

# DIY PROJECT

Group 9 | Presentation



# TEAM MEMBERS

- Durgesh Choudhary      || 21CE10021
- Shah Emaad                || 21CE10061
- Islavath Mohan Naik     || 21CE30016
- Pawan Raj                || 21CE10041

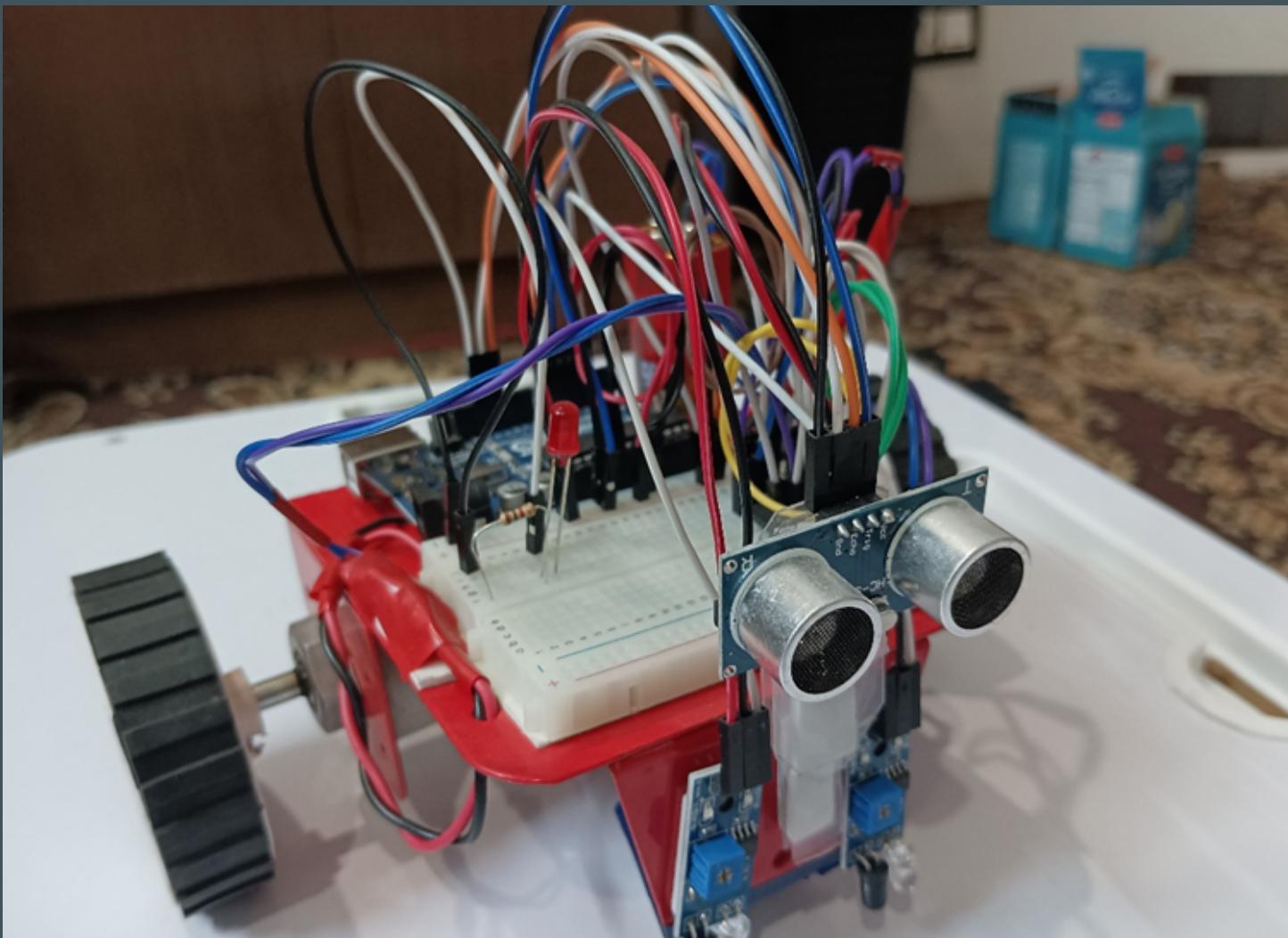
# OUR PROJECT

Obstacle Avoiding +  
Bluetooth RC Car

# OBJECTIVE

We wanted to build an Autonomous Ground Vehicle (AGV) which can change modes from OBSTACLE AVOIDING to MANUAL BLUETOOTH RC.

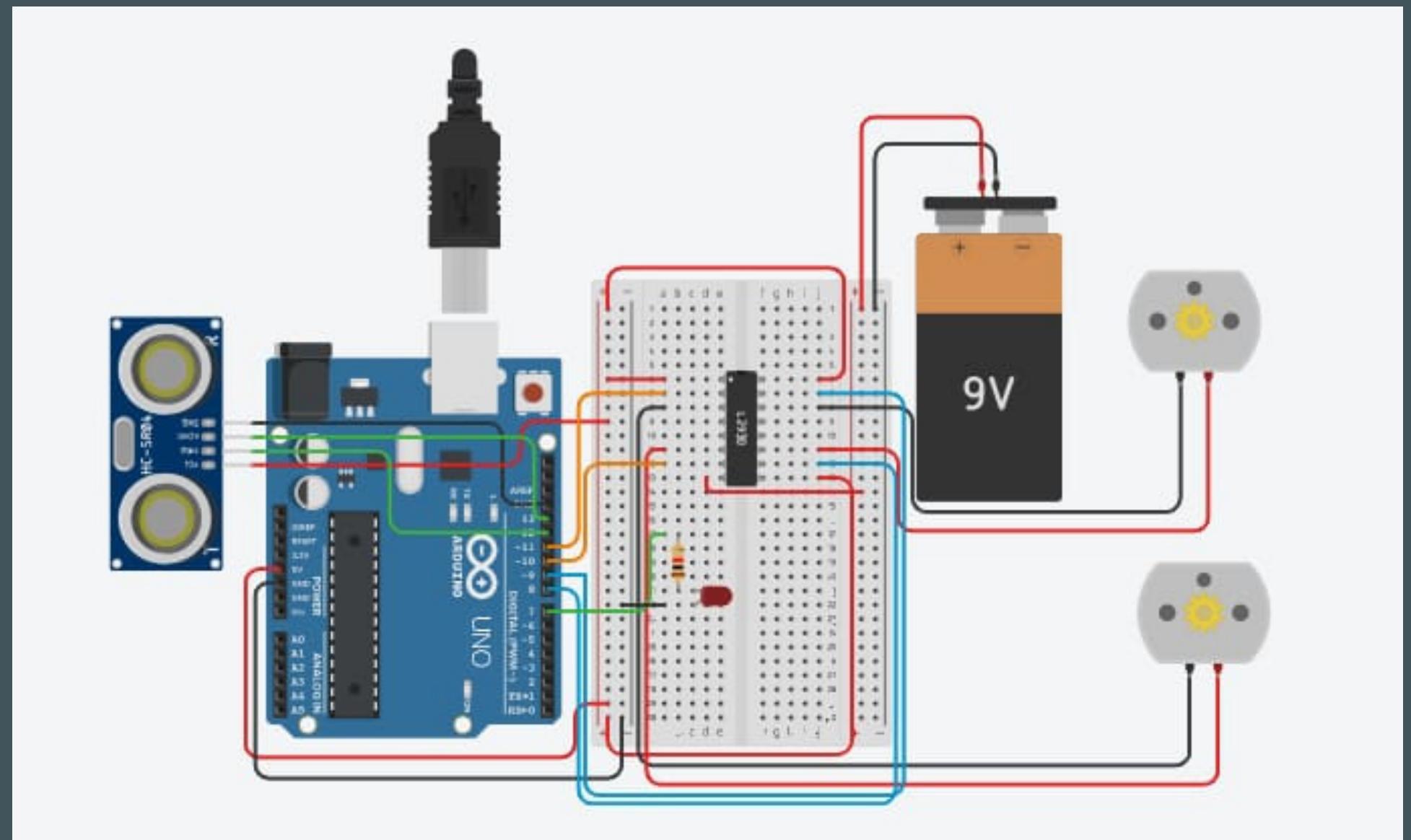
# OBSTACLE AVOIDANCE BOT



# COMPONENTS

Name	Quantity	Component
U1	1	Arduino Uno R3
U3	1	H-bridge Motor Driver
BAT1	1	9V Battery
M1 M2	2	DC Motor
DIST1	1	Ultrasonic Distance Sensor
D2	1	Red LED
R1	1	1 kΩ Resistor

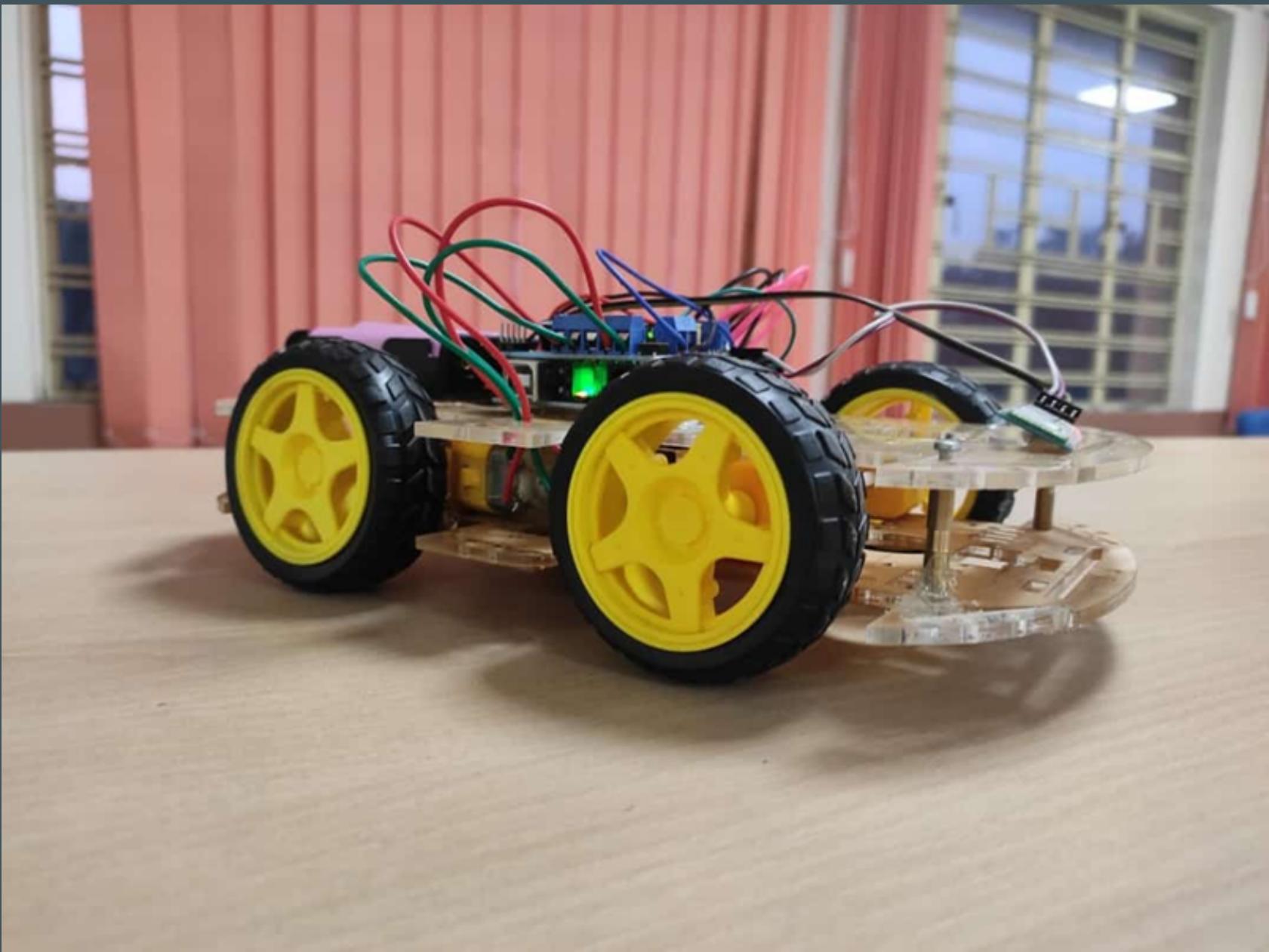
# CIRCUIT DIAGRAM



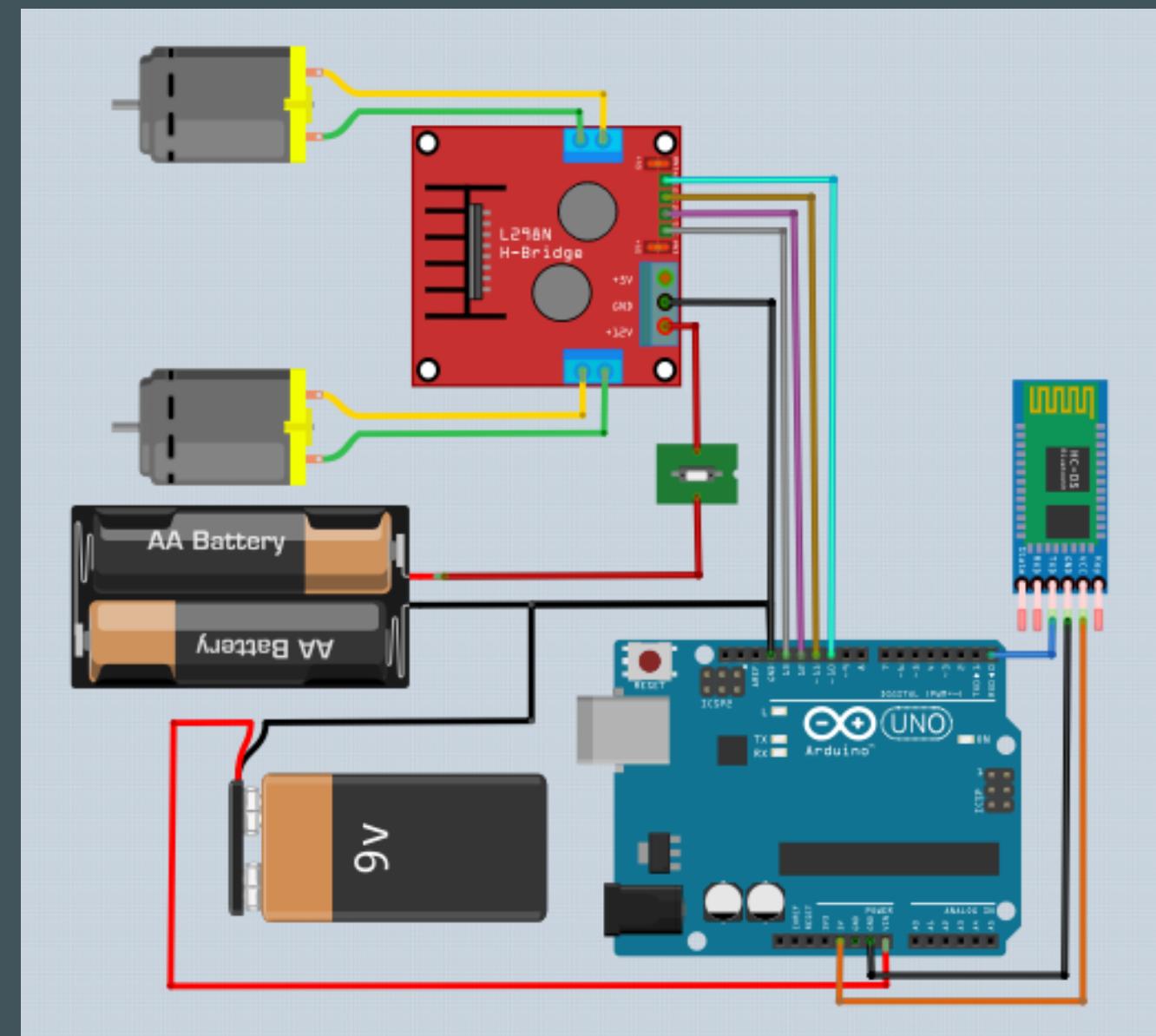
# DEMONSTRATION



# BLUETOOTH CONTROLLED CAR



# CIRCUIT DIAGRAM



# DEMONSTRATION



# APPLICATIONS

- Safety
- Comfort
- Futuristic
- Unmanned Ground Vehicles

# CHALLENGES FACED

- Components were not available
- Time Constraint
- Lack of Physical Presence

# WHAT MORE CAN BE DONE

- We can integrate both the technologies.
- Battery Optimisation can be done.
- Use of RRT or RRT\* algorithm.

# DISTRIBUTION

- Group Leader : Durgesh
- Coding : Durgesh, Emaad and Pawan
- Final Presentation : Durgesh and Emaad
- TinkerCAD Simulation : Emaad and Mohan
- Assembling the parts : Emaad and Mohan
- Video Editing : Durgesh
- PPTs : Pawan

# YOUTUBE LINK

<https://youtu.be/avTy2J4JpI4>

# ACKNOWLEDGEMENT

- We would like to express our special thanks of gratitude to Professors and TAs for providing us this opportunity to work on this project and for their guidance and support through the course
- We as a team combined our diverse perspectives from different individuals to make our project work. While working as a team everyone got chance to come across each other's ideas which helped us in getting to know each other more in this online semester.

Thanking you, Members of Team 9



# THANK YOU