

TEAM FALCONS

TEAM NO:8

Team members

- ❖ ABIN BINU SAM
- ❖ JERIL MONZI JACOB
- ❖ ASHIK DAVID ABRAHAM
- ❖ SAURAV K J
- ❖ VIVEK K P





SUPERARE

Says OVERCOME in Latin

PROBLEM

- Disabled persons face problem to move around without the help of others
- These people are dependent on others for the rest of their lives
- Older people find difficulty to walk around and do their daily chores and if they live alone ...
- Persons with severe disability must need the help of others even for their daily needs

SOLUTION

- A wheelchair is a solution to the early mentioned people and still needs the help of another person to move around
- A home nurse needs to be appointed inorder to maintain the health of the person





“

*I can' t change the direction of wind but I can
adjust my sails to always reach my destination*

”

JIMMY DEAN



OUR SOLUTION!!

- Ofcourse a wheelchair, but not the traditional one.
- A motorized wheel chair with voice control command system enabled
- Commands given through an app in the android phone
- Ultrasonic sensation system for safety
- Movable headrest for comfort of the user

COMPONENTS USED

- **Arduino Mega as CORE**
- **HC05-Bluetooth module for COMMUNICATION**
- **DC Motors for MOTION**
- **Servo Motors for ADJUSTING SEATS**
- **9V Batteries for ENERGY**
- **L293D Modules as DRIVER**
- **Ultrasonic Sensor as OBSTACLE DETECTOR**
- **JUMPERWIRES,WHEELS,CARDBOARD**



KEY FEATURES

- VOICE CONTROLLER
- OBSTACLE ALARMING SYSTEM
- LOW COST DESIGN
- EASY TO OPERATE
- LIGHT WEIGHT
- ELECTRONICALLY ADJUSTABLE SEATS.

THEME AND OUR PROJECT

- **“ROBOTICS FOR HUMANITY”**
- *We Team Falcons sticks on to theme by considering the weaker sections of the society, the ones that need care and bundles of self confidence.*
- *By this project we hope that they will ‘**superare**’ the hurdles of life the reality.*
- *Making differently abled persons move indepedently*

AVERAGE COST

- ARDUINO ATMEGA - 2000
- DC MOTER - 3100*4
- MOTER DRIVER - 2000*2
- BLUTOOTH MODULE - 500
- ULTARASONIC SENSOR - 99*6
- STRUCTURE - 2500
- SERVO MOTER - 3000
- COST(approx.) -22000/-

PICTURES

