Week 9 Assignment: Capstone Project Part 3.3

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Part 1:

Pair 1

Base Prompt:

portrait of a young woman with blonde hair

- **Detail Level:**
  The image produced with the base prompt had a relatively smooth and generic appearance. Facial features were clear but lacked fine detail- especially in the hair texture and eye definition. It looked like a simplified rendering, typical of a default AI-generated portrait.
- **Lighting Quality:**
  Lighting appeared ambient and undefined. There was no specific source or direction, which resulted in a flat look with minimal contrast or visual interest.
- **Overall Mood:**
  The image conveyed a neutral and somewhat bland mood. Without any stylistic cues or atmosphere, it felt emotionally flat and impersonal.
- **Professional Feel:**
  It resembled a stock photo or a placeholder image. While serviceable, it did not have the polish or realism of a professional portrait.

Technical Prompt:
portrait of a young woman with blonde hair, shot on Hasselblad H6D, 80mm lens at f/2.8, natural window light, Kodak Portra 400 film simulation, shallow depth of field

- **Detail Level:**
  The addition of technical descriptors significantly improved the visual fidelity. Hair strands, skin texture, and background separation were noticeably more refined. The shallow depth of field contributed to a strong subject-background contrast.
- **Lighting Quality:**
  The use of "natural window light" introduced soft, directional lighting that enhanced facial features and added subtle highlights. Shadows fell realistically, improving dimensionality.
- **Overall Mood:**
  This version felt much warmer and more intimate. The film simulation introduced a soft tonal quality that added emotional depth.
- **Professional Feel:**
  The result closely resembled a high-quality editorial portrait. It felt intentional and professionally composed, with clear influence from both equipment and lighting choices.

Pair 2

Base Prompt:
modern city street at night

- **Detail Level:**
  While the image effectively captured a nighttime setting, the scene lacked sharpness and depth. Architectural elements were present but minimally defined, and surface details (e.g., textures, reflections) were understated or missing.
- **Lighting Quality:**
  The lighting felt generalised, without emphasis on any particular light source. Shadows were muted and the image lacked contrast, leading to a somewhat washed-out appearance.
- **Overall Mood:**
  The mood feels like a developed, bustling city, with people eating at roadside restaurants, or walking on the road, with vehicles also moving, in the backdrop of tall skyscrapers.
- **Professional Feel:**
  The result was basic and felt closer to a conceptual sketch than a polished visual. It did not exhibit the characteristics of a professional-grade cityscape photo.

Technical Prompt:
modern city street at night, Sony A7R IV, 24mm f/1.4 lens, long exposure, high contrast, neon reflections on wet pavement, 8K resolution

- **Detail Level:**
  This version introduced far more clarity and precision. Architectural details were sharply rendered, and the street scene came alive with layered textures and realistic lighting effects. The wet pavement and neon reflections added significant visual interest.
- **Lighting Quality:**
  The “long exposure” and “high contrast” elements elevated the lighting dramatically. Highlights and shadows were dynamic, and the neon lighting gave the image a vivid, stylized appearance.
- **Overall Mood:**
  The atmosphere felt cinematic and immersive- like a sci-fi film. The technical choices created a strong sense of place and time.
- **Professional Feel:**
  The result was visually compelling and well-composed, easily comparable to a high-end urban nightscape photo. It demonstrated a clear leap in artistic quality, driven by precise technical prompting.

Part 2:

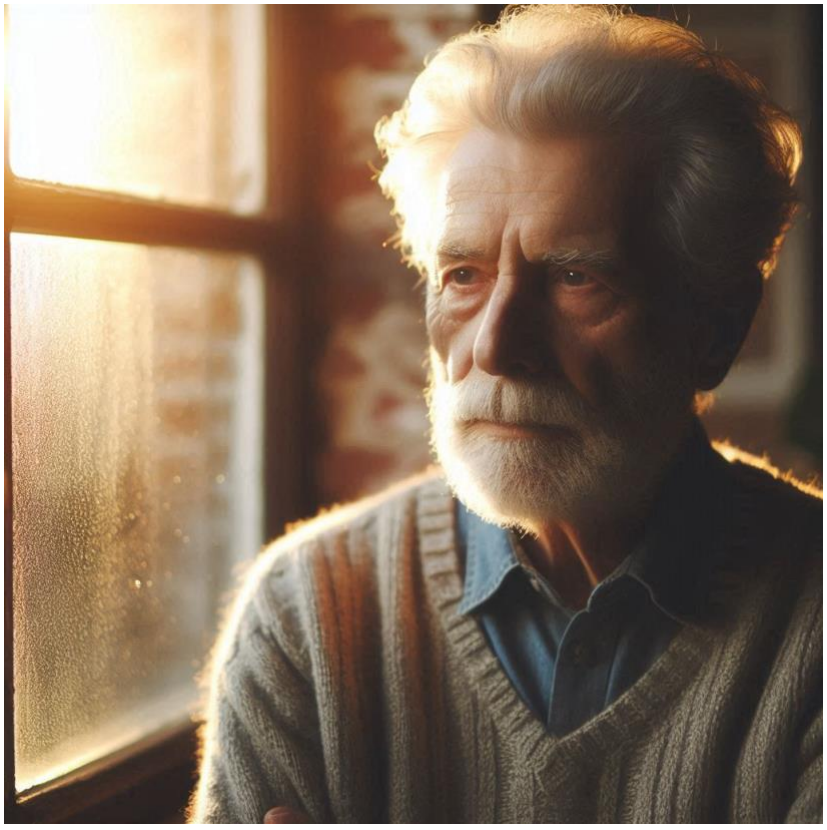
Technical Prompt:
elderly man portrait, natural light

- **Shadow Characteristics:**
  Shadows are soft and gradual, likely diffused by ambient daylight. There's minimal contrast between the lit and shaded areas, giving the image a natural, balanced appearance.
- **Skin Texture Rendering:**
  Skin details are present but subtly rendered. The lighting doesn't emphasize texture strongly, which results in a more forgiving and neutral representation.
- **Mood Differences:**
  The mood feels calm and authentic- realistic but not overly dramatic. It has an honest, documentary-style tone.
- **Background Treatment:**
  The background is likely softly blurred or neutral, blending into the image without drawing attention. It helps keep the focus on the subject without introducing stylistic elements.

Technical Prompt:
elderly man portrait, split lighting setup, black background, studio strobe with 36-inch octabox

- **Shadow Characteristics:**
  This setup creates sharp contrast with clear, directional shadows. One side of the face is illuminated while the other remains significantly darker, producing a dramatic and sculptural effect.
- **Skin Texture Rendering:**
  Very detailed- every wrinkle, pore, and contour is highlighted due to the directional strobe lighting. The result is highly defined and texturally rich.
- **Mood Differences:**
  The mood is intense and theatrical. It evokes seriousness or introspection, common in editorial or character-driven portraiture.
- **Background Treatment:**
  A deep black background isolates the subject completely, adding to the sense of formality and focus. It removes environmental context, directing all attention to the facial features and lighting dynamics.

Technical Prompt:
elderly man portrait, golden hour sunlight through window, dust particles visible, cinematic, Arri Alexa



- **Shadow Characteristics:**
  Shadows are warm and elongated, typical of golden hour light. There's a soft glow with subtle gradations, creating a gentle play between light and dark.
- **Skin Texture Rendering:**
  Texture is rendered in a flattering, filmic way- enough detail to feel real, but softened slightly by the warm, diffused sunlight. The use of a cinematic camera emulation adds a polished tone.
- **Mood Differences:**
  The mood is nostalgic and emotionally evocative. The golden hour light, paired with dust particles and a cinematic style, adds a dreamlike or reflective quality.
- **Background Treatment:**
  The background likely contains soft bokeh or atmospheric elements like sunrays or dust, contributing to the narrative and visual richness. It plays a more active role in storytelling compared to the other two.

Part 3:

Technical Prompt:
mountain landscape, morning mist, shot on Phase One IQ4, 150mm lens, HDR bracketing, natural photography style

- **Analysis:** Sharp, hyper-realistic landscape with depth and tonal contrast. Mist rendered softly, with balanced exposure across terrain.
- **How technical terms affect the medium:**
  The use of "Phase One IQ4" and "150mm lens" directed the model to generate a sharp, high-resolution image with strong clarity. "HDR bracketing" helped balance highlights and shadows, creating dynamic range typical of professional photography.
- **Terms that work best:**
  - "HDR bracketing" and "Phase One IQ4" contributed significantly to the realistic light and tonal quality.
  - "150mm lens" influenced perspective and background compression.
- **Consistency of results:**
  High. Multiple generations produced similarly styled photographic outputs - crisp, lifelike, and evenly lit, with consistency in mist rendering and mountain textures.

Technical Prompt:
mountain landscape, morning mist, digital art, 4K concept art, matte painting style, atmospheric perspective

- **Analysis:** Stylized depth and vivid colors. Soft gradients with a dramatic, cinematic look. Ideal for fantasy or environmental design.
- **How technical terms affect the medium:**
  "Digital art" and "matte painting style" immediately altered the texture and tone to be more illustrative. "Atmospheric perspective" enhanced depth, with fading details in distant objects. The "4K" resolution request improved clarity and refinement.
- **Terms that work best:**
  - "Matte painting style" and "atmospheric perspective" were critical in shaping the fantasy-like, concept-art aesthetic.
  - "4K concept art" ensured clean, detailed linework and color transitions.

Consistency of results:
Moderate to high. While most generations matched the intended look, a few had exaggerated stylization or fantasy elements depending on cloud and color interpretation.

Technical Prompt:
mountain landscape, morning mist, oil painting on canvas, impressionist style, visible brushstrokes

- **Analysis:** Textured rendering, soft-focus mist. Colors blend organically. Expressive and artistic rather than realistic - evoked emotion more than precision.
- **How technical terms affect the medium:**
  The terms "oil painting," "canvas," and "impressionist style" transformed the rendering into something textured, with visible strokes and a painterly effect. Mist was interpreted abstractly, with focus on color blending rather than precise form.
- **Terms that work best:**
  - "Visible brushstrokes" and "impressionist" created a loose, expressive image.
  - "Oil painting on canvas" grounded it in a traditional visual vocabulary.

Consistency of results:
Moderate. The AI responded well to style guidance, though brushstroke clarity and mist layering varied across generations. Some results leaned toward digital paint rather than oil textures unless "canvas texture" was reinforced.

Observations (for all parts)

- **Most Effective Technical Terms Across All Parts:**
  - **Camera brands:** “Hasselblad H6D,” “Sony A7R IV,” “Phase One IQ4” - improved clarity and realism.
  - **Lens details:** “80mm f/2.8,” “24mm f/1.4,” “150mm” - significantly affected field of view, depth of field, and image framing.
  - **Lighting:** “natural window light,” “studio strobe,” “golden hour sunlight” - consistently influenced shadow quality and overall mood.
  - **Style descriptors:** “matte painting style,” “impressionist,” “cinematic” - helped AI shift between mediums and artistic styles.
- **Terms That Didn’t Work as Expected:**
  - “Canvas” sometimes had no visual effect unless paired with explicit cues like “visible brushstrokes.”
  - “Cinematic” was inconsistent unless reinforced with specific lighting or camera terms like “Arri Alexa.”
- **Surprising Results:**
  - The use of “Kodak Portra 400” brought out a film-like softness and color tone more distinctly than expected.
  - Split lighting produced very professional editorial portraits, showing how artificial lighting cues can dramatically improve output quality.
  - Golden hour and dust elements introduced a storytelling dimension that elevated the image beyond just aesthetic output.

Conclusion

Best Practices Discovered

- Combining camera, lens, lighting, and resolution descriptors provides greater control and fidelity in generated images.
- Visual storytelling improves when prompts include time-of-day or environmental cues (e.g., golden hour, window light, reflections).
- Medium-specific terms (e.g., “matte painting,” “oil on canvas”) are essential to shift between photographic realism and stylized output.

Optimal Prompt Structures

Use a layered structure like:

[subject], [camera or medium], [lens/aperture or brush style], [lighting descriptor], [film type or digital style], [resolution/detail marker]

Example:
elderly man portrait, studio strobe lighting with 36-inch octabox, black background, 85mm lens at f/1.4, editorial style

Technical Terms to Keep in Mind

- **Camera Bodies:** Hasselblad H6D, Sony A7R IV, Phase One IQ4, Leica M10
- **Lenses:** 24mm f/1.4, 80mm f/2.8, 150mm lens

- **Film Simulations:** Kodak Portra 400, Ektar, Tri-X
- **Lighting Types:** natural window light, golden hour, split lighting, strobe with octabox
- **Medium Markers:** digital art, oil on canvas, matte painting
- **Quality Markers:** 8K resolution, HDR bracketing, high contrast, visible brushstrokes, shallow depth of field

Tips for Best Results

- Wait for the full render before analyzing - partial outputs may not reflect the prompt accurately.
- Start with exact prompts to establish a baseline before testing variations.
- If a prompt is rejected or yields unexpected visuals, revise one term at a time.
- Generate 2-3 versions of each prompt to identify consistency and model behavior.
- Observe how camera, lighting, and medium terms interact - some may override or dilute others depending on order and emphasis.