



INDUSTRY ORIENTED AUTOMATION ROBOT

Under the guidance of:
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Team 17

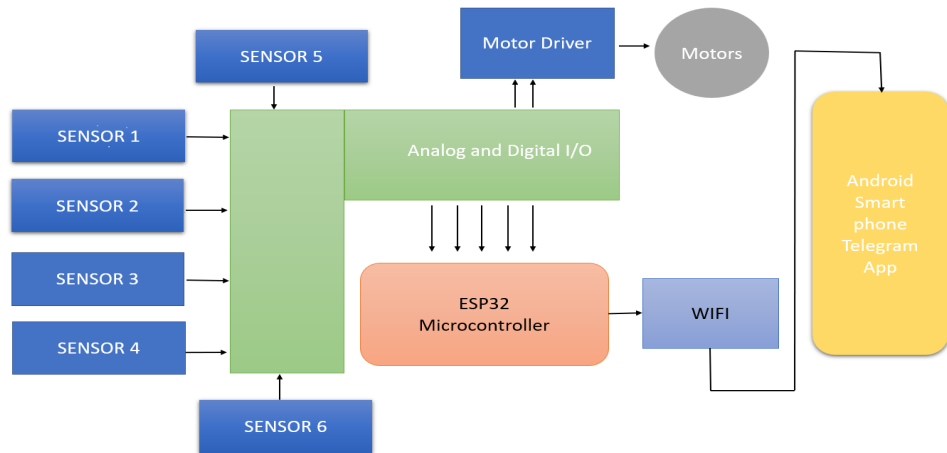
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SUMMARY OF STAGE - I



- This Industry Oriented Automation Robot can be used to monitor an industry's environment using sensors.
- In stage -1, only the LDR Sensor, Ultrasonic Sensors were implemented.
- In stage -2, we have implemented a fire, gas, metal and magnetic sensor.

ARCHITECTURE



MODULES

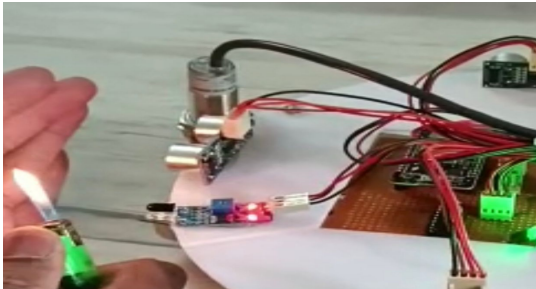


- Light Detection
- Obstacle Detection
- Robot Motion
- Fire Detection
- Gas Detection
- Metal Detection
- Collections of metal particles



1. Fire Detection

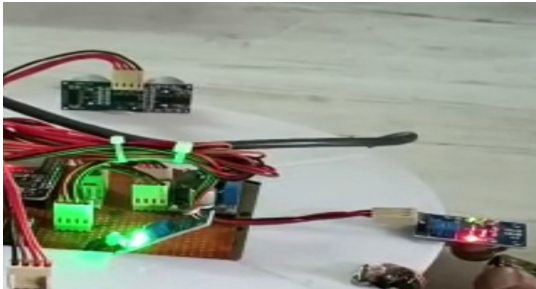
- Fire/Flame sensor infrared receiver module ignition source detection module is Arduino compatible and can be used to detect flame or wavelength of the light source.





2. Gas Detection

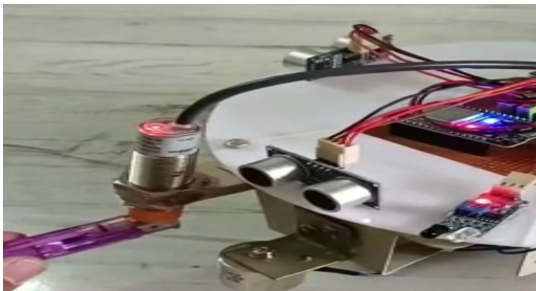
- Gas sensors (also known as gas detectors) are electronic devices that detect and identify different types of gases. They are commonly used to detect toxic or explosive gases.





3. Metal Detection

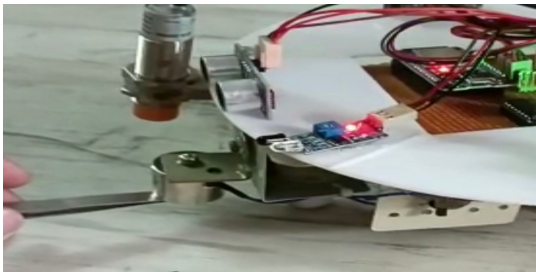
- A metal detector is an instrument that detects the nearby presence of metal. Metal detectors are useful for finding metal objects on the surface





4. Collection of Metal Particles

- As the metal sensor identifies the presence of metal particles, the magnet positioned next to it can be helpful to collect the metal particles.



CONCLUSION



- The implementation of all the six sensors is completed.
- Hardware part has been implemented.
- We still have to connect the robot to a telegram bot, so the robot can send notifications to the admin.

THANK YOU