Summer Design Project
(SDP)

Revision 1.0
Updated July 26th, 2018

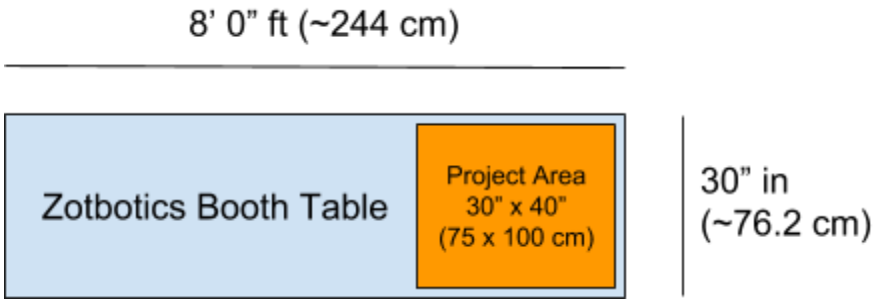
1- Overview

The Zotbotics Summer Build project is a in-house designed project aimed to get others interested in Zotbotics as an organization for the Anteater Involvement Fair as well as other sponsorship possibilities. As such, any project proposal should be impressive to look at, yet also exhibit the engineering skills of the members to be impressive to onlookers. Possible suggestions include a T-Shirt Cannon, or some sort of RC vehicle to impress onlookers.

2 - Constraints

2.1 - Footprint

The device needs to be able to fit onto a standard 8ft banquet table, leaving adequate space for talking and promotional materials. The device must have a footprint of up to 75 x 100 cm, as shown in the figure below.



2.2 - Height

The device may be up to 100cm tall

2.3 - Stored Energy

All forms of stored energy must have an easily accessible release that discharges the energy in a safe method. For instance, pneumatic systems must have a discharge valve

2.4 - Emergency Stop

The device must employ an easily accessible emergency stop feature.

2.5 - Budget

The total cost of the project should be under $300

5 - Deliverables

5.1 - Overview

An intrinsic part of the engineering process is to present and cohesively present an idea. As such, each complete proposal needs several important items, all grouped into a PDF or Google Document.

5.1 - Required Sections

- Proposal Overview
- Project Renders
- Quantitative Analysis[1]
- Subsystem Breakdown
- Itemized Bill of Materials
- Build Schedule

5.2 - Additional Files

All CAD or other design files should be submitted along with the final deliverable.

[1] All mathematical and statistical modeling