HOME CLEANER

Team Name:

THE CKT BREAKERS

Project description:

To make an autonomous bot to detect obstacles and wet wipe the room accordingly.

Youtube link: https://youtu.be/gy2sqoWtCCQ

Our project would look similar to the bot in the above link.

Plan of action:

Week 1: Research mechanical design and finalize components of the bot

Week 2: Finalize solidworks and buy components. Start making bot.

Week 3: Finish the electrical work of the bot and start mechanical work.

Week 4: Complete mechanical work and calibrate the bot.

Minimum components required:

1. Arduino
2. Aluminium for body
3. At least 3 ultrasonic sound sensors for obstacle sensing
4. Motors
5. Battery
6. Cloth for cleaning(Absorbent one)
7. Wires and resistors(of appropriate value)

Estimated Cost:

INR 3000

Breakup:

1. Arduino Uno(Approx. INR 500)

2. Aluminium chasis.
3. Ultrasonic sound sensors (min. INR 100 each (saw on Amazon.in))
4. Motor (Approx. INR 250 each) (We may decide on the number of motors needed according to the design)
5. Cost for wiping mechanism INR 500.
6. Cost for battery and everything else estimated to be INR 1000.

Salient features:

1. Portable
2. Efficient Cleaning

Things we expect to learn from this project:

1. Arduino linking with different sensors
2. Efficient algorithm for room cleaning
3. Mechanical designing
4. Practical implementation of technical ideas

Members:

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