

# System Requirements

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2022-10-04

## 1 Revisions

Table 1: Revision History

Date	Developer(s)	Change
2022-10-04	Edward He, Erping Zhang Guangwei Tang, Peng Cui Peihua Jin	Revision 0

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### **8.1 Limit of rotation degree of Servo motor**

- How to solve the 180 degree limit of servo motors

### **8.2 Object detection algorithm and logic**

- How to distinguish two objects by using limited resources
- How to recognize the same objects in different angles

### **8.3 Object relocation detection**

- How to detect relocation of objects
- How to find the relocation of objects and user's movement

#### **8.4 User interface**

- How to simplify the searching procedure to make better user experience
- What information interface should show to user

#### **8.5 Objects information storage**

- What information we need to store into the database related to the objects
- How to update the location and time stamp of objects in the database

#### **8.6 Serial communication between laptop and hardware controller board**

- How to avoid the data loss and data mismatch of the serial communication
- How to manage the buffer of the serial communication

## **A Reflection Appendix**