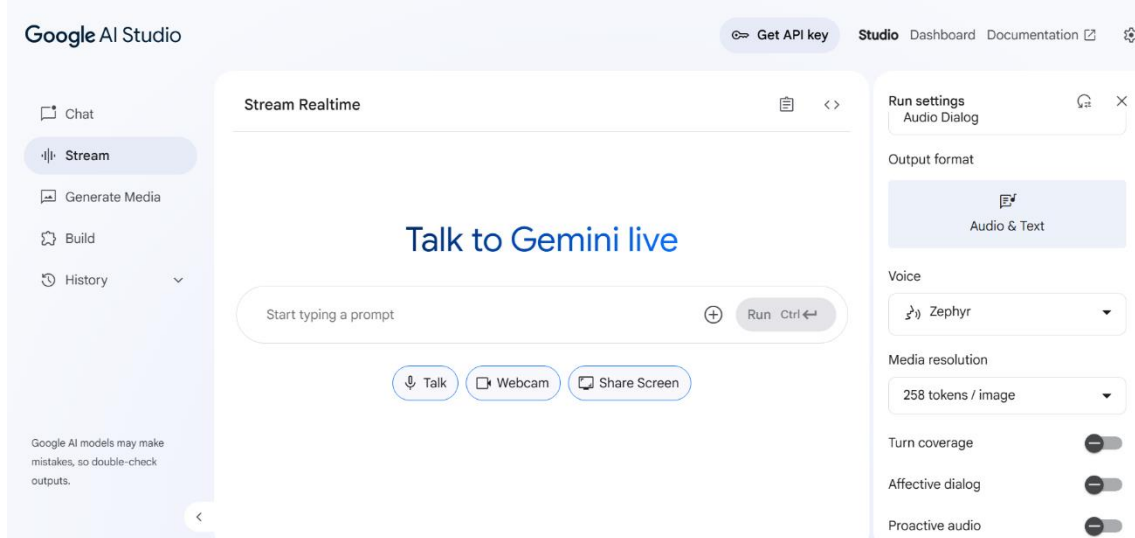


Google AI studio

Day – 7

Features of Google AI studio –



1. Talk to Gemini Live (Realtime Stream)

- Interact with Gemini AI in real time via text, voice, webcam, or screen sharing.
- You can type prompts or speak directly using the "Talk" button.

2. Output Formats

- Choose between:
 - Audio & Text (speech + text response)
 - Possibly Text-only or Audio-only (not shown in the screenshot, but usually available).

3. Voice Options

- Select the voice used for responses (e.g., Zephyr).
- Google provides several AI voices for more natural conversation.

4. Media Resolution

- Configure response detail like tokens per image (258 tokens/image shown).
- This controls how much descriptive data is tied to visual responses.

5. Dialog Settings

- Enable or disable:

- Turn Coverage: Handles response turns (e.g., multi-turn dialogue).
- Affective Dialog: Adds emotion/context-awareness to replies.
- Proactive Audio: AI may initiate/respond more naturally with sound.

Speech to Text –

```
import speech_recognition as sr

import google.generativeai as genai

# 🗝️ Configure Gemini API
genai.configure(api_key="AlzaSyDmnhTn1Daxz-_658fkk7iUjVciVSvmTEM")
model = genai.GenerativeModel(model_name="gemini-2.0-flash")

# 🎤 Initialize recognizer
recognizer = sr.Recognizer()

with sr.Microphone() as source:
    print("🎤 Please speak now...")
    recognizer.adjust_for_ambient_noise(source)
    audio = recognizer.listen(source)

    print("✅ Voice captured. Transcribing...")

# 🧠 Try transcription and Gemini
try:
    text = recognizer.recognize_google(audio)
    print("\n 📄 You said:", text)
    print("\n 🗣️ Gemini is replying...")
    response = model.generate_content(text)
    print("💬 Gemini says:\n", response.text)

    # 💾 Ask AFTER transcription
    save_choice = input("\n 💾 Do you want to save your audio as a file? (y/n): ").strip().lower()
```

```

if save_choice == 'y':
    audio_path = "user_audio.wav"
    with open(audio_path, "wb") as f:
        f.write(audio.get_wav_data())

    print(f"📁 Audio saved as: {audio_path}")
else:
    print(f"🗑️ Audio not saved.")

except sr.UnknownValueError:
    print(f"❌ Could not understand what you said.")

except sr.RequestError as e:
    print(f"❌ Speech Recognition error: {e}")

except Exception as e:
    print(f"⚠️ Unexpected error")

```

Output -

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

• 🗣️ Please speak now...
✅ Voice captured. Transcribing...

📄 You said: hello who is the president of India

🗣️ Gemini is replying...
💬 Gemini says:
The current president of India is **Droupadi Murmu**.

📄 Do you want to save your audio as a file? (y/n): y
📁 Audio saved as: user_audio.wav
PS C:\Users\deepa\OneDrive\Desktop\Speech>

```

