## **Setup:**

- 1. Make sure vicon system is on
- 2. Run "roslaunch vicon\_bridge vicon.launch" and ensure the topic "/vicon/fetch/fetch" is being published
- 3. Move fetch to center of room, facing West (away from computer room)
- 4. Watching the topic /vicon/fetch/fetch, move the fetch to the following position:

```
position:
    x: 0.02
    y: -0.65
    z: (doesn't matter)
rotation:
    x: 0
    y: 0
    z: 0.677
    w: 0.735
```

Note that you should first set the position, then rotate. If the position becomes slightly off while rotating the robot, this is fine. Precise rotation is more important.

## **Procedure:**

"Today you will be completing some sorting tasks involving cards at various workstations. I will give you instructions for each task to complete, one at a time. While you do this, a robot will also be in the environment, completing its own tasks of scanning various items.

Each time I give you an instruction, I will tell you the next station to go to and the task to complete at that station. Then, you must wait until I say "Begin" to begin moving toward that next station and completing the task. Please begin at station 1, here."

For each task, execute the associated robot script, read the sentence, then say 'Begin' precisely when the robot begins moving in a line (after finishing turning)

1. (no robot script)

Instruction: "Go to **station 4** and sort the cards into red and black decks"

2. (no robot script)

Instruction: "Go to **station 1** and sort the cards into red and black decks"

3. Robot Script: "roslaunch fetch\_base\_mover **center\_left.launch**" (no instruction)

4. Robot Script: "roslaunch fetch\_base\_mover left\_right.launch"

Instruction: "Go to **station 4** and organize the black deck from low to high"

5. Robot Script: "roslaunch fetch\_base\_mover right\_left.launch"

Instruction: "Go to **station 1** and organize the red deck from low to high"

6. (no robot script)

Instruction: "Go to **station 3** and sort the cards into red and black decks"

7. Robot Script: "roslaunch fetch\_base\_mover left\_right.launch"

Instruction: "Go to **station 2** and sort the cards into red and black decks"

8. Robot Script: "roslaunch fetch\_base\_mover right\_left.launch"

Instruction: "Go to **station 3** and sort the black deck from low to high"

"Okay, that's it for the experiment! Now we have a survey for you to take before we finish"