

User Research Questionnaire

Basic Information

What is your age group?

- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55 or older

What is your experience level with VR/XR technology?

- ☐ No experience
- ☐ Limited experience (1-5 times)
- ☐ Moderate experience (6-20 times)
- ☐ Extensive experience (more than 20 times)

Before participating in this experience, how familiar were you with the Great Fire of London?

- ☐ Not familiar at all
- ☐ Somewhat familiar
- ☐ Fairly familiar
- ☐ Expert level knowledge

Questionnaire 1: Interactive Elements and Sense of Immersion

Previous Immersive Experience

1. **Have you ever used VR or participated in a 360° interactive experience?**
 - If yes, which experience left the strongest impression on you and why?
 - If no, what are your expectations for an immersive historical experience like this?
2. **Importance of Interactive Elements** (*Likert Scale Question*)

- On a scale from 1 (Not Important at All) to 5 (Very Important), how important do you think interactive elements (e.g., picking up objects, triggering events) are in keeping you engaged in a VR historical experience?
- 3. Most Engaging Interactive Features**
- In your experience, which interactive elements (e.g., picking up objects, triggering story events, NPC dialogue) were the most engaging or memorable? Why?
- 4. Factors That May Distract or Disrupt Immersion**
- Were there any interactive elements that felt confusing or pulled you out of the immersive experience? If so, please describe.
- 5. Suggestions for Improvement**
- What aspects do you think could further enhance interactivity and immersion? (e.g., controls, visual feedback, story integration, etc.)
- 6. Learning and Memory Retention**
- Do you feel that interactive elements helped you better understand or remember historical information about the Great Fire of London? Please share specific examples or thoughts.
- 7. Additional Comments**
- Do you have any other feedback or suggestions regarding interactive elements or the immersive experience?

Questionnaire 2: The Impact of Transitioning from 360° Video to VR on Storytelling and Understanding

Background:

We aim to understand how transitioning from a 360° video to a fully immersive VR environment affects storytelling flow and learning comprehension. Please answer the following questions based on your experience.

Transition Smoothness (*Likert Scale Question*)

- 1. How would you rate the smoothness of the transition from 360° video to the VR environment?**
 - On a scale from 1 (very disjointed) to 5 (very seamless), please select a score and briefly explain your reasoning.
- 2. Did you experience any confusion or discomfort during the transition from the 360° video to the VR scene?**
 - If so, what aspects contributed to it? (e.g., visual effects, controls, storyline connection, etc.)

3. **Did you notice any significant change in your sense of engagement or immersion after transitioning into VR?**
 - Please describe your subjective experience.
4. **How did this transition impact your understanding and memory of the Great Fire of London's storyline or historical events?**
 - Was the effect positive or negative? Please provide examples based on your experience.
5. **Do you think the 360° → VR structure enhanced the overall storytelling experience, or did it feel disruptive or repetitive?**
 - Please explain your reasoning.
6. **If you could suggest improvements for the transition process, what would they be?**
 - For example, adding guidance prompts, transition animations, interactive transitions, etc.
7. **Do you have any additional thoughts or feedback regarding this experience?**
 - We welcome any ideas or suggestions you'd like to share!

Experience Feedback Questionnaire

1. **Which interactive features did you use during the experience? (Select all that apply)**
 - Picking up historical objects
 - Triggering character dialogues
 - Moving between different scenes
 - Using historical tools
 - Participating in firefighting activities
 - Other (please specify): _____
2. **Please rate the ease of use for the following aspects: (1 = Very Difficult, 5 = Very Easy)**
 - Navigating in the 360° environment: ____

- Interacting with objects in VR: ____
 - Understanding available interactive features: ____
 - Following the historical narrative: ____
 - Transitioning between 360° video and VR modes: ____
3. **What new knowledge did you gain about the Great Fire of London through this experience?**
- _____
- _____
4. **How did the transition between 360° video and VR affect your understanding of historical events?**
- _____
- _____
5. **How strongly did you feel the following during the experience? (1 = Not at all, 5 = Very strongly)**
- Connection to the historical event: ____
 - Empathy for the people of 1666: ____
 - Feeling immersed in historical London: ____
 - Sense of urgency during the fire scenes: ____
 - Emotional impact of the destruction: ____
6. **What emotions did this experience evoke in you?**
- _____
- _____
7. **What was the most engaging part of the experience for you? Why?**
- _____
- _____
8. **What aspects were the most challenging or confusing? Why?**
- _____
- _____
9. **How do you think this experience could be improved?**
- _____
- _____
10. **Did you experience any discomfort during the experience?**
- No discomfort
 - Mild discomfort
 - Moderate discomfort
 - Severe discomfort