

# Requirements Document

**Project:** *Liberty*

**Task:** *One-way wifi communication*

**Document Version Number:** *REQ – WIF-3 – 01.00*

**Date:** 14/10/17

**Author:** Edward Son

**Edit History:** N/A

## 1.0 TABLE OF CONTENTS

<b>1.0 TABLE OF CONTENTS</b>	1
<b>2.0 CAPABILITIES</b>	1
2.1 PURPOSE	2
2.2 SCOPE	2
2.3 CONSTRAINTS	2
2.4 USER FUNCTIONS	2
2.5 OPERATING ENVIRONMENT	2
2.6 PERFORMANCE	2
<b>3.0 COMPATIBILITY</b>	2
3.1 COMPONENT RE-USE	2
3.2 COMPATIBILITY WITH THIRD PARTY PRODUCTS	2
<b>4.0 GLOSSARY OF TERMS</b>	3

## **2.0 CAPABILITIES**

### **2.1 PURPOSE**

The purpose of one-way wifi communication is to allow the robot to receive data quickly and efficiently, to then proceed to follow the instructions contained in the data.

### **2.2 SCOPE**

The robot is limited to using the wifi adapter included in the mindstorm kit.

### **2.3 CONSTRAINTS**

The one-way wifi communication must accept a total of 18 parameters and store them in an efficient data structure, which will later one be used to set these parameters. Furthermore, the system should be able to receive the data in 20 seconds or less.

### **2.4 USER FUNCTIONS**

The user will not be able to interact with the system during its execution. Afterwards, the user should be able to start the game by pressing a button, since the parameters are acquired.

### **2.5 OPERATING ENVIRONMENT**

The system will only be used at the beginning of the game, once the instructions are sent out.

### **2.6 PERFORMANCE**

Time performance: *found in CONSTRAINTS*

## **3.0 COMPATIBILITY**

### **3.1 COMPONENT RE-USE**

N/A

### **3.2 COMPATIBILITY WITH THIRD PARTY PRODUCTS**

N/A

## **4.0 GLOSSARY OF TERMS**

**Note that this document should be reviewed with the “Clients” and should be developed in conjunction with them.**