Project Specifications
Accessible Wheelchair Scale

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**Introduction & Overview:**

Disabled people often have difficulties keeping track of their weight. An accessible weight scale for the handicapped would alleviate this concern by allowing them to frequently monitor their weight, while standing or sitting in a wheelchair. To accomplish this, the scale’s design should have a wide platform and a ramp for those in wheelchairs, and bars for those standing. Users should be able to calibrate the scale to take into account the weight of the wheelchair. The display should be large enough to accommodate visually impaired persons. With this design in mind the following specifications will be required:

**Mechanical:**

- **Maximum measurable weight**: 500 lbs
- **Weight resolution**: .5 lbs
- **Weighing time**: 30 seconds
- **Dimensions**:
  - **Length**: less than 36 “
  - **Width**: less than 36 ”
  - **Height**: less than 48” (with support bars) Less than 5” (platform only)
- **Scale weight**: less than 100 lbs

**Environmental:**

- **Operating temp**: 40 to 100 F
- **Storage temp**: 0 to 120 F

**Display:**

- **LCD**
  - **Character size**: at least 1”
  - **Number of Characters**: 16

**Input:**

- **Tare button**
- **Button size**: .5” x .5 “ minimum

**Power:**

- **Both AC and DC**
- **DC**: 5-12 Volts
- **AC**: 120 V 60 Hz