

# [4]

Project Title: **Automated Garbage Bin**

Objective:

The aim of the project is to collect garbage and compact it together for space reduction purposes.

Project Description:

- The compact machine consists of a ground seated frame structure.
- The frame holds the mechanical parts of the compact machine.
- The project consists of a wooden frame, three cylinders, and an IR sensor.
- Items are dropped to the bin in a receiving container.
- After 5 items have been thrown into the bin, the cylinder **A** pushes the uncompressed garbage to the compressing chamber.
- Cylinder **B**, in a vertical motion, would compress the collected garbage.
- Once the garbage is compressed, cylinder **C** is activated to let the garbage out.
- Identify all elements of the system (Actuators, sensors, etc.).