BMS COLLEGE OF ENGINEERING

TITLE :- AGRO BOT

GUIDE:-

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AGENDA:

- Introduction
- Problem definition
- Methodology
- Working
- Expected Result
- Advantages and disadvantages
- References

INTRODUCTION

- Using machinery in agricultural field.
- Disadvantages in conventional method of farming.
- Reduces physical labour.
- We cannot use huge machines for domestic purpose
- Small robots makes the job easier.
- Utilizing advanced technology.
- Power consumption is less.
- It is eco-friendly.

PROBLEM DEFINITION

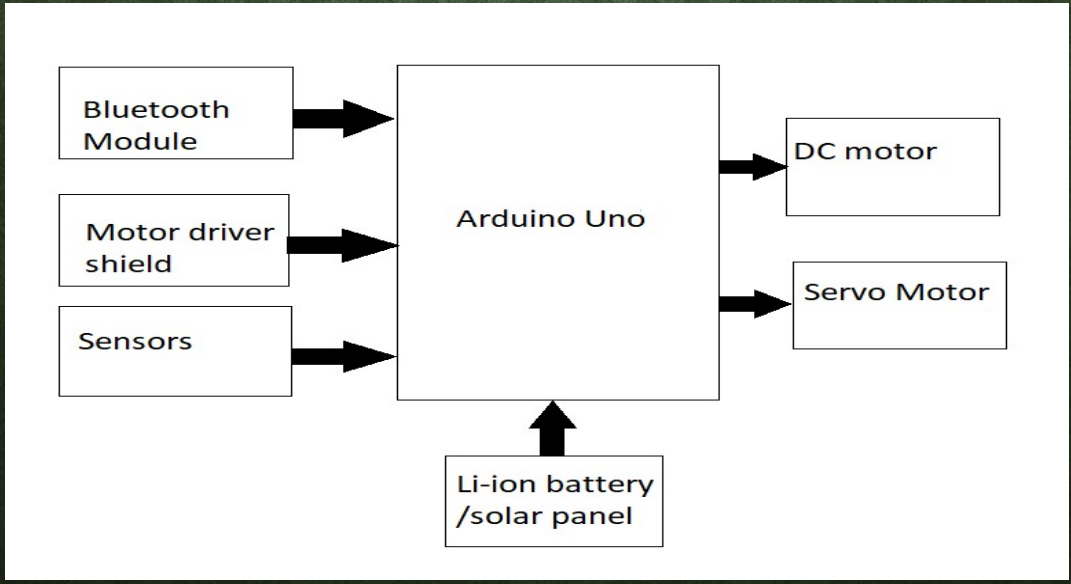
- Large machineries can't be used in small areas.
- Proper seed sowing is necessary.
- Human effort and time consuming.

METHODOLOGY

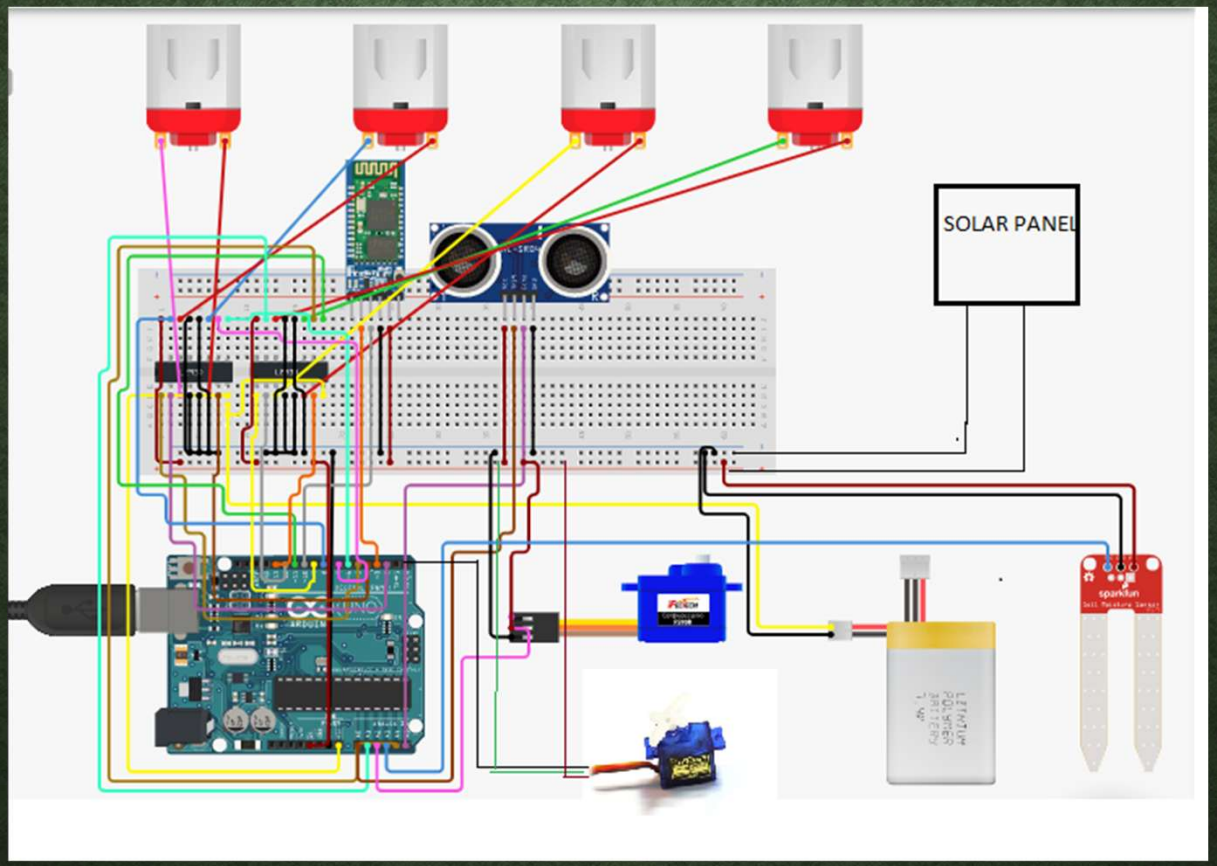
- The circuit diagram, circuit description, flow chart, and the block diagram are included in this section.

- The Bluetooth electronics app is used to control the robot.

- Seed sowing is done with the help of servo motor.



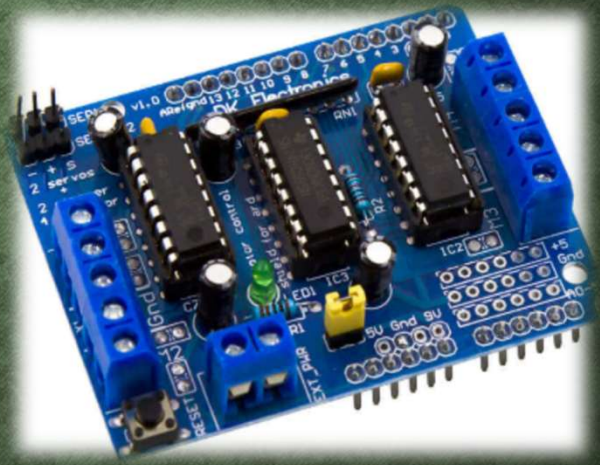
CIRCUIT DIAGRAM



COMPONENTS DESCRIPTION

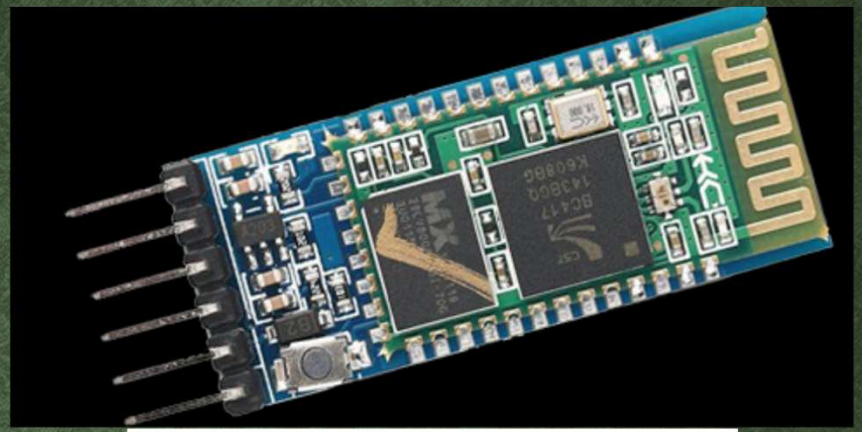
1. Arduino Uno

2.Motor driver shield



3. Ultrasonic sensor

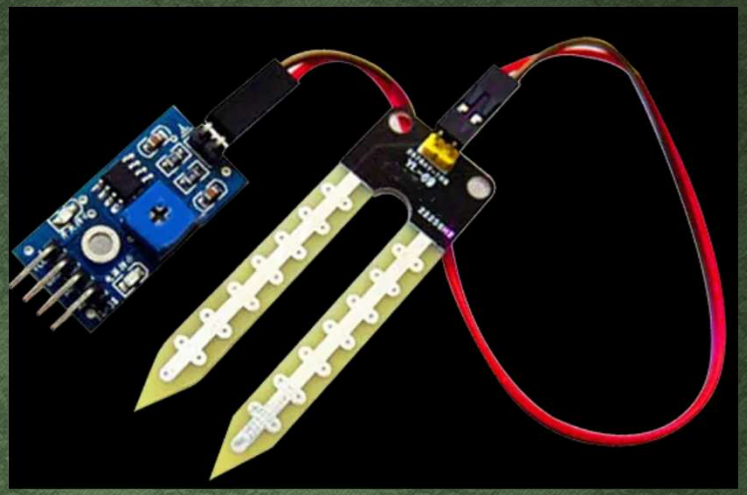
4. Bluetooth module



5. DC Motor

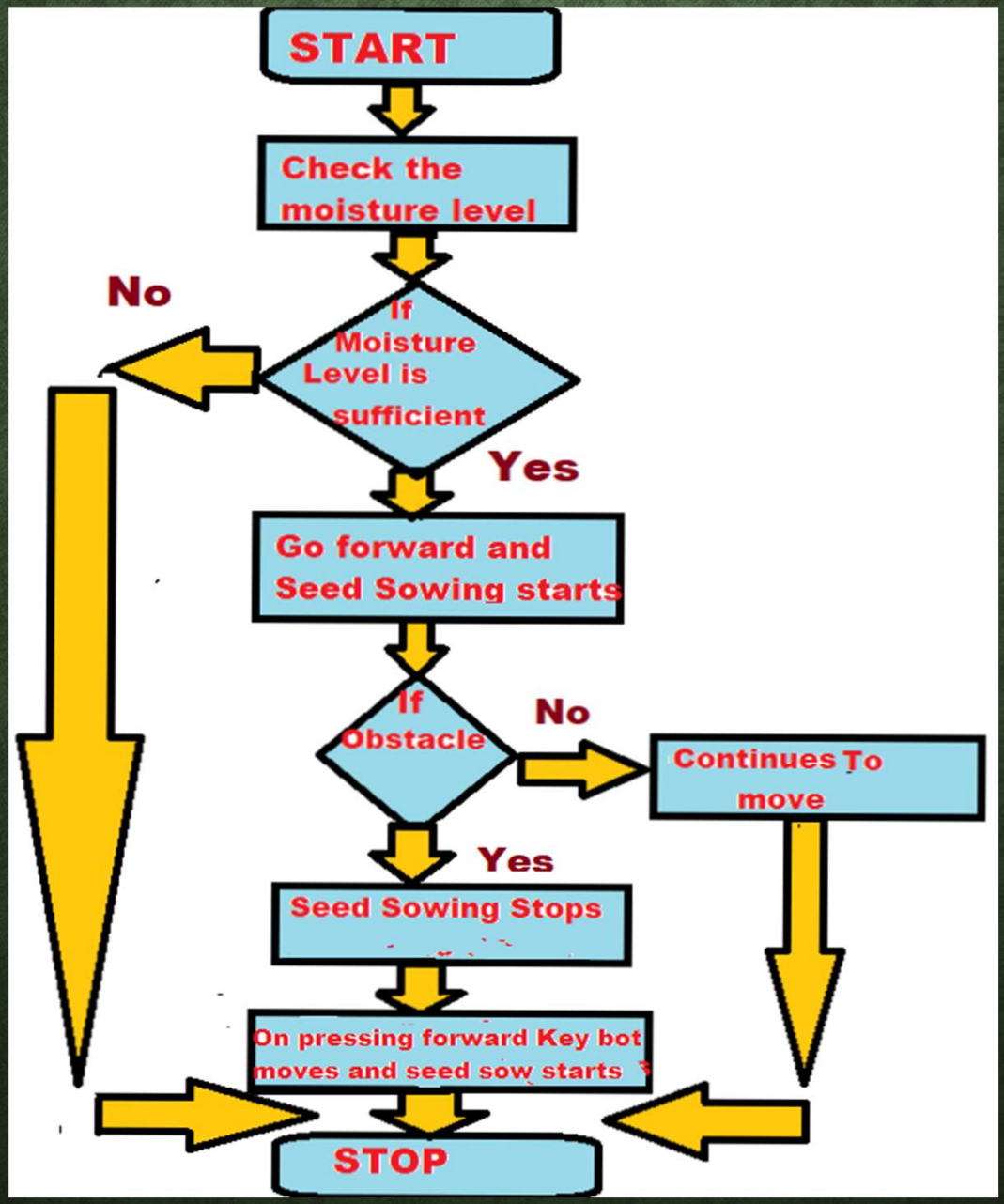
6. Li-ion battery

7.Soil moisture sensor



8.Servo motar

FLOWCHART


START
Check the moisture level
No
If Moisture Level is sufficient
Yes
Go forward and Seed Sowing starts
If Obstacle
No
Continues To move
Yes
Seed Sowing Stops
On pressing forward Key bot moves and seed sow starts
STOP

EXPECTED RESULTS

- Operated using automated seed sowing robot.
- Soil moisture checks the moisture content of the soil.
- Movement based on obstacle detection.

ADVANTAGES AND DISADVANTAGES

ADVANTAGES

- Reduces human effort and work.
- Low cost.
- Small in size and light weight
- The batteries have a good shelf life.
- Moisture sensor checks the moisture level of soil
- No complexity in operating .
- Solar Panels can be used to run the bot in future.

DISADVANTAGES

- Minimal range of Bluetooth.
- Only small seeds can be sowed .

REFERENCES

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THANK YOU