## **UNIVERSITI TEKNOLOGI MARA**

# TOYS BASKETBOT WITH HAND GESTURE SYSTEM

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Diploma (Mechanical Engineering)

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Jul 2023

### ABSTRACT

This project is presenting a toys basketbot with hand gesture which are being controlled by the user according to the movement of their hand. By using Arduino UNO as based remote monitoring system, the labor cost can be reduced, and it is also easy to operate which use C++ as core function. This project discusses about the motor used to make the control car move, the control system and core function used in the system. In conclusion based on the developed system, authors discussed the advantages and points need to be considered when working on the system.

## ACKNOWLEDGEMENT

First and foremost, I wish to express my gratitude to God for granting me the opportunity to embark on this diploma journey and for enabling me to successfully complete this long and challenging endeavor.

I am deeply thankful to my supervisor, Ir Ts Noor Hafiz Nordin, who was a constant source of support, guidance, and invaluable advice during those moments when I faced difficulties while completing this course.

I would also like to extend my sincere appreciation to Dr. Wan Muhammad Syahmi for providing me with tremendous help, guidance, and insightful advice. Furthermore, I am grateful to the other dedicated lecturers who were always available to assist me as I worked on this project.

Additionally, I want to express my thanks to all the assistant engineers who were consistently ready to lend a helping hand during the fabrication of the project in the workshop.

Lastly, I dedicate this dissertation to my father and mother, who instilled in me the vision and determination to pursue an education. This achievement is a tribute to both of you. Alhamdulillah.

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#### **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of Study**

Parents really love to make their children happy by getting them a toy. Other than making them enjoy themselves by playing with their toys, it also helps the parents to do their jobs. Some of the toys that they have also come from their relatives or from special events. Like for example, they get the toys as a birthday present.

However, having too many toys can also cause problems when their parents or older siblings must clean up the mess after the kids done playing with their toys. It requires a lot of energy to clean up the toys because they must pick up the box or basket, where the toys are stored, and bring it to the place where the kids play with their toys. After that, they must put all the toys in the basket and pick up the basket that fill with toys to its original place. It's not a big problem if the quantity of the toys is a little, but it can cause back pain when the person who must pick up the basket that is full of toys frequently. There might be time where they put the basket of toys at place that is hard to reach such as under the bed. This will make it hard to bring the basket out of there especially for those with large body.

These problems can be reduced by using toys basketbot with hand gesture system. The toys basketbot is controlled using hand gesture system where users do not have to use a remote-control device, instead they only need to move their and to move the toys basketbot. It can help the kids specially to clean up the mess after they done playing with it, so they don't pick up the heavy basket that full of their toys. Moreover, kids will find it's interesting and fun to clean up their toys. This product can also train them to pack their toys from young age. Not just that,