

XR Interaction Test3 – Questionnaire

Participant Information

Participant ID: BoBo
Age: 30
Gender: Male
VR Experience Level:
☒ Beginner ☐ Intermediate ☐ Advanced

Task 1: Toolbox Location and Tool Switching

Were you able to **clearly find the location of the toolbox** in the scene?

☒ Yes ☐ No

Were you able to **successfully switch between different tools** (for example, different brush sizes or the eraser)?

☒ Yes ☐ No

Please rate how **convenient** the tool switching was (1 = Very Inconvenient, 5 = Very Convenient):

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☒

Open-ended Question:

In many other VR painting applications, tools are switched using a virtual menu on the user's non-dominant hand.

In this prototype, the switching is done through **physical grabbing and changing**.

Which method feels more natural or easier to use for you, and why?

It is good, if could adding function, such as when I want to change to another tool, the old one can be put into the box.

Task 2: Pigment Picking and Placement

Were you able to **successfully pick and take a pigment** from the pigment box?

☒ Yes ☐ No

Were you able to **place the pigment onto the palette** smoothly?

☒ Yes ☐ No

Please rate how **intuitive** the color-picking process felt (1 = Very Unintuitive, 5 = Very Intuitive):

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☒

Open-ended Question:

In previous versions, users needed to keep a specific distance between the brush tip and the palette to pick a color.

This time, the pigment-ball system was used instead.

Did this change make the interaction feel more natural?

If you still had difficulties, please describe them or give suggestions for improvement.

In this test, I found out when I left a long distance the color will be bigger, opposite with the circles.

Task 3: Joystick Mixing System

Were you able to understand and complete the **color-mixing operation using the left joystick rotation**?

☒ Yes ☐ No

Please rate how **easy** the joystick mixing was to use (1 = Very Difficult, 5 = Very Easy):

1 ☐ 2 ☒ 3 ☐ 4 ☐ 5 ☐

Please rate how **natural and realistic** the mixing effect felt (1 = Very Unnatural, 5 = Very Natural):

1 ☐ 2 ☐ 3 ☒ 4 ☐ 5 ☐

Open-ended Question:

Did using the joystick to mix colors feel intuitive to you?

Would you prefer a future version that allows **real physical stirring** with the brush instead?

Please explain your preference and reasons.

*I very like the function, but it is a little confused me.
1. I don't know how to drag the color to the board.
2. I don't know how to mix the color without instruction
after I am told how to operate this action, I am still
a little confused about the work flow.*

Overall Experience

Please rate how **intuitive** the overall interaction experience was (1 = Not Intuitive, 5 = Very Intuitive):

1 ☐ 2 ☐ 3 ☐ 4 ☒ 5 ☐

Please rate how **enjoyable** the overall experience was (1 = Not Enjoyable, 5 = Very Enjoyable):

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☒

Open-ended Question:

Please describe which part of this experience you liked the most and what could be improved.

I am very interested this app. if there is a introduction about the work flow, it will be easy to understand. Every parts are successful except dragging the color to the board.