

# PROJECT THREE: MILESTONE 1 – COVER PAGE

Team  
Number: 

Tues-33
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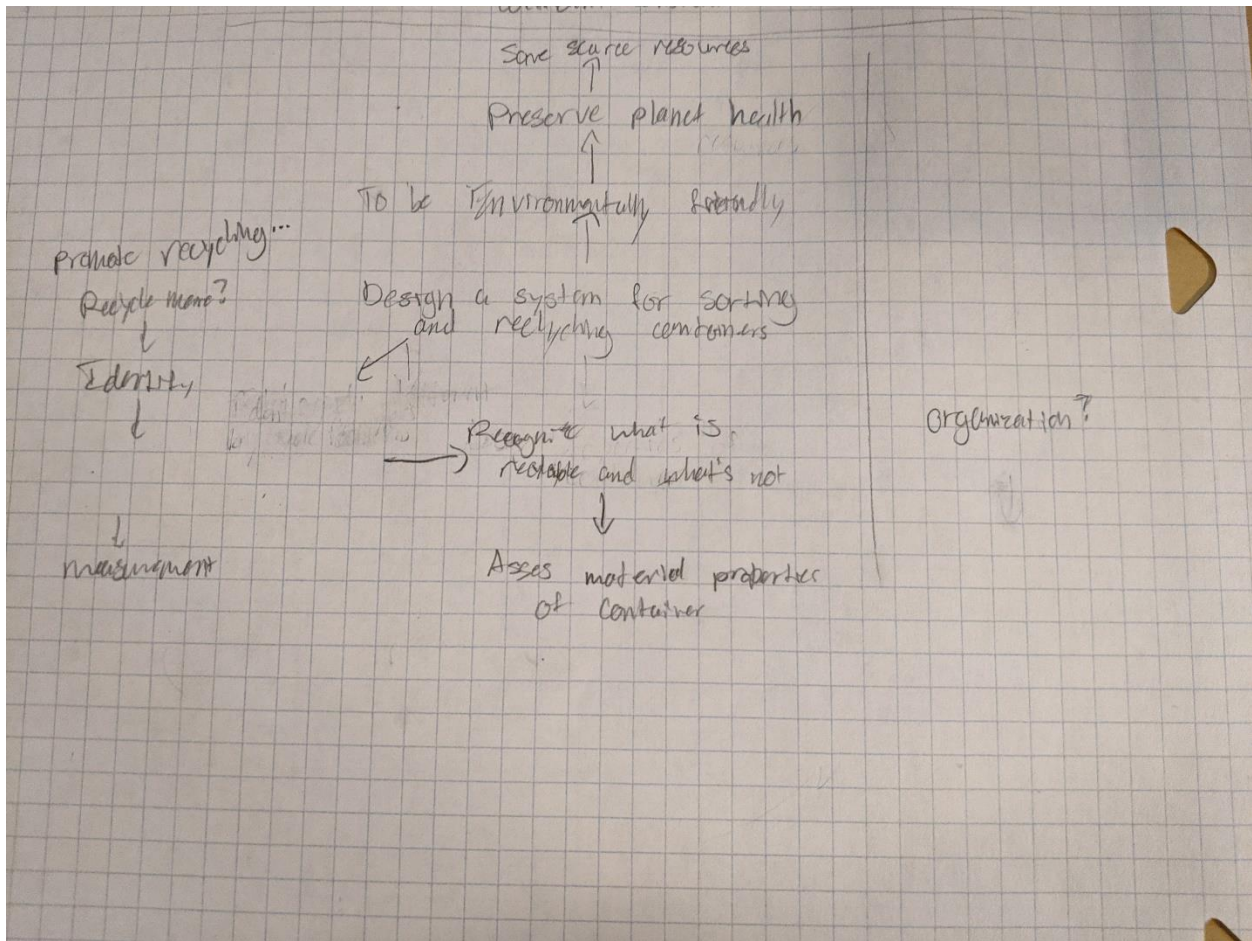
Please list full names and MacID's of all **present** Team Members

Full Name:	MacID:
Nolan Cross	crossn3
Zareen Kabir	kabirz
Luigi Quattrociocchi	quattrl
Fondson Lu	luh57
Sude Sayyan	sayyans

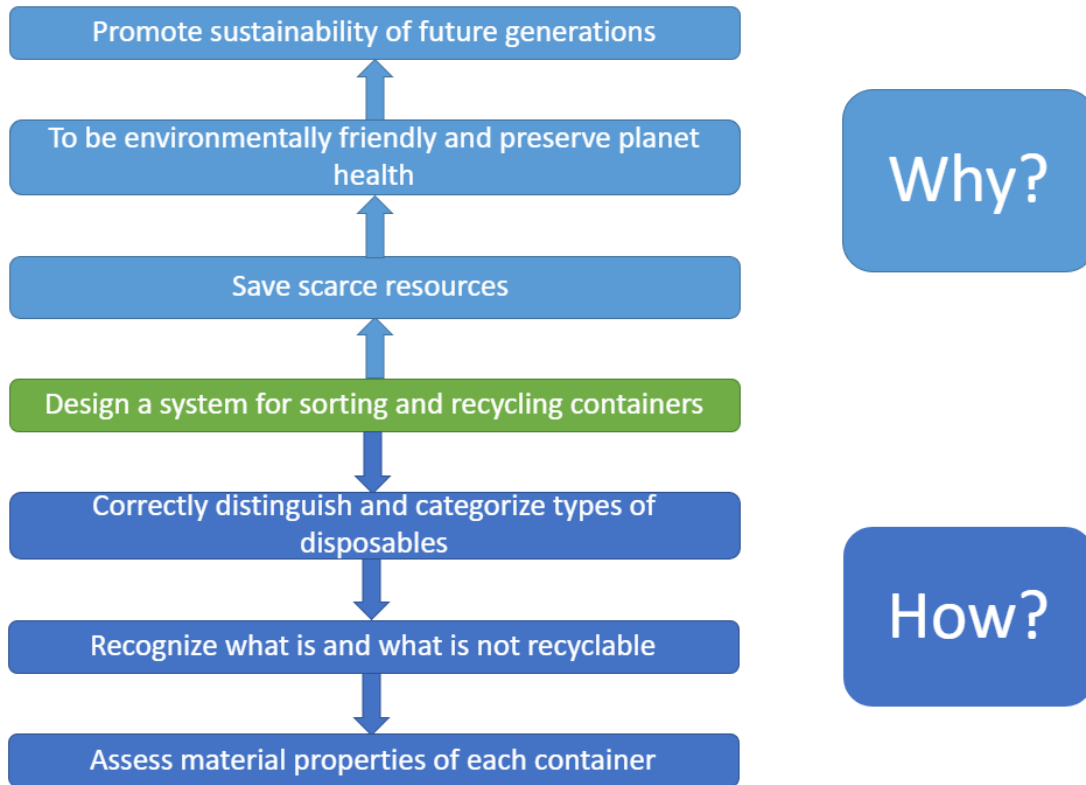
# MILESTONE 1 (STAGE 1) – WHY/HOW LADDERING

Team Tues-33  
Number:

1. Document both your conversation and a refined visual on a separate sheet of paper
2. Take a photo of both your rough work and refined visual
3. Insert each photo as a Picture (Insert > Picture > This Device)
4. **Do not include more than one Picture per page**



# Refined Needs Hierarchy



# MILESTONE 1 (STAGE 2) – LIST OF OBJECTIVES AND CONSTRAINTS

Team **Tues-33**  
Number:

As a team, create a list of objectives and constraints in the table below. The exact number you should have depends on what information you have gathered from the Project Pack as well your previously completed needs hierarchy.

<b>Objectives</b>	<ul style="list-style-type: none"><li>- Maximize Recyclables</li><li>- Distinguish between different types of disposable containers</li><li>- Minimize process time/Maximize efficiency of recycling process</li><li>- Should categorize items based on which type of disposable they are</li><li>- Should distribute items into their respective bins and maximize accuracy of container placement</li></ul>
<b>Constraints</b>	<ul style="list-style-type: none"><li>- Total mass of containers on bot cannot exceed 90g</li><li>- Hopper must hold a maximum of three containers</li><li>- Designed device for depositing containers must hold hopper and a mechanism for depositing containers into bins</li><li>- Must be able to identify contaminated items to be recycled</li><li>- Device must connect to baseplate at 2 locations</li></ul>

# MILESTONE 1 (STAGE 3) – REFINED PROBLEM STATEMENT

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## Initial Problem Statement

1. Write the initial problem statement in the space below. This will have been defined in a previous lecture, prior to your scheduled Design Studio.

Design a system for sorting and recycling containers.
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## Refined Problem Statement

2. Write the refined problem statement below. Kindly refer to the Refined Problem Statement rubric provided on Avenue (see [P3 Rubrics](#)). This will guide your group in creating a valid statement.

Design a system that distinguishes between different containers to be recycled and sorts them to their appropriate bins to promote a positive environmental impact.
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