

**UNIVERSITI TEKNOLOGI MARA**

**DESIGN AND FABRICATION OF  
THE SMART TRASH CAN**

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## **ABSTRACT**

Nowadays, there are so many things that apply the concept of mechanical engineering. This is because, machinery and technology really help human to live their life comfortably. During the coronavirus crisis, people were told to follow standard operation procedure (SOP) that government has set. Which is maintaining the social distancing when at the public places. People also need to avoid any physical touch with any object when going outside. Hence, smart trash can is one of the best things because people can avoid touching the trash can lid. The lid can open automatically with the help of sensor. In conclusion, smart trash can reduce the risk of coronavirus transmission between people

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study

Wherever people go, be it house, went shopping or studying at school, people always need to throw their trash in the dustbin so the place the is neat and not dirty. The reason behind the invention of this trash can is people who want to throw away trash always got their hands full of their things, so it is very difficult for user to open the lid of the trash can. With the help of the lid, the smell of the trash will not come out and the flies will not lay egg there. Also the trash can also can reduce the direct touch between people when people were outside.

### 1.2 Problem Statement

From this project, there are some problems that the smart trash can for solve. Observation in the surrounding area have been collect and solution have been made.

One of the problems is the smell from the trash can. The lid that can automatically open and close really helps to reduce the smell from the trash can. This is because if the lid keep opening, the smell from the trash can can be smell throughout the place. The smell will make people to feel uncomfortable while at that place.

Next, when there are user that wanted to throw away trash, user were looking for the trash can. But mostly people do not know either the trash can is empty or full. When user go to throw away their trash and suddenly know that the trash can is full, user need to go search for another trash can. This action will waste user time.

Lastly, after the plastic bag is full of trash, user need to change the plastic int the trash can. Be it student, cleaner or office worker need to change the plastic bag. In public place people do not know the content in the trash can because that trash