PROJECT TWO: MILESTONE 4 – COVER PAGE

Team Number: Tues-28

Please list full names and MacID's of all *present* Team Members

Full Name:	MacID:
Julian Cecchini	cecchinj
Luigi Quattrociocchi	quattrl
Luke West	westl5
Hetash Rattu	rattuh

Team Number: Tues-28

Use the space below to document mentor feedback for your design.

Inventor File comments:
-none
G-code comments:
-none
Constraints Met:

- Mass of 350 g or less
- Length of 4mm or greater for all features
- Print time under 2 hours
- Sterilization
- Tool Security

Go without warning

Use the space below to propose design refinements based on the feedback.

Based on the feedback, our design does not require improvements. However, prior to the design review many crucial improvements were made, such as redesigning the securing method of the tool, splitting our design into 4 pieces rather than 3 by cutting the tube into cross-sections to allow for easier 3D printing (i.e., supports can more easily be removed but still allows for the printing of the cylindrical shape that would be impossible without proper support).
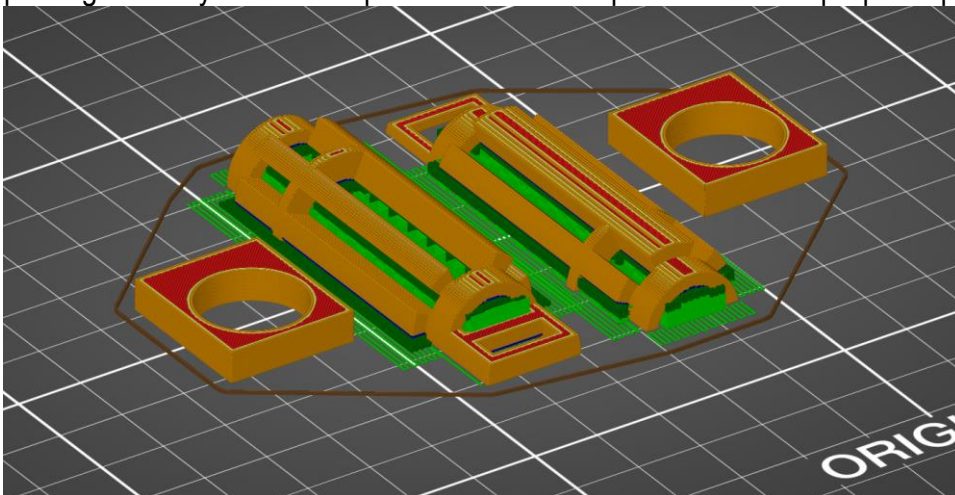
MILESTONE 4 (STAGE 3) – DESIGN REVIEW FEEDBACK (COMPUTATION SUB-TEAM)

Team Number: Tues-28

Use the space below to document mentor feedback for your design.

- No feedback on any function definitions or logic
- No feedback on commenting or code neatness
- No feedback on single cycle pick up or transfer
- Feedback on drop off: Tweak small container drop off locations for more consistent placements (see image below)
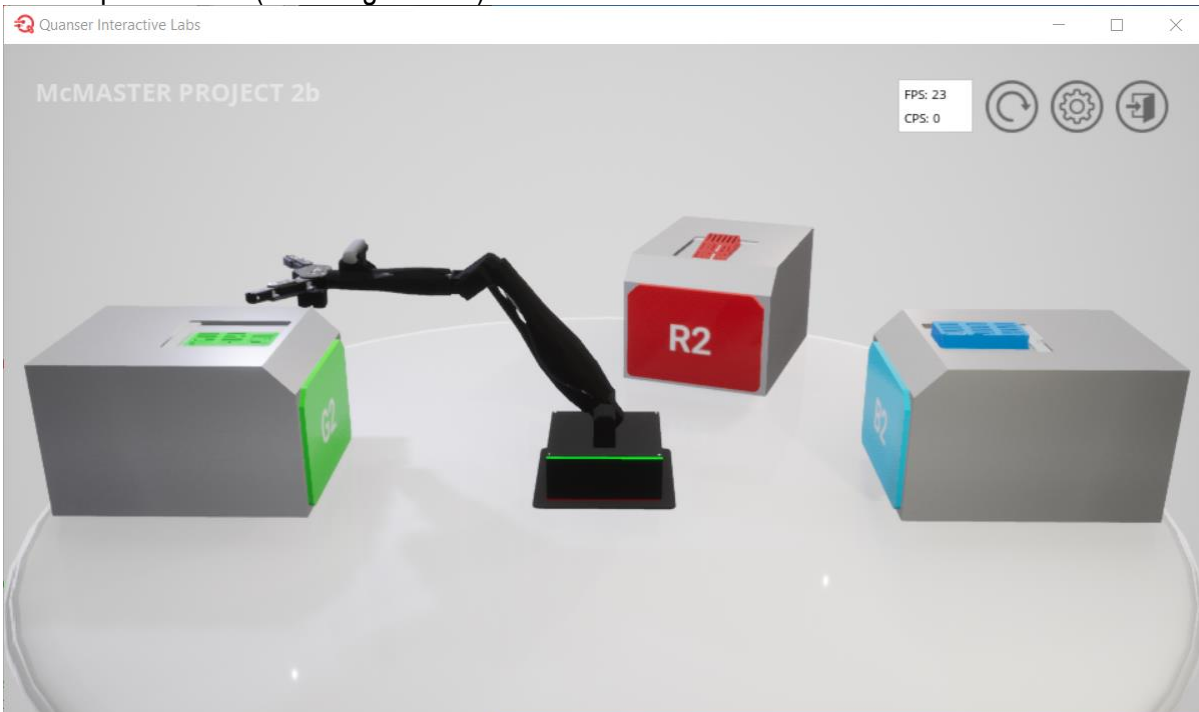
Go without warning

Use the space below to propose design refinements based on the feedback.

Adjust pick up and drop off locations so that container placement is more consistent. In the image above each of the small containers is placed with a different degree of success, despite all being based on the same series of joint rotations.

NOTE: Even though all the small container drop-off locations have the same exact arm rotation amounts (except the base rotation), different behavior is observed for each of them (see image above). See the code snippet included below.

```
if container_id == 1: # small red
    return [-0.5771, 0.229, 0.4218]
if container_id == 2: # small green
    return [0.0, -0.6153, 0.4218]
if container_id == 3: # small blue
    return [0.0, 0.6153, 0.4218]
```