

## PROJECT THREE: MILESTONE 1 – COVER PAGE

Team Number: Thurs-72

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

Full Name:	MacID:
Shawn Braley	braleys
Muhammad Sibtain Raza	razam26
Aryan Naik	naika6
Ryan Kumar	Kumarr38

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

Team Number: 

Thurs-72
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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**

Statement: **Design a system for sorting and recycling containers.**

Why:

- Filter through and remove nonrecyclables
  - To reduce the amount of garbage going towards land fills
    - To promote a healthier ecosystem
- Reduces time and effort
  - Creates more skill-oriented jobs

How:

- By creating a fully automated system
  - Optimizing the system to break down every object into any possible recyclable components
    - A better sanitation system that only breaks down materials if necessary
- Make the system more efficient compared to manually doing it
  - By training people to maintain these advanced machines



To promote a healthier eco-system

To reduce the amount of garbage going towards land fills

Filter through and remove non-recyclables

### Design a system for sorting and recycling containers

By creating a fully automated system

Optimizing the system to break down every object into any possible recyclable components

A better sanitation system that only breaks down materials if necessary

Create more skill-oriented jobs

Reduce time and efforts

Make the system more efficient compared to manually doing it

By training people to maintain / manufacture these machines



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

Team Number: Thurs-72

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>• Time efficient</li><li>• Should maximize power usage</li><li>• Cost effective</li><li>• Fully automated system</li></ul>
<b>Constraints</b>	<ul style="list-style-type: none"><li>• Needs a large directory of items to sort from</li><li>• Meets sanitary and safety regulations</li><li>• Reduces waste going to landfills</li><li>• System must be able to deal with errors</li></ul>

# MILESTONE 1 (STAGE 3) – REFINED PROBLEM STATEMENT

Team Number: Thurs-72

## 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.

## 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.

Create an automated and efficient way of sorting recycling containers, in order to filter through different types of containers and reduce unnecessary garbage going to landfills.