Constraints Document

Project: LIBERTY
Task:

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1. TABLE OF CONTENTS

2. ENVIRONMENTAL ISSUES

The system might be affected by:

CON - GEN - 2.1:   the sun light varying the readings of a light sensor.

CON - GEN - 2.2:   the opponent's ultrasonic sensor which would create additional noise

CON - GEN - 2.3:   the previous rounds which drained the battery voltage.

3. HARDWARE CONSTRAINTS

The system is limited to:

CON - GEN - 3.1:   3 EV3 Mindstorms kit which each contain:

- a brick with a ARM926EJ-S core @300 MHz *[CON - GEN - 3.1.1].*
- a wifi dongle for communications *[CON - GEN - 3.1.2].*
- multiple sensors such as an 1 ultrasonic sensor which detects distances; a color sensor which also detects light levels; and an accelerometer *[CON - GEN - 3.1.4].*
- 4 EV3 motors and 1 NXT servo motor *[CON - GEN - 3.1.4].*

     3.0.2   a 3D printer (Maker Replicator 2) *[CON - GEN - 3.2]*

4. SOFTWARE CONSTRAINTS

5. AVAILABILITY OF RESOURCES