**Design Decisions Document**

**1. Scene Composition**

**Decision:** I chose to design a small workspace scene with a desk, chair, and lamp.

**Reasoning:** A workspace gives me a mix of simple and complex objects to show geometry, texturing, and lighting skills. The lamp provides a natural light source which shades naturally with the surrounding environment.

**2. Object Choices**

**Decision:** I built the desk and chair using box and cylinder meshes, while the lamp included more complex geometry.

**Reasoning:** This combination of simple and more det detailed objects shows competency with multiple primitive shapes. The lamp also serves as both a visual centerpiece and the main light source for the shadows.

**3. Texturing**

**Decision:** The desk, chair and lamp use wood textures, while the laptop and legs of the chair and table use a metallic silver texture.

**Reasoning:** These textures were chosen to create contrast between natural (wood) and manufactured (metal). The mix highlights the material differences and demonstrates UV mapping skills.

**4. Lighting & Shadows**

**Decision:** A point light was placed at the lamp’s bulb to simulate real lighting. Shadows were approximated under the desk and chair.

**Reasoning:** This lighting choice keeps the lamp central to the scene. Using the lamp as the light source creates realistic and believable effects where objects block light, showing depth and placement in the scene.

**5. Camera Angles & Movement**

**Decision: The camera was set at a slight downward angle toward the desk, with full movement controls (WASD, QE, mouse rotation/zoom) and the option to toggle between perspective and orthographic projections.**

**Reasoning: This provides a natural viewer perspective while giving users freedom to explore the scene. Projection toggling adds flexibility—perspective for realism and orthographic for accurate, distortion-free views.**

**6. Overall Design Goal**

**Decision:** The goal was to create a realistic but simple workspace illuminated by a lamp.

**Reasoning:** This kept the project scope manageable while still showing understanding of object construction, texturing, and lighting/shadow design.