Requirements

1 Project Requirements

1.1 The total cost of the below shall not exceed $2,500.

1.1.1 Labor.

1.1.2 Prototypes.

1.1.3 Final product.

2 Operation Requirements

2.1 The mower must be battery powered.

2.1.1 The battery must be rechargeable.

2.2 The mower must be autonomous as outlined in 3

3 Autonomous Functions

3.1 The mower must return to base when battery level is low.

3.1.1 The mower must connect to the base for recharging.

3.2 Return to base on command. See x.x

4 Operating Environment Requirements

4.1 The mower must be able to operate normally within an environment that

4.1.1 is above XX degrees Fahrenheit

4.1.2 is below XX degrees Fahrenheit

4.2 The mower must not become inoperable due to constant exposure to conditions within the limits specified in 4.1, as well as

4.2.1 Rainfall not to exceed XX in/hr.

4.2.2 Rain accumulation not to exceed XX inches.

5 Safety Requirements

5.1 The mower must power down when...

5.1.1 it senses an “undefined obstacle” (this is too vague) in its path.

5.1.2 it senses moving objects entering its “safety bubble.”

5.1.3 an emergency kill switch on mower unit is pressed.

5.1.4 an emergency kill switch on the base / control panel is pressed.

6 And the Rest //Needs editing below here

6.1 Separate power/control systems for propulsion and blades

6.2 Restricted boundaries

6.3 Alarm for outside boundaries

6.4 Needs to be able to cut on 25 degree incline

6.5 Adjustable blade depth

6.6 Base and mower needs to be “weather” proof

6.7 Mower must be started manually by physical switch

6.8 needs to have recharging station

6.9 Needs to be able to be recalibrated

6.10 Anti theft features

6.11 state display