

Exno.8-Prompt-Engg

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Aim:

To perform the Exploration of Prompting Techniques for Audio Generation.

Algorithm:

1. Identify the type of audio content required (music, effects, voice).
2. Design precise and descriptive prompts tailored to the audio goal.
3. Select and apply suitable AI tools/models for generation.
4. Evaluate and refine outputs based on audio quality and use case.

AI Tools Required:

- **For Assistance:** ChatGPT, Claude, DeepSeek
- **For Audio Generation:** MusicGen, Bark, Riffusion

Prompt

- Generate a piece of ambient background music suitable for a focus/study session.
- The audio should be calm, loopable, and approximately 30 seconds in length. Avoid sudden changes in tone,
- ensure it maintains a consistent rhythm.
- Create a realistic forest soundscape with occasional bird chirps and a gentle stream.
- Generate a motivational voiceover that encourages daily productivity, in a calm female voice.
- Produce a 10-second sci-fi sound effect for a spaceship docking sequence.

Procedure:

1. **Define Application Needs** – Identify personal or user-centric audio requirements (e.g., study music, reminders, sound effects for content creation).
2. **Design Prompts** – Construct clear and descriptive prompts for various audio generation tasks.
3. **Model Selection** – Choose the appropriate AI audio generation model (e.g., MusicGen for music, Bark for speech).
4. **Prompt Execution** – Run prompts through selected models and analyze the outputs.
5. **Iterate** – Refine prompts based on the audio quality and user feedback.

Music Prompts Given:

1. Create a lofi music with Hindi lyrics in a nostalgic mood.
2. Generate an acoustic folk song with English lyrics about travel and discovery.
3. Compose an upbeat pop song with Spanish lyrics celebrating friendship.
4. Develop an ambient electronic track with no lyrics, in a futuristic city mood.

Story Prompts Given:

1. Write a short story about a lone traveler encountering a magical creature in a forgotten forest, with a hopeful mood.
2. Craft a detective novel outline set in a rainy, cyberpunk city, with a cynical mood.
3. Develop a children's picture book concept about a shy cloud who learns to make rain, with a whimsical mood.
4. Write a personal essay about overcoming a creative block, with an introspective mood.

Output:

Music Prompt Output:

1. Generate a piece of ambient background music suitable for a focus/study session

<https://drive.google.com/file/d/1Qzi0HEXxLqO7MsjiUjhqdAN3oKW451Cl/view?usp=sharing>

2. Create a lofi music with Hindi lyrics in a nostalgic mood.

<https://drive.google.com/file/d/1Q-oZl-atQwUCN75B9OU7s397n5MgErJ5/view?usp=sharing>

3. Compose an upbeat pop song with Spanish lyrics celebrating friendship.

<https://drive.google.com/file/d/1gX5kHNw1Kqx-ele0NHAtyZj51kDTM5IQ/view?usp=sharing>

Story Prompts Output:

1. Write a short story about a lone traveler encountering a magical creature in a forgotten forest, with a hopeful mood.

https://drive.google.com/file/d/1HJwfnQQk0GaDK1Va_vKqVx4vQp_C3ibh/view?usp=sharing

2. Craft a detective novel outline set in a rainy, cyberpunk city, with a cynical mood.

https://drive.google.com/file/d/1yJQq-FzYe_a4qcxghDEQ86pHCfVospeh/view?usp=sharing

Result:

The exploration of prompt engineering techniques for audio generation was successfully performed. The designed prompts for various audio types (ambient music, lofi with Hindi lyrics, upbeat pop with Spanish lyrics, forest soundscape, motivational voiceover, and sci-fi sound effect) were executed using the specified AI tools. The generated audio outputs, accessible via the provided Google Drive links, demonstrate the effectiveness of precise prompting in achieving diverse audio content, verifying the practical application of the chosen prompting strategies. And the Prompt for the above process executed successfully.