



Mahatma Gandhi Missions College
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FABRICATION OF CREEPING ROBOT



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Introduction

The purpose of this project is to design and implement a floor cleaning Robot which control via Phone Application. floor Cleaner Robot is designed to make cleaning process become easier rather than by using manual cleaning items.

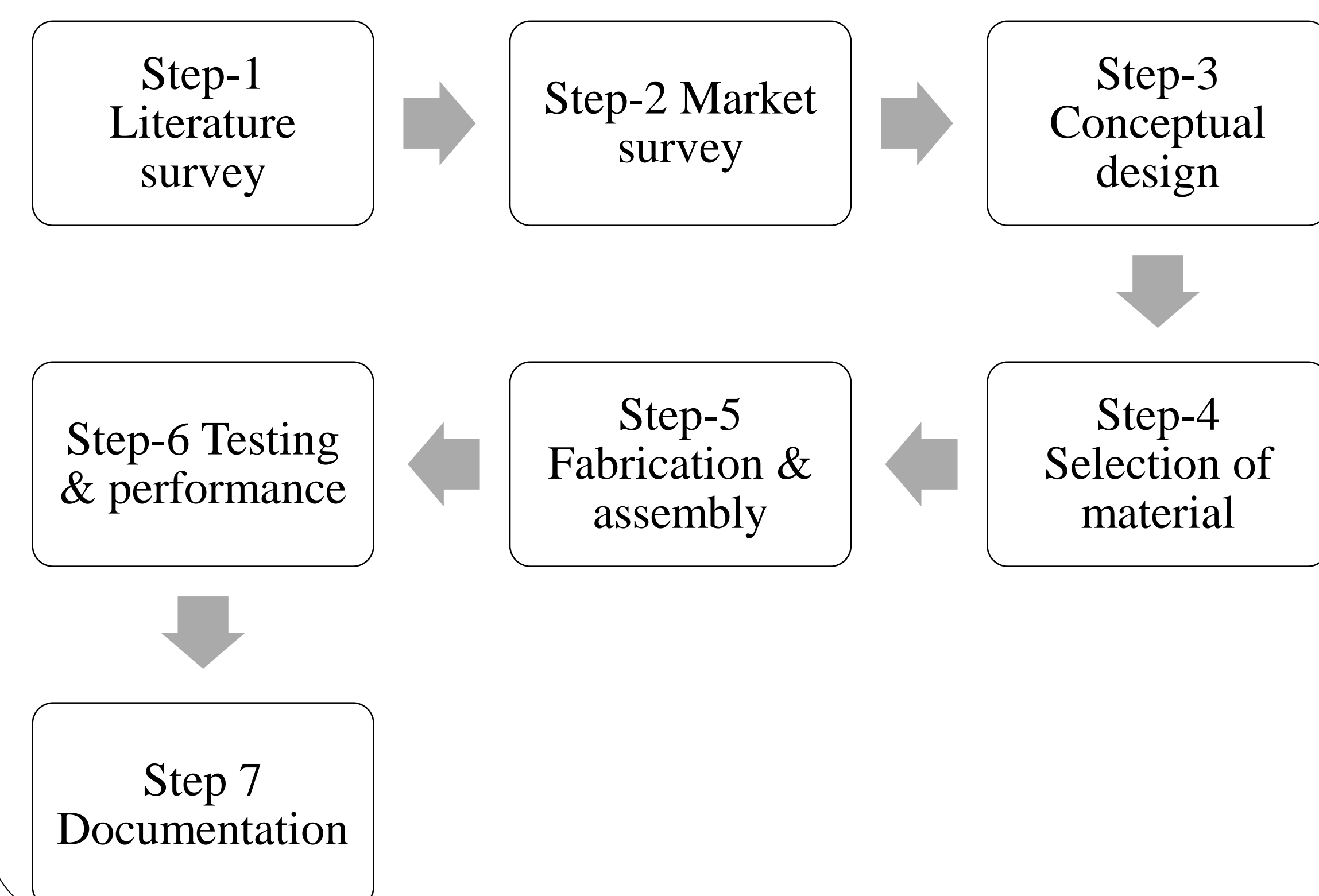
It is designed to handle a dust and small dust particles. The different component are controlled with the mobile application Bluetooth serial controller .

This robot avoid obstacles and stop the operator of this robot clean the large area of the robot without any fatigue.

Project Objectives

- The person with disability can easily control the robot..
- To perform automatic functions.
- The base of the project is small in size so it can be easily move in small area.
- To clean the surface with minimum effort.
- Better cleaning and eco friendly.

Methodology



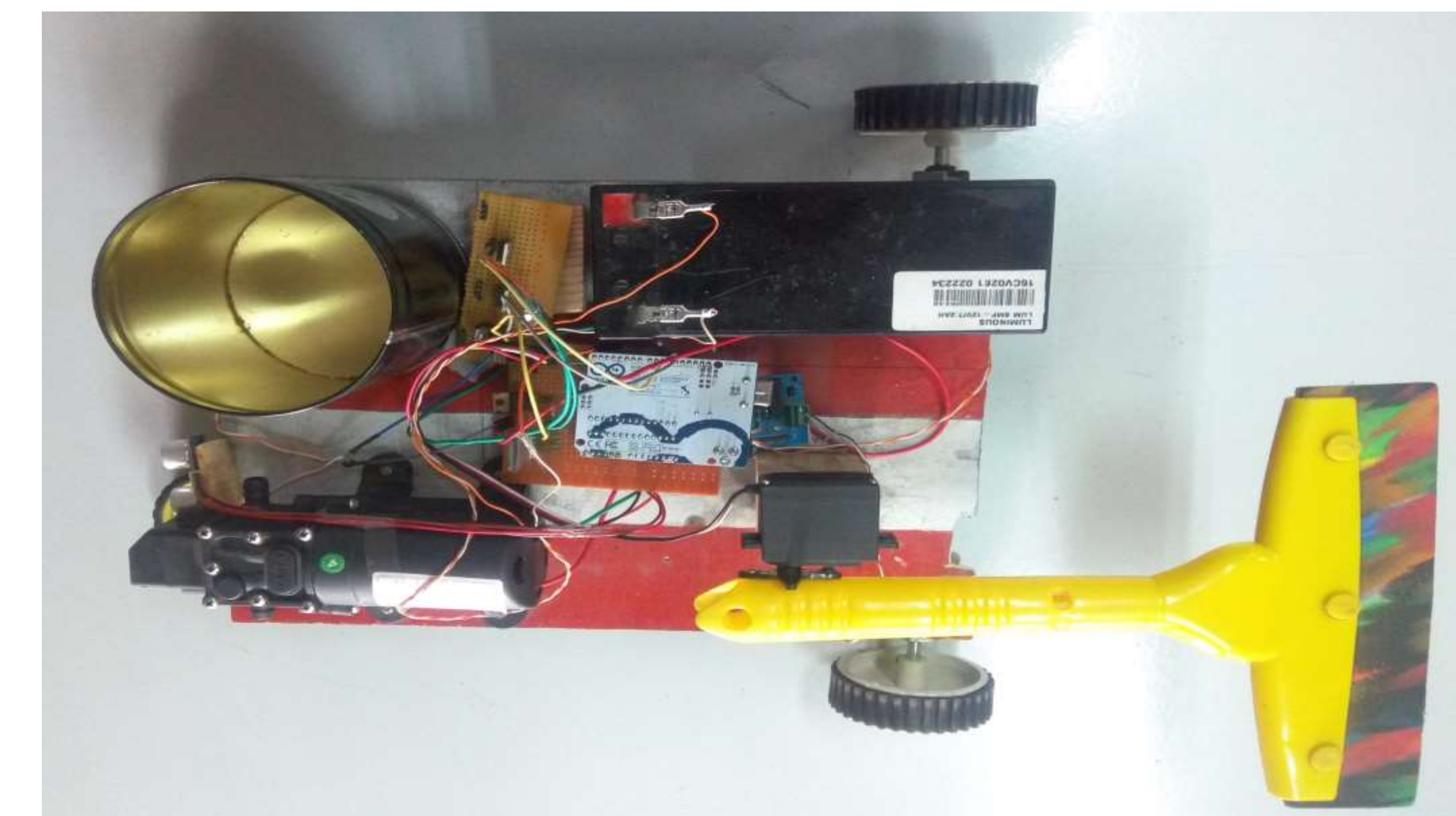
Performance Parameter

- **Mop test:** Gear motors ad Mops are tested.
- **Sensor testing:** we use HC -05 sensors to avoid obstacles.
- **Rear wheel test:** Testing the rear wheels at different speed and in different direction
- **Pump test:** Testing the pump for water mechanism.

Design Parameters

S.no	Robot Specifications	Targets	Achieved
1	Wheel base	At least 6 inches	6"
2	Clamps	stability	successful"
3	Wiper	Wiper is used to clear the rear side of the floor attached to the servomotor.	Movable to 90 degree up and down"
4	Ground clearance	Minimum 3 inches	2"
5	Battery	12 volt battery is used to provide the power to the robot.	all component is working withy this battery
6	Obstacle sensor	Stop the robot	Successfully tested at 30cm
7	Water mechanism	Water mechanism is use to enhance the floor cleaning process.	Successfully tested

IMAGES



Conclusions

- In our project creeping robot we have successfully design our base and after that we have done the complicated wire connection.
- We fabricated the robot ad its small parts which were also a challenging one so we have completed in specified time limit.
- We have successfully check the different component.

References

1. Dr. Sunil Awasthi, Designing of advance Technology of Robotic International Journal of Scientific And Research Publications, Issue 06, December 2016.
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3. Lawrence Anthony, analysis of robot, DRI-TR-12-06-2 Second Revision, 15 October 2015.

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