IoT based Climate Reporting Automated Robotic Solar Lawn Mower

Presentation for REVA IDEA DAY 2019

REVA UNIVERSITY
Bengaluru, India

AUTOMATIC SOLAR LAWN MOWER

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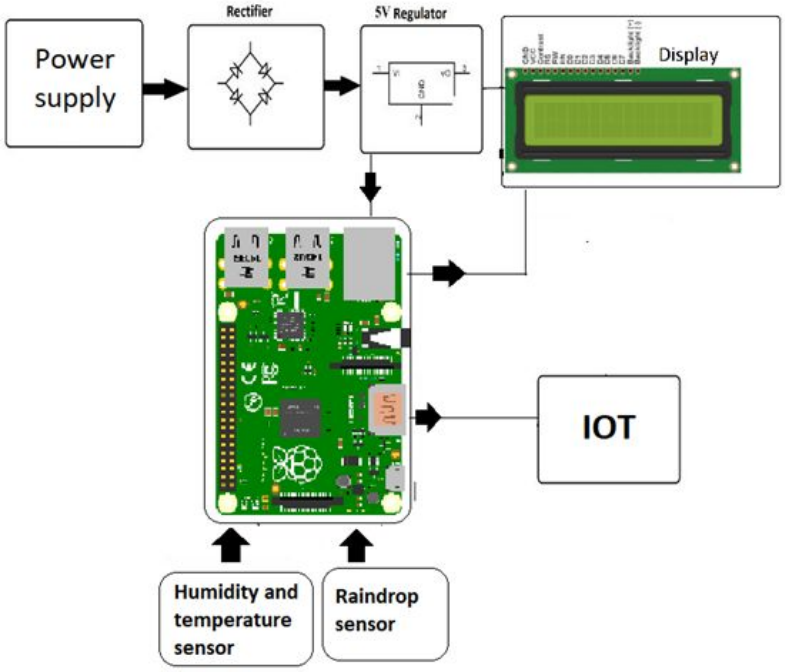
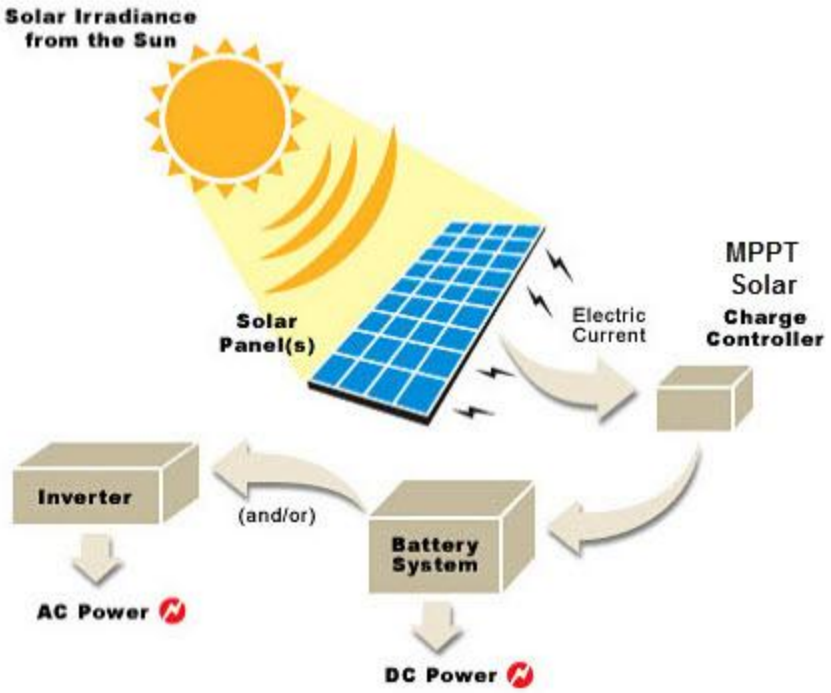
Introduction

TRADITIONAL LAWN MOWER

Methodology:





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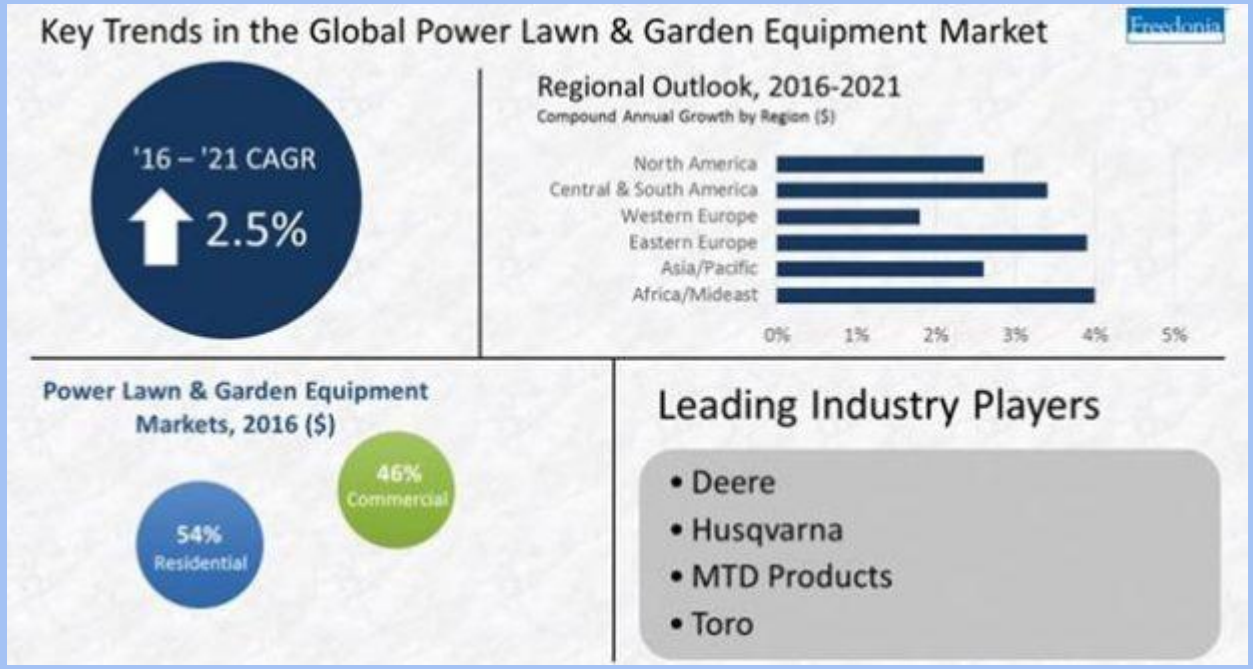
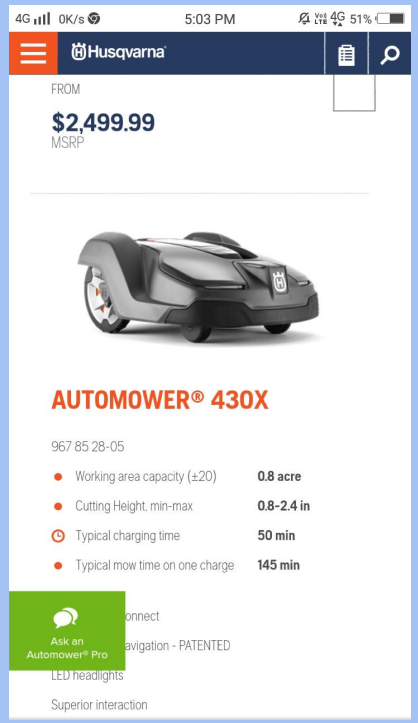
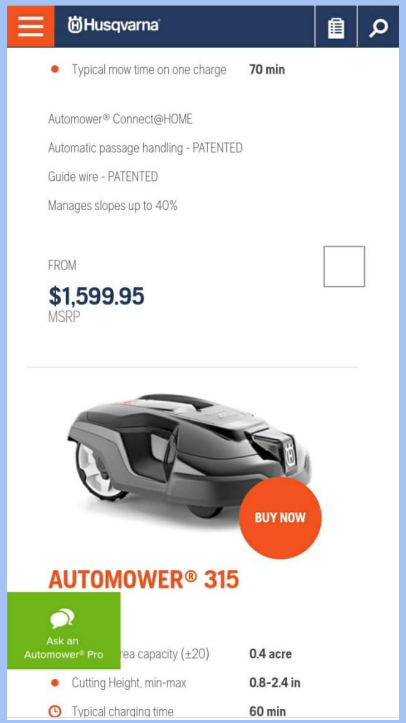
Mppt Technique

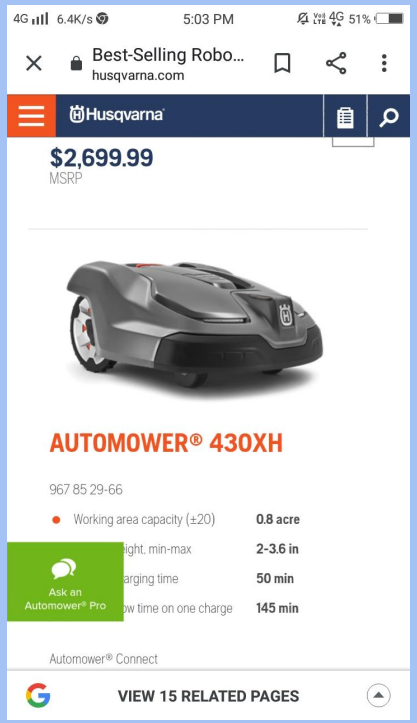
Market Analysis



Market Analysis

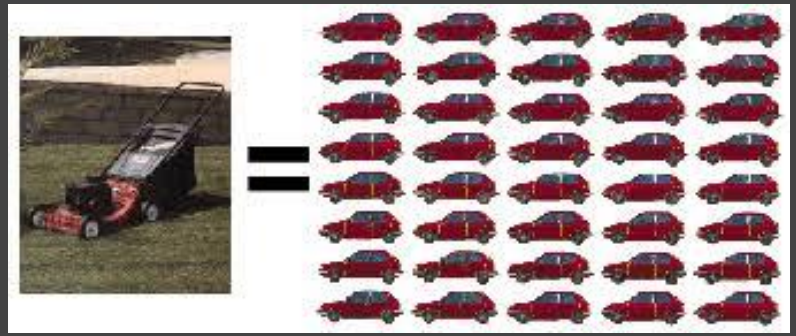






Customer and Market Research

Causes - Effects

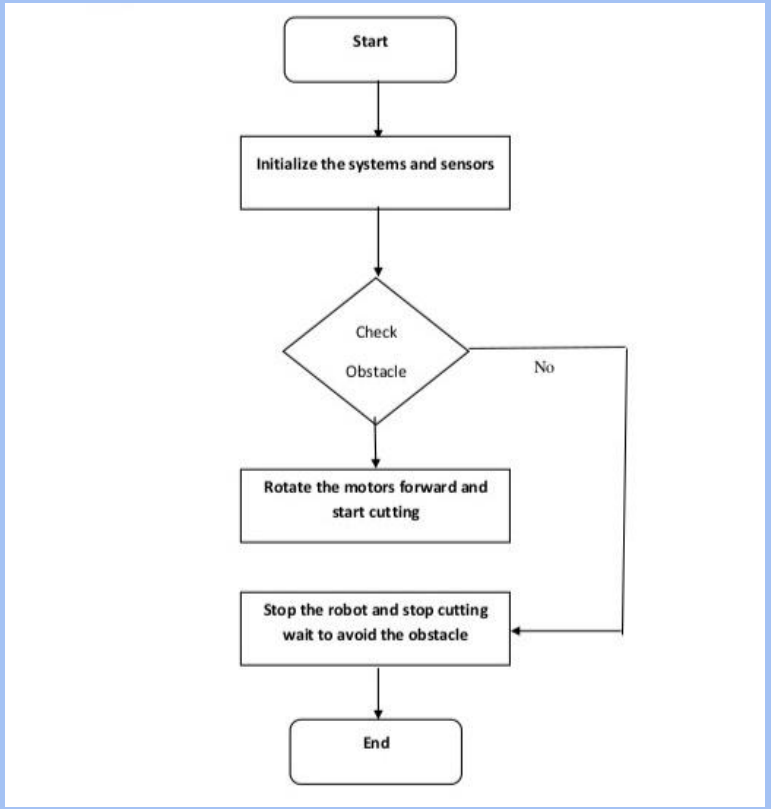


Causes - Effects

Causes - Effects

Causes - Effects

IMPLEMENTATION:



Flow Chart

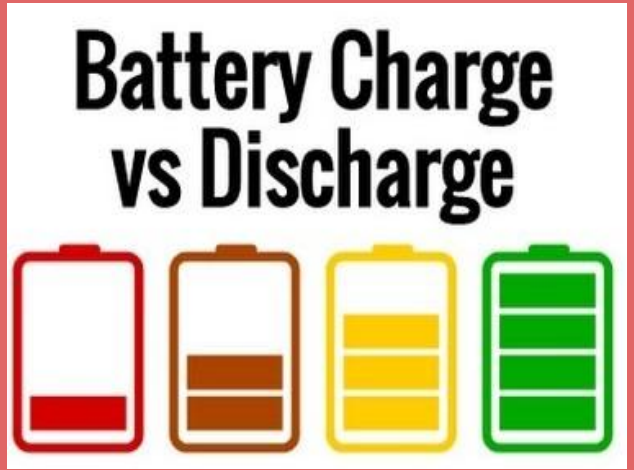
BATTERY EFFICIENCY

Old system:

Charging time of the battery is equal to the discharging time of the battery in present lawn mowers

New proposed system:

Here we are decreasing the charging time and increasing the discharging time by stepping up the voltage.



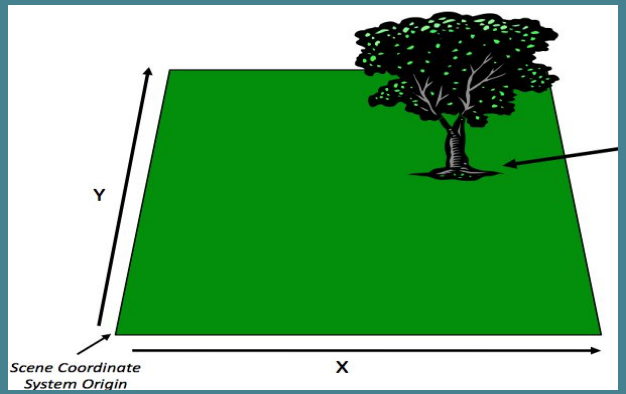
COORDINATE SYSTEM

Old system:

There are charging stations to every lawn mower and guide wires which means that the present environment is disturbed.

New proposed system:

We are using coordinate system to find the borders of lawn so that the present environment is not disturbed.



BLADES

Old system:

Normal blades used in the lawn mower cuts the grass uneven.

Normal blades damages any object or wires in its way.

New proposed system:

We are using laser cutting blades to reduce the damage to both grass on its cute edge and other objects when goes in contact with blades.

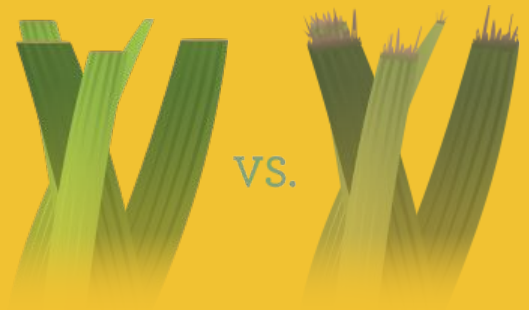
LIFE OF GRASS

Old system:

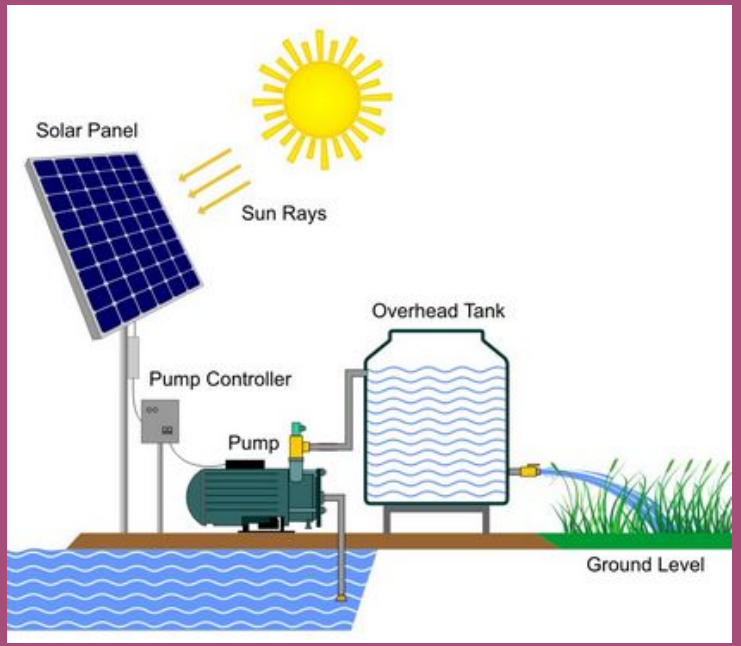
- Normal blades used in the lawn mower cuts the grass uneven and this damages the grass and reduces the growth.

New proposed system:

- We are using laser cutting blades which reduces damage to grass on its cute edge this won't disturb grass growth.



USES OF SOLAR PANEL SYSTEM



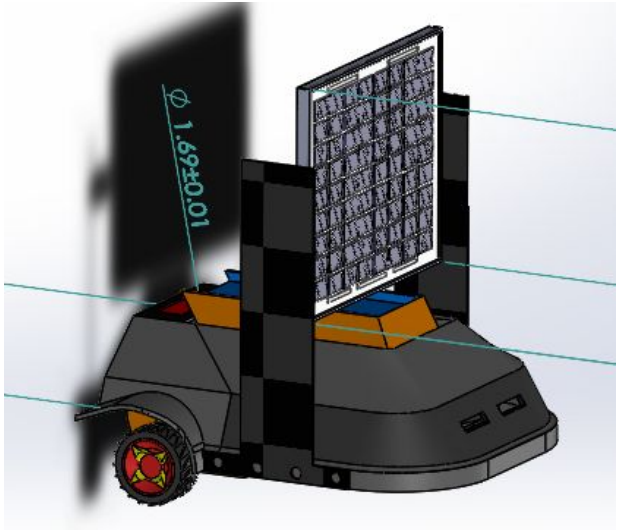
BAGGING

Old system:

- Here there is a requirement of bag for storing the grass.

New proposed system:

- The blades used will cuts the grass into small chip which is used as fertiliser for the grass itself so no bagging required.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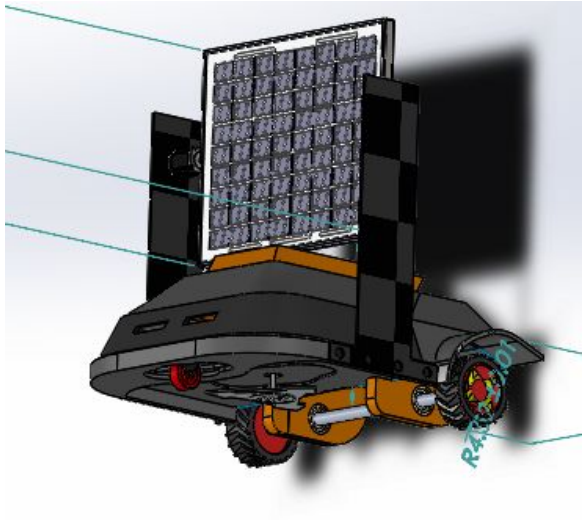

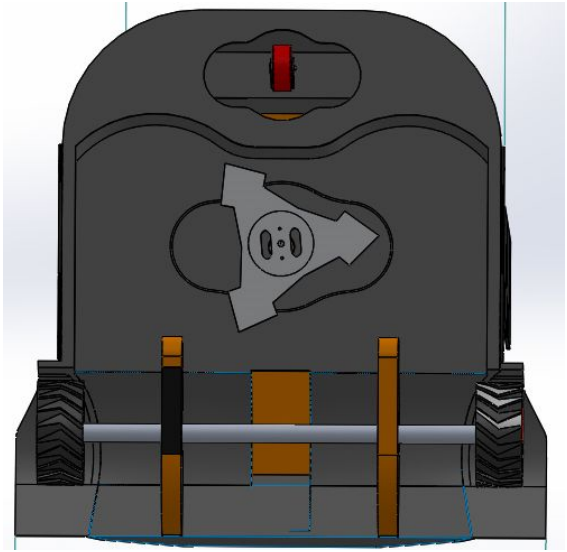

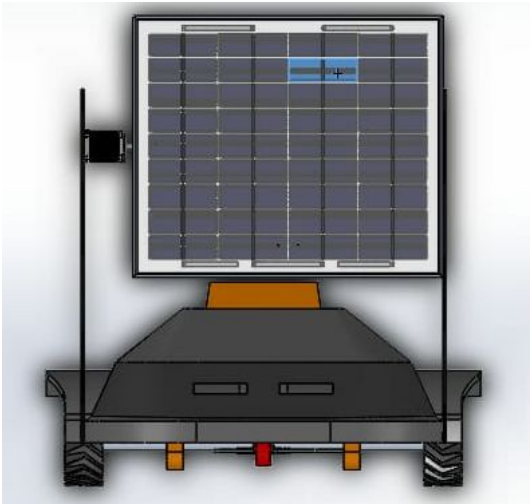

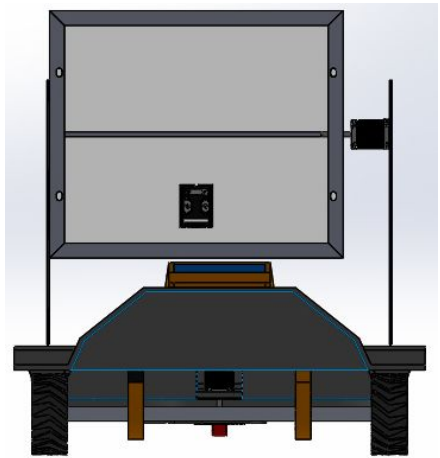

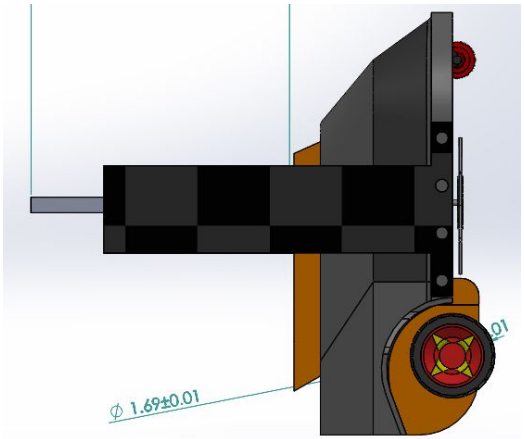
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Thank you!