EX NO : 8 EXPLORATION OF PROMPTING TECHNIQUES FOR AUDIO GENERATION

REG NO: 212222040009

AIM

To explore how various prompting techniques can be used to generate and manipulate audio content (e.g., speech narration) using an AI model.

TOOLS USED

- **ElevenLabs – AI Text-to-Speech Engine**
  A state-of-the-art AI voice synthesis tool that creates realistic human-like speech using advanced prompt-based inputs. Offers voice cloning, emotion control, and multilingual support.

PROMPTING TECHNIQUES APPLIED

We tested **five distinct prompt types** with selected voices and tones to examine how prompt structure and emotional intent impact audio quality and realism.

PROMPT DETAILS

PROMPT TYPE	PROMPT	VOICE USED	TONE SELECTED
Emotional	"Even in the darkest moments, remember – hope is just around the corner."	Female – Bella	Calm, Warm
Instructional	"Please fasten your seatbelt and keep your hands inside the vehicle at all times."	Male – Josh	Clear, Formal
Narrative	"In a quiet village nestled among the hills, lived an old clockmaker with a magical secret."	Female – Emma	Storyteller

Motivational	"You are stronger than your fears. Keep moving forward, no matter what."	Male – Adam	Bold, Inspiring
Advertisement	"Discover freshness like never before – try our new eco-clean spray today!"	Female – Rachel	Friendly, Energetic

PROCEDURE

1. Opened ElevenLabs Studio and selected appropriate prebuilt or custom voices.

2. Inserted each prompt with a matching tone setting (calm, formal, inspiring, etc.).

3. Adjusted advanced parameters: **stability**, **style exaggeration**, and **clarity**.

4. Previewed outputs and exported final high-quality audio files for documentation.

ANALYSIS TABLE

PROMPT TYPE	VOICE USED	TONE SELECTED	OBSERVATIONS (AUDIO OUTPUT)
Advertisement	Female – Rachel	Friendly	Clear, engaging, enthusiastic. Ideal for marketing.
Emotional	Female – Bella	Calm, Warm	Soft, empathetic. Evoked emotional depth.
Instructional	Male – Josh	Formal	Precise and authoritative. Suitable for PA systems.
Narrative	Female – Emma	Storyteller	Rich expression, great pacing. Added dramatic storytelling feel.

| Motivational | Male – Adam | Confident | Powerful and inspiring delivery. Effective for speeches. |

OUTPUT

SUPPORTING MATERIALS:

The generated audio files corresponding to each prompt type have been compiled and are available via the following Drive link: 📁 PromptEngineering-Ex:No:7

A. AUDIO DELIVERABLES

- Five AI-generated audio files, each corresponding to the different prompts and use cases.

B. OBSERVATIONS

- Matching tone with message intent improves clarity and listener engagement.

- Female voices better suited for emotional and storytelling; male voices excelled in formal and motivational contexts.

- Adding stylistic details to prompts significantly improved expression and pacing.

C. OPTIMIZATION STRATEGIES

- Use emotionally descriptive adjectives in prompts.

- Select voice and tone based on context and audience.

- Adjust style exaggeration for stronger emphasis where needed.

RESULT

This experiment successfully demonstrated that **voice selection**, **tone setting**, and **prompt specificity** dramatically influence the realism and effectiveness of AI-generated audio using ElevenLabs. It validated that using **emotionally aware and context-specific prompts** produces highly targeted and professional-sounding results for narration, announcements, and storytelling.