**Requirements Capture**

Animal Sound Display

Senior Design II

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Objective: An Electronic display that appeals to the guests of the zoo displaying different kinds of animal information such as animal sounds i.e. Bird Calls

**Requirements:**

* Play minimum of four different bird calls and have availability for expansion.
* Volume should be at a level (dB) easy to hear in outside environment

**Rugged Conditions Requirements**

* Unit able to withstand various levels of temperature while maintaining full functionality, temperatures ranging from 50° C to -25° C
* Unit able to withstand various levels of relative humidity ranging from 10% to 100% while maintaining full functionality.
* Unit should have some sort of a protective enclosure so that unit functions under precipitation conditions i.e. rain or possibly snow.
* Unit able to withstand various amounts of force due to children and humans interacting on display.

**Power Requirements**

* 120 Vrms AC input Voltage
* Average power consumption of unit, maximum of 15W.

**Size Requirements**

* From a marketing point of view, aesthetically pleasing so as to attract initial interest.
* Width and length of a Minimum of 50cm by 50cm to a maximum of 180cm by 180cm.
* Depth of less than 30cm.
* Unit able to be relocated easily due to a number of zoo reasons (including peak weather conditions)
* Unit should have some sort of security system, locking it into place, preventing unauthorized removal.
* Unit should be under 70 lbs. or 32 kg.

**User Interface Requirements**

* Should have an on and off switch capability to prevent power consumption during non-business and non-operation hours.
* User interface including scrolling LED display showing temperature, time, date, humidity, etc., as well as sensors to activate the corresponding animal display sounds (Such available sensors could be: passive infrared, light, motion, or any combination of these within the unit.)
* Use of sensors minimalizes physical contact between users and unit to reduce wear and tear on the unit itself

Advisor Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_ / \_\_ / \_\_

Team Rocket Signatures \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_ / \_\_ / \_\_

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