

# ME 370

Team 49

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# Prelab Reflection Part 1

<p>Teammate 1 Prelab point of view statement</p> <p>Lab personnel need a way to have dispensable items delivered in order to streamline order delivery and management in order to not lose time sourcing necessary inventory.</p>	<p>Teammate 2 Prelab point of view statement</p> <p>Delivery robots are needed to place students' online purchases safely and orderly in front of their dormitory doors.</p>	<p>Teammate 3 Prelab point of view statement</p> <p>Campus students need their food delivered <b>on time</b> to give them a sense of security and alleviate the anxiety of waiting.</p>	<p>Teammate 4 Prelab point of view statement</p> <p>Hospital staff at McKinley need a way to deliver medication quickly to patients across the hospital to free up time spent walking to allow them to focus on other work or just take a much needed rest.</p>
<p>Teammate 1 Prelab Requirements</p> <p>The compartment where the package is stored must not get contaminated and must be easily cleaned between uses. The robot must be easily distinguishable within the lab setting in order to not pose a hazard. It must also be very stable so package is not damaged in transit.</p>	<p>Teammate 2 Prelab Requirements</p> <p>1. The delivery robot needs to be fast enough to improve efficiency and perform basic turning functions. 2. It needs to be able to be placed in an orderly and stable manner.</p>	<p>Teammate 3 Prelab Requirements</p> <p>1. The robot should have a suitable compartment to hold all the food and packaging, ensuring stability. 2. The robot must not jostle the food out of the bag; it should extract the packages from the bag smoothly and steadily</p>	<p>Teammate 4 Prelab Requirements</p> <p>All medications loaded must be secured to ensure only the proper people can access them. A hospital is busy and lots of people are moving around constantly, the design must not pose a tripping hazard for hospital staff.</p>

# Prelab Reflection Part 2

Which requirements do you have in common with your peers

- Robot must be stable so cargo/payload is not damaged
- Robot must be easily visible so people don't trip on it.
- Easily identifiable
- Robot must be able to carefully dispense whatever payload it is transporting

What requirements are different from your peers

- The speed of delivery
- Medication must be secure and only accessed by authorized people

Are your teams' requirements verifiable, indivisible, traceable, and solution-neutral?

Yes

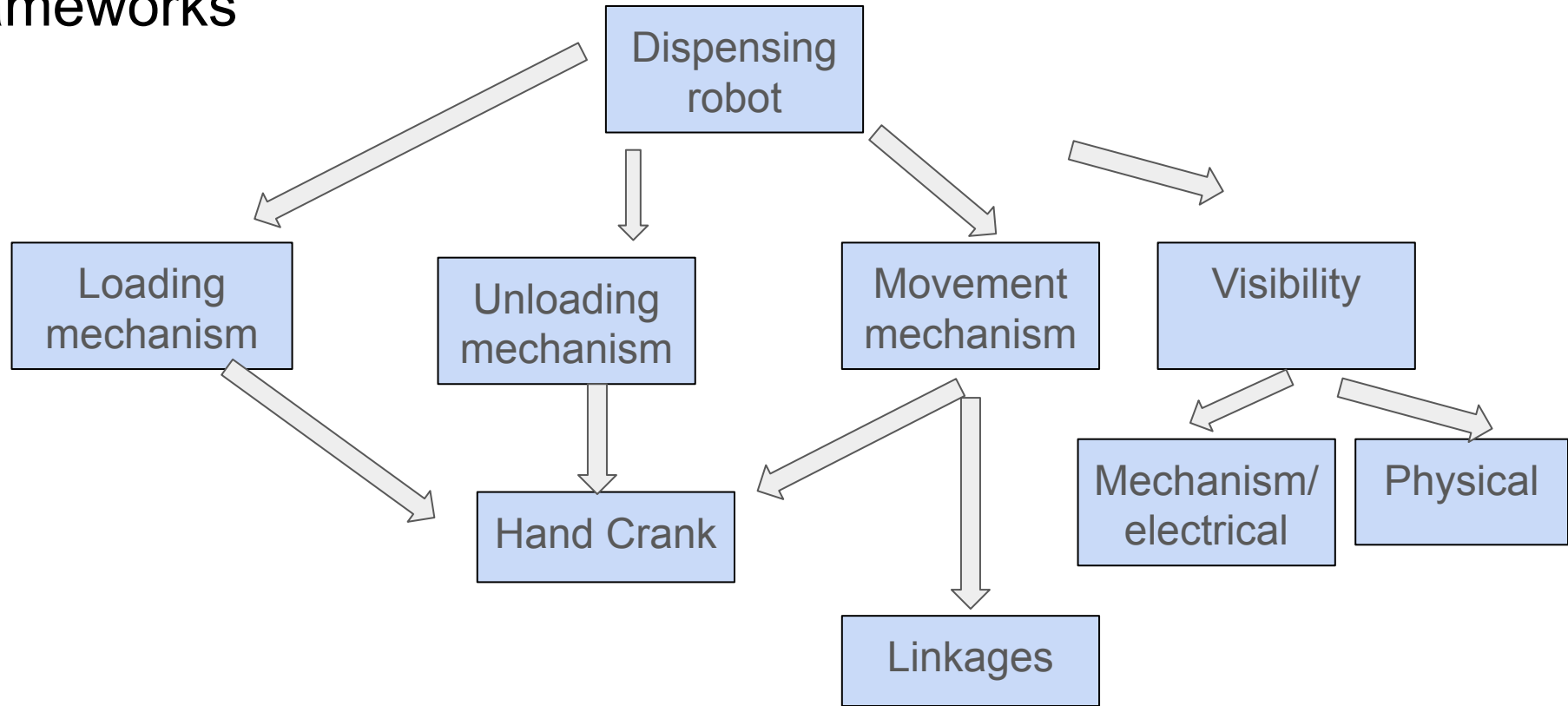
# Prelab Reflection Part 3

Our team's user group will be:

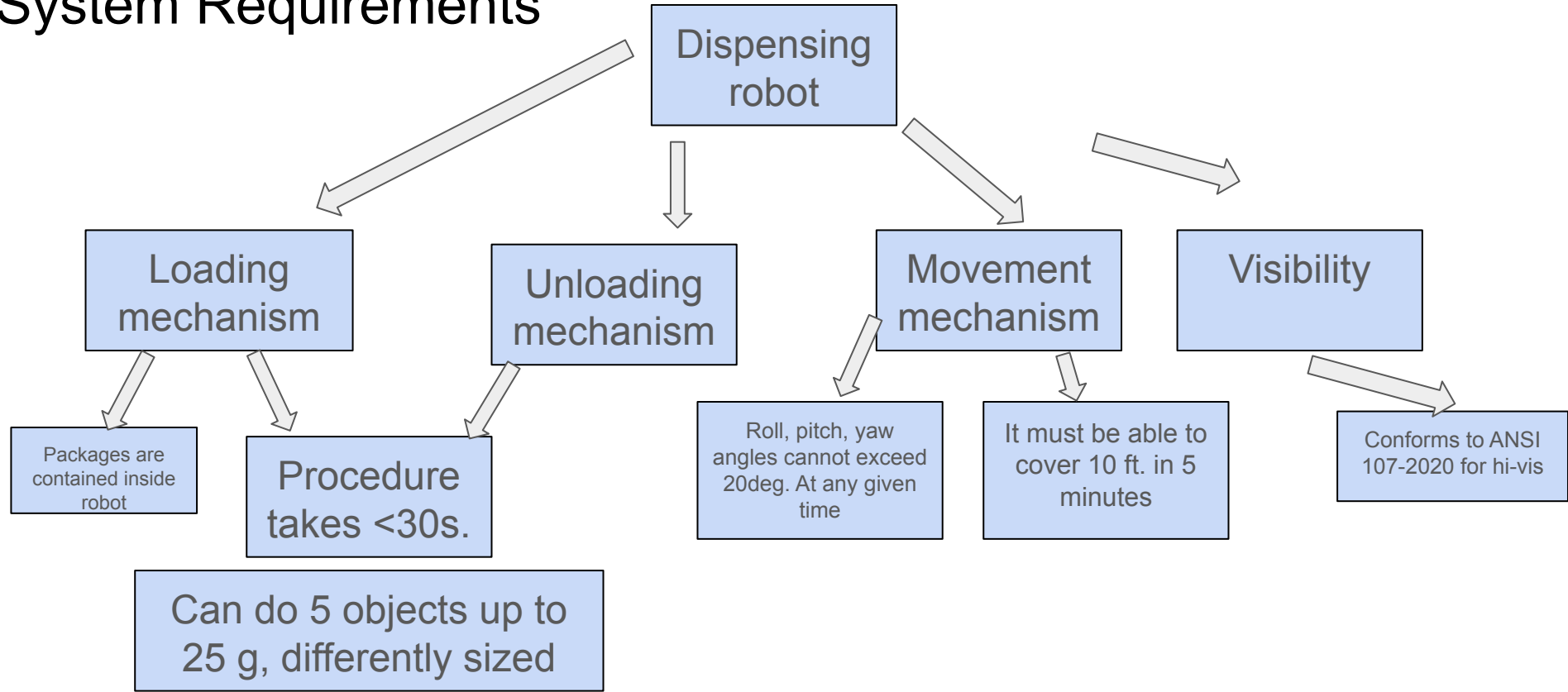
Package delivery to dorms

Please recall that it can often be easier to design for a more specific user group than a general one.

# Frameworks



# System Requirements



# Project Summary

Create a 1 paragraph “Project Summary” that clearly communicates the target user or group you are designing for, the emotions that user or group needs you to create with your design, and a few key requirements for your design.

We think users need our products to achieve orderly distribution of packages, and they need the items to be placed stably on the ground. The key requirements are that the transport robot must have high efficiency, secondly the transport robot must be stable, and finally he should be visible.