5)
* 🔊 Listen to the summary read aloud using text-to-speech
* ❌ Handles disambiguation, missing pages, and other exceptions

**🧰 Requirements**

Install dependencies using

pip install Wikipedia pyttsx3

**🧠 Code Explanation and Implementation**

**📌 wiki\_summary\_voice.py**

python

import Wikipedia

import pyttsx3

def generate\_ summary(topic, num\_sentences=5):

try:

Wikipedia. Set\_ Lang("en")

search\_results = wikipedia.search(topic)

if not search\_results:

return None, "No results found for your query."

page\_title = search\_results[0] # Take the first result

summary = wikipedia.summary(page\_title, sentences=num\_sentences) # Get summary

return page\_title, summary

except wikipedia.exceptions.DisambiguationError as e:

options = ', '.join(e.options[:5])

return None, f"Disambiguation Error: Your query is ambiguous. Did you mean one of these?\n{options}..."

except wikipedia.exceptions.PageError

return None, "Page not found. Try a different topic."

except Exception as e:

return None, f"An unexpected error occurred: {e}"

def speak\_text(text):

engine = pyttsx3.init() # Initialize text-to-speech engine

engine.say(text)

engine.runAndWait()

if \_\_name\_\_ == "\_\_main\_\_":

print("🔍 Wikipedia Article Summary Generator with Voice")

topic = input("Enter a topic to search: ") # User input for topic

num\_sent = input("How many sentences should the summary have? (default 5): ")

if not num\_sent.isdigit():

num\_sent = 5

else:

num\_sent = int(num\_sent)

title, summary = generate\_summary(topic, num\_sent)

if title:

print(f"\n📘 Topic: {title}\n\n{summary}\n")

print("🔊 Reading the summary aloud...")

speak\_text(summary)

else:

print(summary)

speak\_text(summary)

**🧪 Sample Output**

**Input:**

Enter a topic to search: Artificial Intelligence

How many sentences should the summary have? (default 5): 5

**Output:**

📘 Topic: Artificial intelligence

Artificial intelligence (AI) is intelligence demonstrated by machines, unlike the natural intelligence displayed by humans and animals.

Leading AI textbooks define the field as the study of "intelligent agents": any system that perceives its environment and takes actions that maximize its chance of achieving its goals.

Some popular accounts use the term "artificial intelligence" to describe machines that mimic cognitive functions such as learning and problem-solving.

AI applications include advanced web search engines (e.g., Google Search), recommendation systems (used by YouTube, Amazon, and Netflix), understanding human speech (such as Siri and Alexa), self-driving cars (e.g., Waymo), and competing at the highest level in strategic games (such as chess and Go).

As machines become increasingly capable, tasks considered to require "intelligence" are often removed from the definition of AI, a phenomenon known as the AI effect.

🔊 Reading the summary aloud...

**⚠️ Error Handling**

| **Error Type** | **Description** |
| --- | --- |
| Disambiguation Error | Suggests alternative topics when input is too broad |
| Page Error | Informs when no matching Wikipedia page is found |
| Exception | Handles any other runtime or API errors |

**🧑‍💻 Author Info**

* **Language:** Python 3.7+
* **Libraries:** Wikipedia, pyttsx3
* **License:** MIT
* **Author:** Bandari Deeksha

**📌 Summary Table**

| **Component** | **Purpose** |
| --- | --- |
| generate\_summary() | Gets the article summary from Wikipedia |
| speak\_text() | Converts the text to speech using pyttsx3 |
| \_\_main\_\_ block | Orchestrates user input, output, and speech |