Group 12

THE TWO WHEEL DEAL

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Goal

- Design and build a self-balancing Segway-like transportation device that uses feedback from accelerometers and an angular rate sensor to keep the wheels under the rider.

Packaging Overview

- Size Requirements
- Weight Requirements
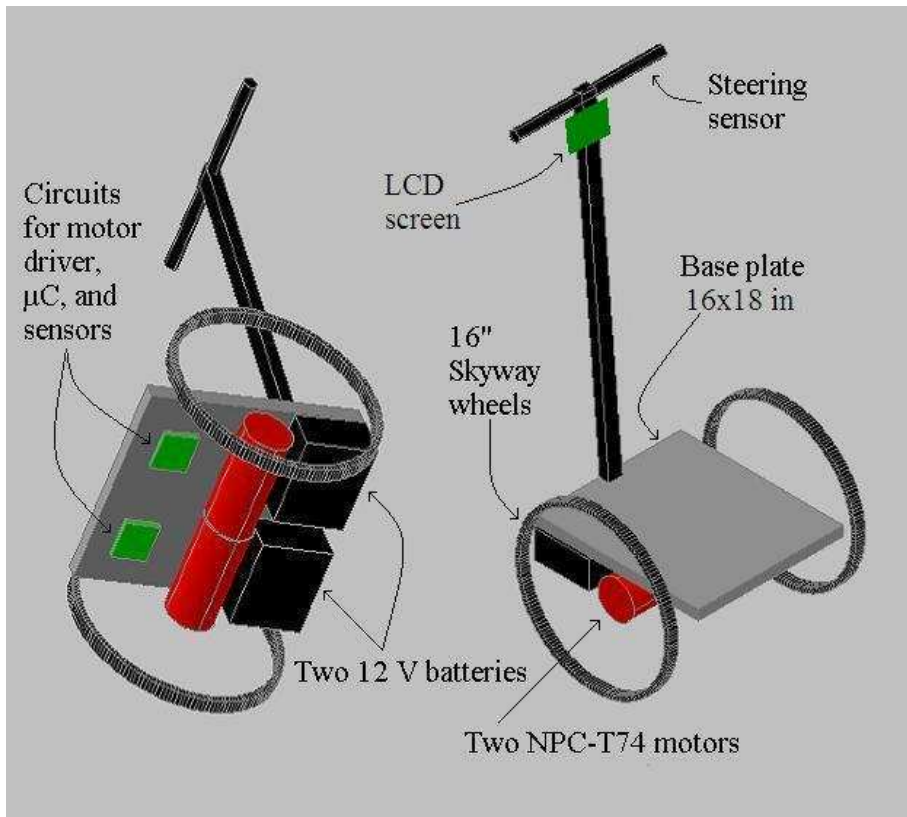- Circuitry Placement

Size Constraints

- Requirements:
  - Small enough to fit in car
  - 18x24 in footprint
  - 5 in ground clearance

- Segway
  - 19x25 in footprint
  - 3.5 in ground clearance

Weight Constraints

- Requirements:
  - Less than 80 pounds
  - 250 pound payload

- Segway
  - About 105 pounds
  - 260 pound payload

Circuitry Placement

- Batteries, PCB, sensors
- LCD screen, steering device

Two Wheel Deal

Segway i2

Questions?