1. **Preliminary set-up (before participant arrives):**

Have headset fully charged

Boundaries drawn

App pulled up on screen

Begin casting

1. **Greet Subject**

“Hello! Thank you for participating in this study on utilizing virtual reality to develop controls for teleoperating novel robots. Please have a seat, and I’ll provide you with a consent form and get you set up with the Oculus headset.”

1. **Obtain Consent (Provide Consent form, (offer to) read to subject if necessary, get signature)**

“Before we begin, here is some information about this study. The purpose of this study is to learn how people would control remote-controlled robots without a separate controller, if given the chance. In this study, I’ll show you how to put on the VR headset, and once inside, you will see robots of different shapes (these two in particular). Each robot will perform a bunch of motions, and for each one, we would like you to imagine that this is an action you want the robot to perform and you need to move your arm or body in such a way that the robot will know that that is the action you require. You can watch the robot as many times as you’d like, and then you’ll click the “Record” button you see from within the headset (with this trigger button here) and perform your command motion as the robot does its action. We will record your head and hand positions as you do your command motion. You will be prompted to record your command motion five times, and then the app will prompt you to move on to the next robot movement. The total experiment should take about an hour.

“The form here has more information about the study, including the purpose of this experiment, and the risks and benefits of participating. The main points are on the front page, and if you agree to participate, there is a place for your signature at the very back.

“The main risk to you is some slight physical discomfort or motion sickness from wearing the headset. If you are feeling discomfort at any time, please let me know, and I will pause the experiment to give you a chance to recover. If you need to leave early, that is also acceptable.

The main benefit will be your $12 Amazon gift card, which should arrive in your inbox in the next business week.

“There are two important privacy things I need to draw your attention to: first, that we will not be taking any identifiable information, with the exception of your email, which we will use to send you your $12 Amazon gift card as a thank-you for your participation. We will not associate the email with your data. Secondly, the Oculus records only head and hand positions, so we would like to record a video of you while you are participating in this study in case the additional information about what the rest of your arms are doing turns out to be useful. If you do not wish to be video-recorded, you may still participate in the study; please indicate so on this page, here. Pieces of the video recordings may also be useful for research presentations at robotics conferences. This is again optional; if you are willing, please check the appropriate place.

“Do you have any questions? Please feel free to read the document; I have spare copies for you to take home if you like.”

1. **Provide brief overview of experiment**

(show on computer. Provide participant ID. Make sure casting is on. Ask if they have any questions.)

*Imagine that you want the robot to make the motion you see in front of you, but it’s not doing it. How would you like to move to tell it to do that motion?*

[Answer relevant questions without over-explaining experiment, and defer some questions if they will be explained later]

1. **Help the participant don and adjust the headset.** Make sure it is comfortable and in focus. Make sure they understand the use of the controllers. Make sure the app is loaded and that casting is happening effectively. If video recording, make sure the webcam is active and includes the full participant.
2. **Perform VR Study (have the user press “Begin”)**
3. **Administer Post-Experiment Questionnaire**

Experimenter Text: “That’s it! Thank you. I’ll take the headset and controllers from you now. If you could please complete this questionnaire, that will be it for today’s study. Thank you for participating and you should receive your Amazon gift card in the next week or so.”

1. **Check all questionnaires for completeness**
2. **Experiment Finished. Thank Subject.**
3. **Ask Subject if they have any questions.**