



**Department of Computer Science and  
Engineering**

**Project Proposal**

**Course No:** CSE-360

**Course Name:** Computer Peripherals and Interfacing Laboratory

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**Submitted By:**

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**Submitted To:**

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**Project Name:** Remote Controlled Smart Dustbin

**Objectives:** Smart Dustbin is an automatic dustbin. It works like- when someone comes in front of this dustbin, it will open automatically with the help of a servo motor and ultrasonic sensor. So the sensor works to detect the object in front of the dustbin. This dustbin is also movable. It acts like a remote controlled car system. A person can rotate the dustbin with a remote control. It is a decent gadget to make home clean and attractive. Practically many people consistently make it grimy and spread trash to a great extent by paper, rappers and numerous different things anywhere at home. This dustbin is easily reachable and attractive. Making people tend to utilize this smart dustbin.

**Bill of Materials:**

1. Arduino UNO
2. Ultrasonic Sensor
3. Servo Motor
4. BO Motor
5. Wheels
6. L293D Motor driver
7. Jumper Wires
8. Cardboard
9. Connecting Wires
10. A small dustbin
11. Power Supply
12. Miscellaneous (glue, plastic tube etc.)

**Conclusion:** This project is implemented using Arduino Uno with operating voltage. Based on the android mobile app installed by the user, Arduino will receive the command by the user. Based on the command, it is going to perform. This project will help the physically challenged person, aged people as well as ill persons. It will also help us to maintain a clean home and surroundings.