SRS

Are We There Yet?

Names

Version 1 – Date

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# Revision History

# Introduction

## Purpose

## Problem Statement

## Team Information

### Course Information

### Team Name

### Team Members

### Course Information

## Definitions

# Functional Requirements

## Movement

* + 1. The system shall move in four directions.
       1. The system shall have the ability to move forward.
       2. The system shall have the ability to move backwards.
       3. The system shall have the ability to turn right.
       4. The system shall have the ability to turn left

## Navigation

## Challenge Completion

* + 1. System shall play Simon for 15 seconds.
       1. System shall initiate Simon game by depressing start button.
       2. System shall correctly sense color blue [exact RGB values TBD] when illuminated on Simon board.
       3. System shall correctly sense color red [exact RGB values TBD] when illuminated Simon board.
       4. System shall correctly sense color yellow [exact RGB values TBD] when illuminated Simon board.
       5. System shall correctly sense color green [exact RGB values TBD] when illuminated Simon board.
    2. System shall twist one row of a Rubik’s cube 180 degrees.
    3. System shall draw “IEEE” on an Etch-A-Sketch.
       1. Font and size shall [TBD].
    4. System shall collect a single playing card.
       1. System shall carry playing card across finish line.
       2. System shall keep card in a usable condition.

# Non-Functional Requirements

## System Size

* + 1. The system size shall be no greater than 1’ x 1’ x 1’ within the starting area and the finishing area.

## Power Management

* + 1. The system shall operate for a minimum of three consecutive course rounds each having a duration of five (5) minutes, on one battery life.

## Start Method/Operation

* + 1. The system shall have a clearly indicated power switch
    2. The system shall be completely autonomous after being powered on
    3. The system shall maintain contact with course floor at all times