

# Mop Bot

The Robotic Floor Cleaner

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#### **Project Case**

The case summary of our control system project highlights the following incidents:

- A smartphone controlled robot that cleans the floor.
- Spinning mops on the front of the robot along with a foam roller attached for its cleaning purpose.
- A water reservoir and a water pump which can be switched on when required to pour water on the floor for a proper clean.



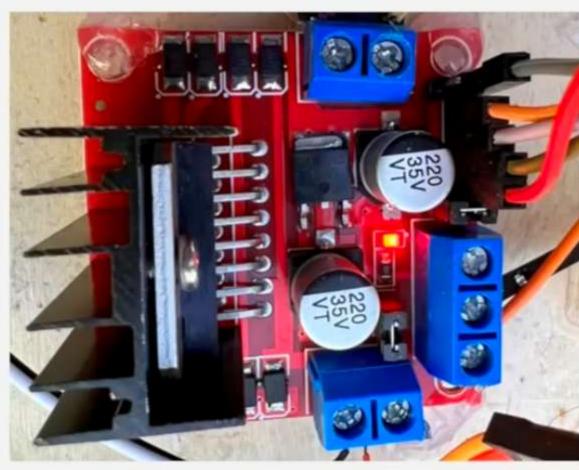
## Key Components







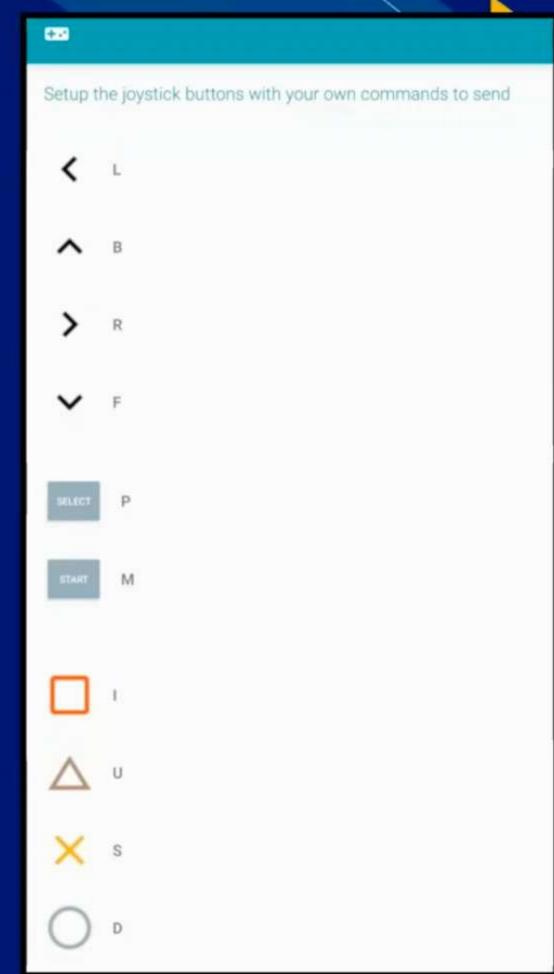


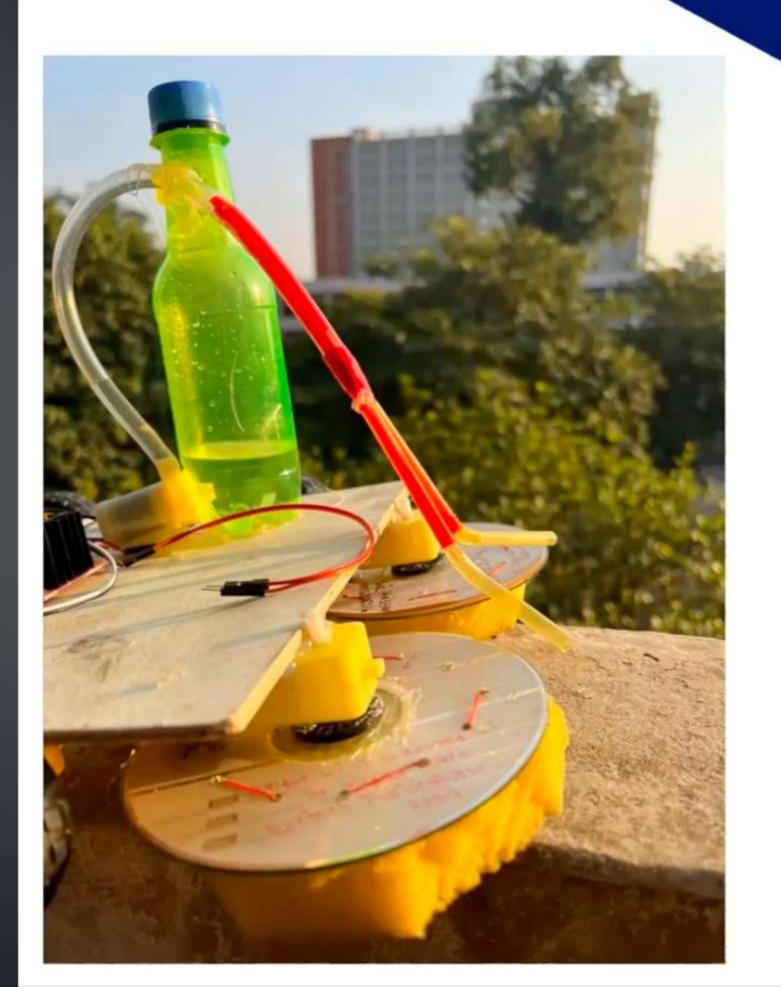


### **Bluetooth Controlled App**



 Above are the layouts of our app which was connected via Bluetooth to the bot. The single alphabets represent various functionalities of the bot.



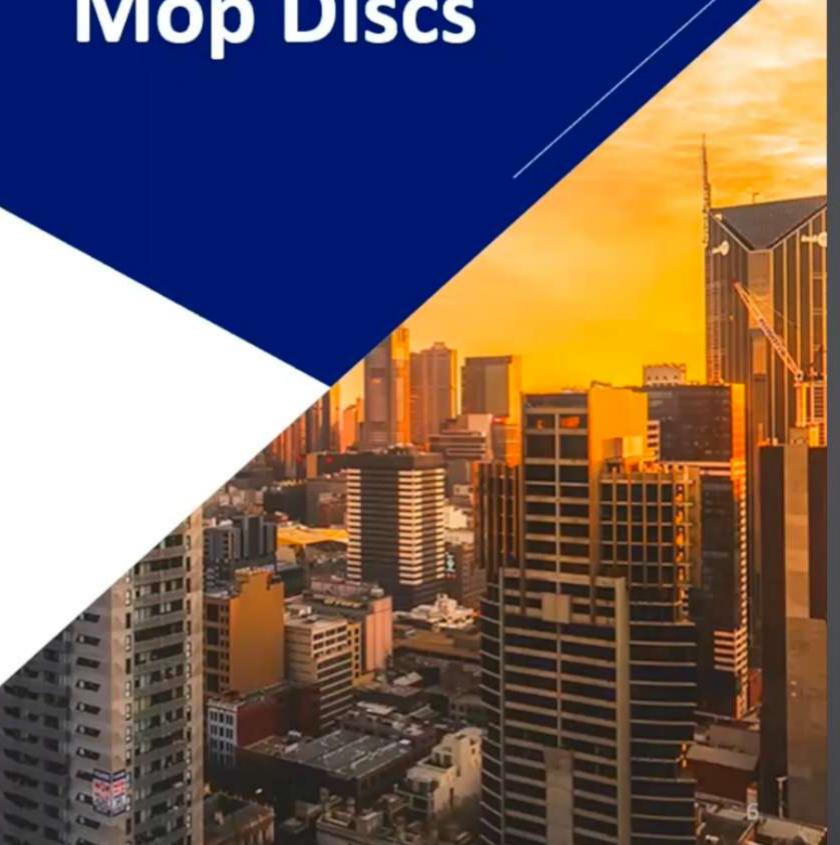


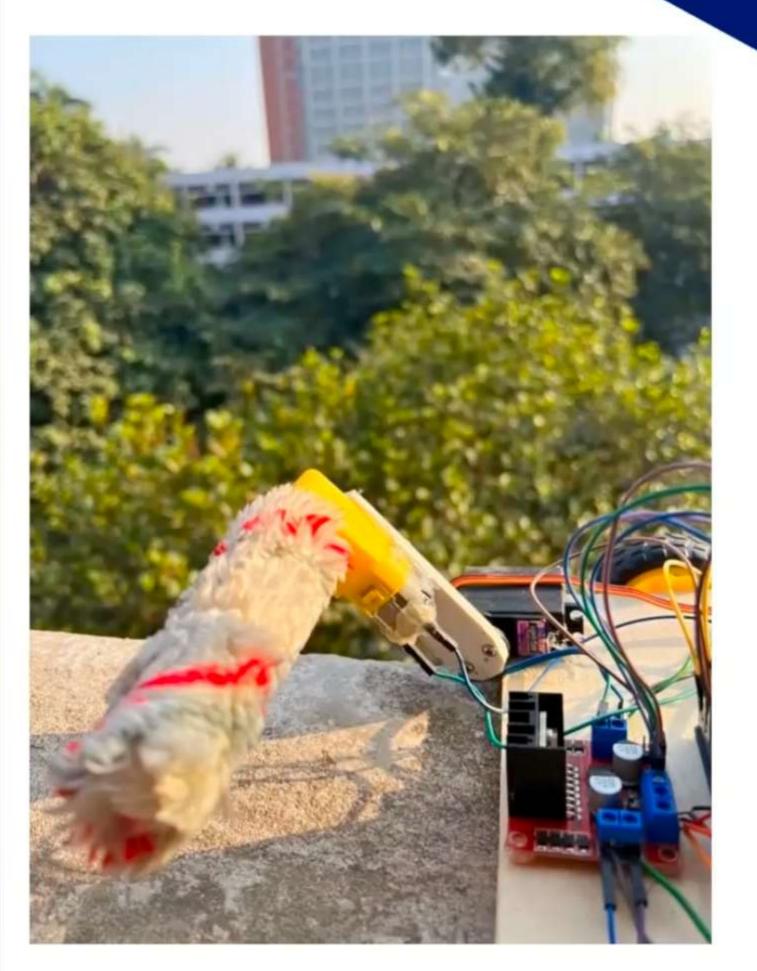
Mop Discs

 Discs with foam attached acts as our mops.

The gear motors of the mops are connected in an anti-parallel way resulting in different clockwise rotation.

Speeds can be controlled.





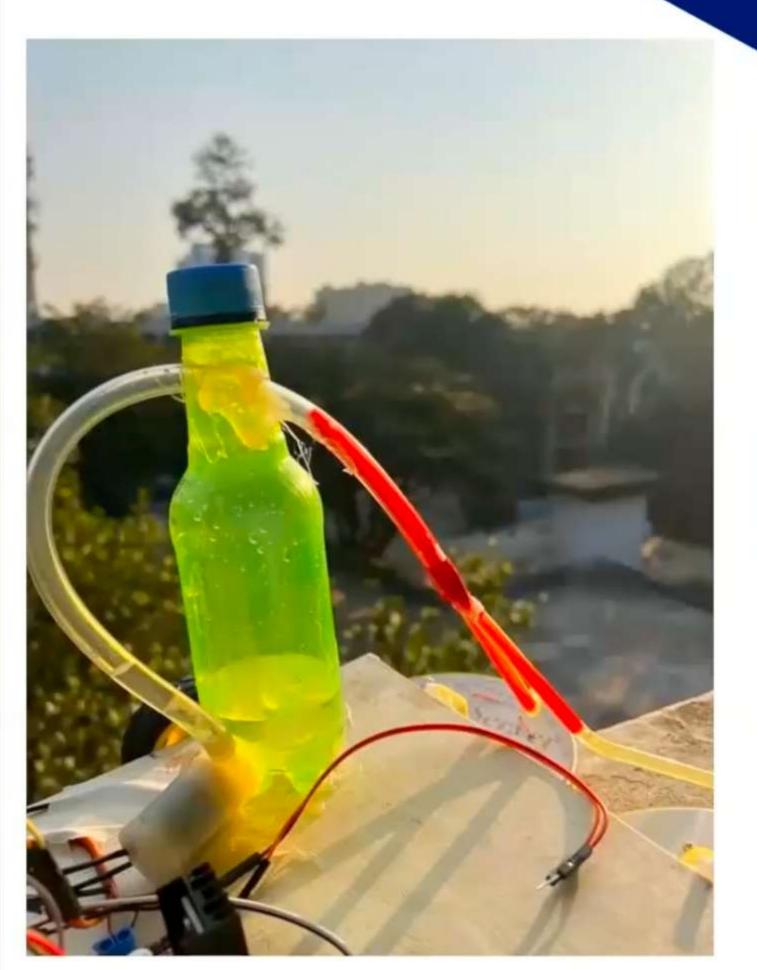
#### **Roller Cleaners**

 Paint roller connected with a servo serves the same cleaning purpose

 The gear motor of the roller also has a controlled rotation.

Speeds can be controlled.





## Water Pump & Reservoir

 A small bottle was mounted with the water pump to act itself as the water reservoir.

 The vinyl tube coming from the pump gets parted to two sides sothat water reaches to both of the mops

