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Experiment 9: Exploration of Prompting Techniques for Video Generation

Aim:

To explore and understand various prompting techniques used for generating videos through AI models, and to demonstrate how different prompt structures affect the quality, coherence, and style of the generated videos.

Tools Used:

• VEED IO- video generator

Procedure:

1. Familiarize Yourself with Video Generation Models:

o Explore tools like Runway Gen-2, Synthesia, Pictory, and DeepBrain.

o Understand the strengths and limitations of each platform (e.g., animation support, realism, voice generation, avatar use).

2. Create Simple Prompts for Video Generation:

o Start with general and minimal prompts to observe basic outputs.

o Example: “A person walking in a park.”

3. Experiment with More Detailed Prompts:

o Gradually add information about the scene such as the environment, clothing, or background details.

o Example: “A person in a red jacket walking on a sunny path with

birds flying above.”

4. Add Time and Motion Elements:

o Include actions, camera directions, or transitions to introduce movement.

o Example: “A time-lapse of the sun setting over the ocean with the camera slowly zooming out.”

5. Test Different Video Styles:

o Specify whether you want an animated, cinematic, realistic, or artistic output.

o Example: “An animated futuristic city with glowing lights and flying cars.”

6. Save and Compare Outputs:

o Document each version and analyze which prompt produced the most accurate or creative result.

Scenario 1: Futuristic Robot Cooking

1. Simple Prompt Version:

Prompt: "A robot cooking food in a kitchen."

• Output Observation: Basic animation of a humanoid robot at a stove. Limited details in kitchen setup or interaction.

2. Refined Prompt Version:

Prompt: "A silver humanoid robot cooking pasta in a sleek futuristic kitchen with glowing countertops and automated appliances moving in sync."

• Output Observation: Improved visuals, vibrant lighting, and cohesive futuristic setting. Robot actions appeared more deliberate and engaging.

3. Time and Motion Enhanced Version:

Prompt: "An animated video showing a futuristic robot chef cooking pasta in a neon-lit kitchen. The camera starts with a wide shot, then zooms into the

robot’s hands as it stirs a pot with steam rising. Robotic arms rotate, appliances beep, and soft techno music plays in the background."

• Output Observation: Excellent detail and timing. Motion elements like steam, arm movement, and music sync provided a cinematic and engaging narrative.

Drive links –

1. https://drive.google.com/file/d/1TjuS51HDGSnM7p3PmJJggCebvKEC1HWg/view?usp=sharing

Conclusion:

This experiment demonstrates that prompt structure significantly impacts video generation results. Simple prompts yield basic scenes, while detailed prompts enhance realism and engagement. Incorporating motion, time progression, and style brings dynamic richness to videos. Moreover, even small prompt variations lead to distinct visual and thematic interpretations.