CAR ACCIDENT AND ALERT SYSTEM

PROJECT REPORT

GROUP 1

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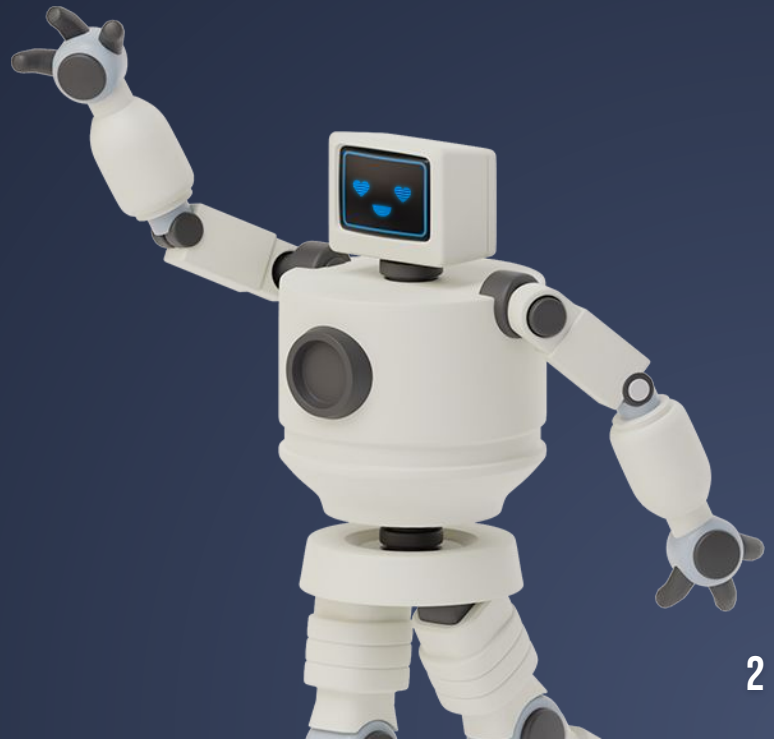
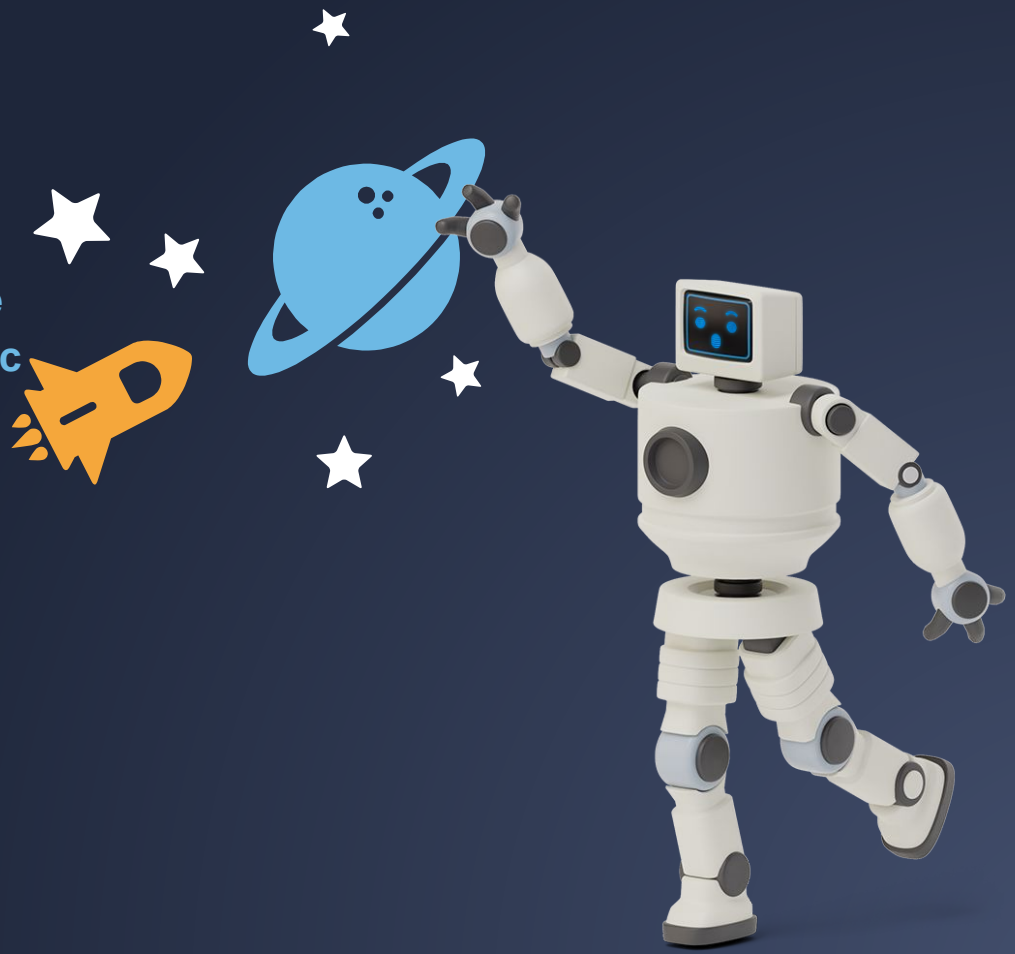


ABSTRACT

Every day around the world, a large percentage of people die from traffic accident injuries. An influential indicator of survival rates after detecting the accident is the time between the occurrence of the accident and the arrival of emergency responders to the scene. Reductions in this time, in turn, may reduce the numbers of fatalities



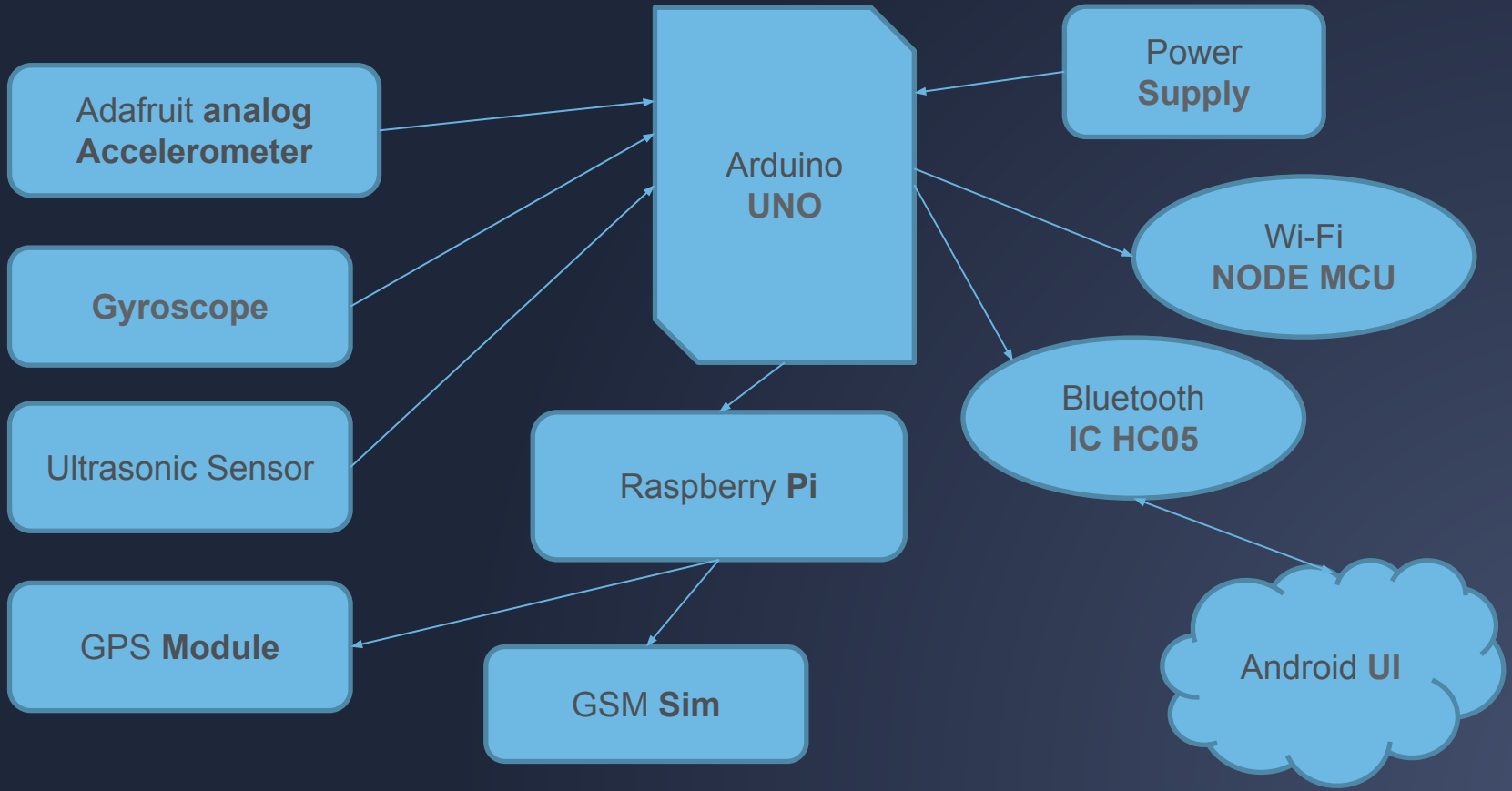
JUSTIFICATION

This project detects whether accident occurs or not using accelerometer,gyroscope & ultrasonic sensor and it notifies to some emergency numbers through call and notifies on the admin app with location and details.

The process can be monitored through an application available to the admins by using technologies like Embedded System, Bluetooth, Sensors, Wi-Fi modules, etc.

By using these type of smart automation system we can prevent causing casualties and accidents.

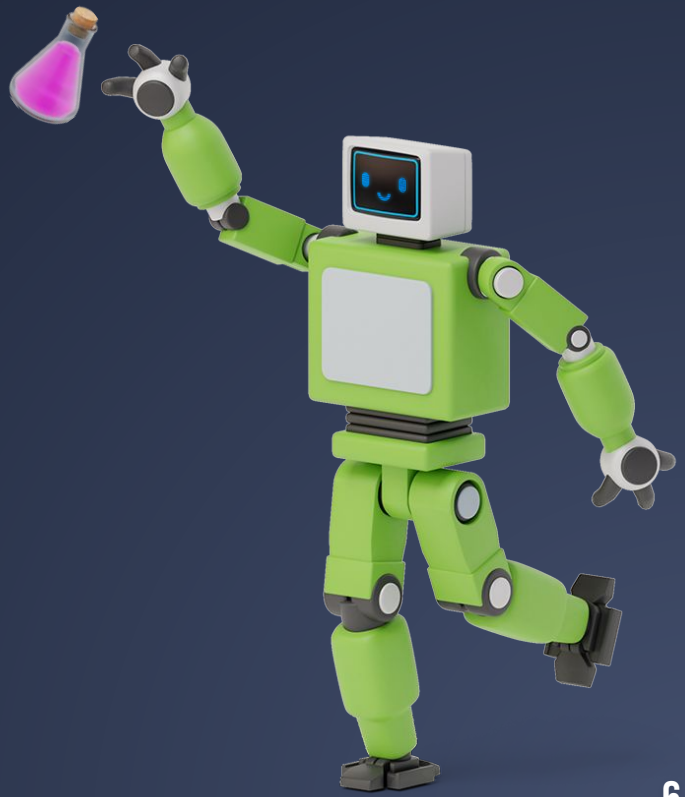
FUNCTIONAL BLOCK DIAGRAM



COMPONENTS

HARDWARE –

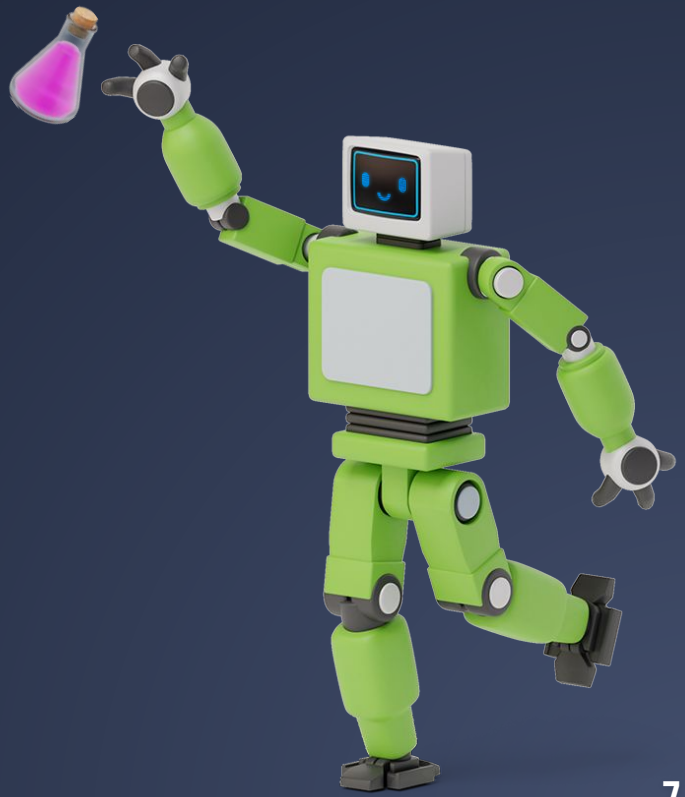
- Arduino UNO
- NODE MCU
- Motor & Wheels
- Bluetooth HC05 Module
- Gyroscope
- Ultrasonic Sensor
- Power Supply
- Connecting Wires & Resistors
- Motor Driver IC
- Servo Motor
- Motor Door



COMPONENTS

SOFTWARE –

- **Arduino IDE**
- **Android Studio**
- **Android Application UI**
- **Algorithm :: The sensors detect the accident and corresponding signal is sent from the Arduino Board to different modules for different work.**



PHASE WISE IMPLEMENTATION

PHASE 1 : OUTPUT FOR PRE-EVALUATION –
Integration of sensors into the car and uploading of data manually to the cloud.

PHASE 2 : OUTPUT FOR FINAL-EVALUATION –
Demonstration of whole project with an app UI which monitors the status of car and sending of messages using sim on the event of an accident.