

## PROJECT THREE: MILESTONE 1 – COVER PAGE

Team Number: Tues-26

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

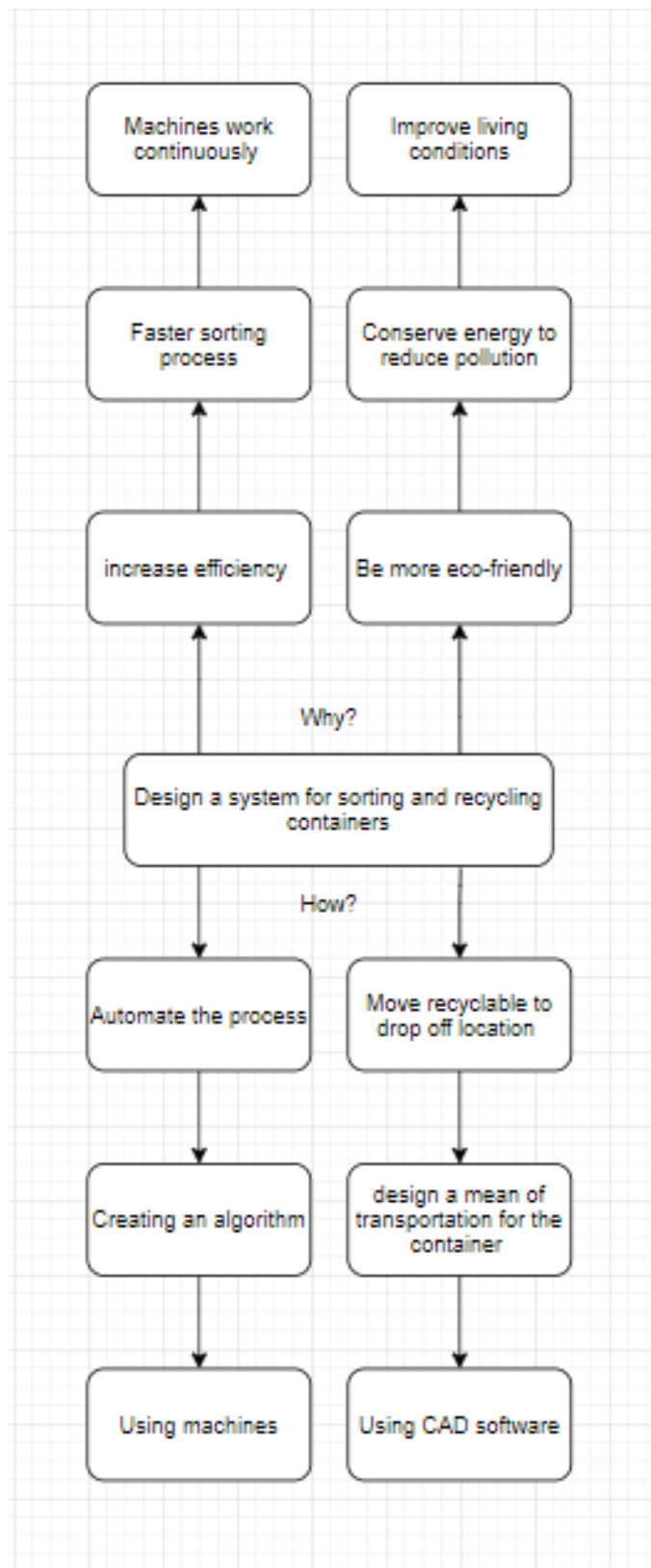
Full Name:	MacID:
Sana Khan	khans288
Amine Hassine	hassinem
Ahmed Mohamed	mohaa97
Yash Patel	pately28

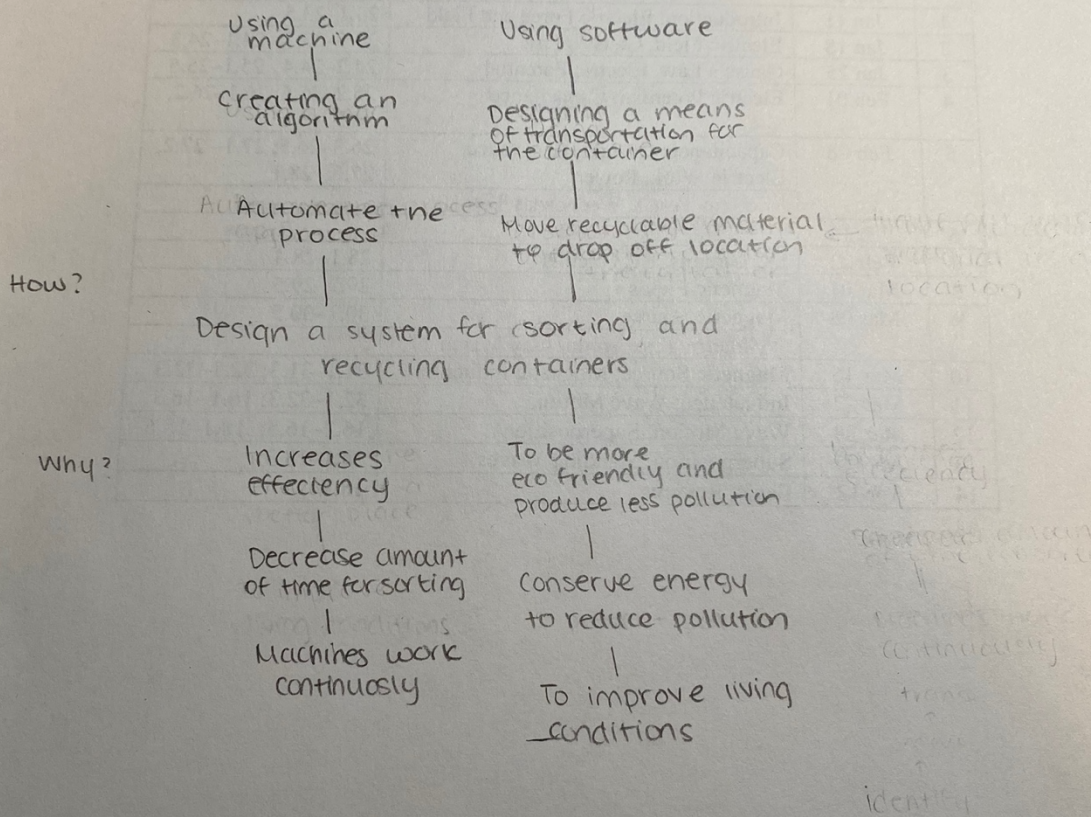
## MILESTONE 1 (STAGE 1) – WHY/HOW LADDERING

Team Number: 

Tues-26
---------

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**





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

Team Number: Tues-26

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>	<div>Can determine the material of the container and allocate it to the correct bin</div> <div>Automate the process of recycling containers</div> <div>Hopper can hold containers securely for transport</div> <div>Robot arm can securely pick-up container for placement</div> <div>Device can deposit containers into bin</div> <div>Code allows for transfer of container from the sorting station to the correct bin in the recycling station</div>
<b>Constraints</b>	<div>Can't hold more than three containers</div> <div>Container must fit into base plate in two locations</div> <div>Required to connect the actuator on the base plate</div> <div>The Q-bot must return to home position after tasks are performed</div>

# MILESTONE 1 (STAGE 3) – REFINED PROBLEM STATEMENT

Team Number: Tues-26

## 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.

Design a system for identifying, sorting, and recycling containers so that they can be placed into the appropriate bins in accordance with their material in an efficient manner. Doing so will reduce landfill pollution and move the world in an eco-friendlier direction.