

Your name:

Phi Bui

Robot name:

Sphero

Your group members:

Daniel Choate, Daniel Graham, Anna Sheaffer, Ju-Hung Chen

One-sentence description of your design:

An investigation on the reusability of a robot to complete a task based on the way the robot conveys the message "Task Complete".

What the group liked about this design:

Ju-Hung liked Robot Behavior 2 (where it celebrates after a task complete) because he felt like the robot rewarded him with the "celebration" after completing the task.

Suggestions from the group for improving **the idea of your design** OR one thing you learned from someone else's **design** that you could use for future assignments:

I really liked the use of "video game" like elements from Anna, who used a sound to convey the message that the robot had encountered a collision. She chose to use a very obvious and video game-like sound that you would typically hear during a character death or game over screen. I think utilizing sounds that the

common person can recognize and attach to certain behaviors/results is a great way to convey information quickly without any need for teaching.

Suggestions from your group on improving **the code you wrote** OR one thing you learned from someone else's **code** that you could use for future assignments:

I liked Ju-Hung's use of random (or pseudo-random) generation to produce a "drunk" robot behavior. It seemed very human and amicable due to the random movements and produced unexpected behavior because of it, surprising even Ju-Hung during his in-class demonstration. I believe slightly varying responses using randomization could increase a human's interest in reusing a robot.

One change you would like to make or thing you would have done differently about this assignment:

I would definitely utilize more sounds in the future, something very recognizable, like the sounds that Anna's robot produced. For example, I would utilize a very simple Major chord progression that resolves nicely for a simple robot's behavior, and maybe a more sing-songy tune for a more human-like robot.

Special question (see Canvas assignment):

The results overwhelmingly favored reusing a robot that celebrated a task completion over one that did not. Survey results also indicated that participants perceived a greater difficulty on a task that required celebration afterwards.