Testing Plan – Interactive Prototype 2

Extended Reality Video Workspace

Project Concept

This prototype continues the reimagining of Adobe Premiere Pro in an XR environment using Meta Quest. Building upon the earlier floating video editing interactions, Prototype 2 focuses on extending spatial control over video clips. In addition to interacting with floating video panels, users can now:

1. Grab and place videos freely within the XR environment.
2. Drag videos horizontally along a structured editing panel to simulate timeline editing.

By integrating these functions, the prototype explores whether XR offers intuitive alternatives to traditional 2D video editing workflows.

Testing Objective

The aim of this test is to evaluate the usability and intuitiveness of two new XR editing interactions:

- **Spatial Placement**: Can users easily grab floating videos and place them anywhere in the environment?
- **Timeline Editing**: Can users horizontally drag video panels along an editing panel?

The test will help identify whether these interactions feel natural, efficient, and understandable without extensive instruction. Insights will inform refinements to interaction design and guide future integration of timeline-based editing in XR.

Testing Methodologies

- **Task-Based Usability Testing**: Participants will attempt specific editing tasks involving grabbing/placing and horizontal dragging.
- **Observation & Think-Aloud Protocol**: Participants will verbalize their thought process while performing tasks.
- **Performance Metrics**: Task completion rates, time taken, errors, and hesitation moments will be recorded.

- **Qualitative Feedback**: Participants will share impressions on intuitiveness, ease of use, and suggestions for improvement.

Prototype Description / Requirements

The prototype, developed in Unity for Meta Quest, includes:

- **Floating Video Panels**: Videos can be grabbed with controllers and placed anywhere in 3D space.
- **Editing Panel (Horizontal Timeline View)**: A structured panel where videos can be dragged horizontally to simulate arranging.
- **Affordances**: Glow effects, drag handles, and alignment cues provide visual guidance for interactions.

Data Collection Method

- **Quantitative**: Task completion success, errors, and time per task.
- **Qualitative**: Notes from observations, user think-aloud insights, and post-test interview feedback.
- **Behavioral**: Instances of confusion, hesitation, or unintended actions.

Testing Setup

- **Hardware**: Meta Quest headset connected to Unity prototype.
- **Environment**: Quiet room with minimal distractions; calibrated XR setup.
- **Recording**: Recording of think-aloud session.
- **Participant Briefing**: Explain purpose, obtain consent, and introduce XR controls.

Testing Process (Schedule/Time)

1. Introduction & Consent (1 min)

- Welcome participant, explain study goals, confirm consent.

2. Prototype Explanation (1 min)

- Provide a short overview of XR environment and the two main interactions (grab/place, drag horizontally).

3. Task Execution (6–8 mins)
Participants will complete the following tasks:

- **Task 1**: Select a floating video, grab it, and place it anywhere in the environment.
- **Task 2**: Move two or more videos to different spots and comment on how natural the placement feels.
- **Task 3**: Drag a video horizontally along the editing panel.

4. Feedback Session (2–3 mins)

- Ask participants how intuitive the interactions felt.
- Gather feedback on differences compared to traditional editing.
- Ask for suggestions to make placement or dragging more natural.

5. Wrap-Up (30 seconds)

- Thank participants and end the session