VERSION HISTORY

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| **Title** | Constraints Document | | | |
| **Description** | Week 1 iteration of this document | | | |
| **Created By** | Luka Jurisic, Documentation Manager | | | |
| **Date Created** | 19th February 2018 | | | |
| **Maintained By** | Luka Jurisic | | | |
| **Version Number** | **Modified By** | **Modifications Made** | **Date Modified** | **Status** |
| 1.00 | Luka Jurisic | Created the document. Set out the overall structure that the document should follow | 19th February | Initial work done |
| 1.01 | Luka Jurisic | Completed section 2 and 3 | 24nd February | All other sections remain |

**CONSTRAINTS**

**2. ENVIRONMENTAL ISSUES**

Refer to section 1.5 in the requirements document.

**3. HARWARE CONSTRAINS**

The final robot design will be comprised of components from three Mindstorm kits, while only using one NXT brick. The brick is comprised of:

* 4 input ports to allow sensor integration
* 3 output ports to allow servo motor connection
* 1 USB 2.0 to allow for software upload
* Wi-fi compatibility
* An LCD display screen
* Requires 4 AA batteries to run

The Lego components provide constraints due to their design. The pieces are all precogitated in their shape and length, and this cannot be manipulated. Thus, it can be difficult to be creative in our design in some regard. However, the provided axes that are placed inside the motors are bendable and weight constraints must be considered accordingly. Similarly, since the pieces cannot be manipulated, the angles of freedom that we are able to utilize are limited.