

**UNIVERSITI TEKNOLOGI MARA**

**DEVELOPMENT OF A PROTOTYPE  
INTELLIGENT COMPRESS BIN**

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## **ABSTRACT**

Every day, every restaurant will produce garbage. This waste is produced from kitchen, dining room or from customers. However, bins are not able to accommodate excessive amounts of garbage at one time. So, it needs to be changed and disposed of all the time. So, the objective of this project is to reduce the time rate for changing and disposed garbage with compress the garbage. It's because the bin will overload with garbage that has a large size. So, if we compress that garbage, it will save a time for bin full of trash and save a plastic bag. However, it's also kept hygiene because it's not used our hand to compress that garbage. That garbage was using our leg to press the button to start compress system. That bin will be useful to all restaurant, cafe and canteen.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study



Waste has always been generated by humans. The very first was developed in 3,000 B.C. in Knossos, Crete, when people dug deep holes to hide refuse, which they would then cover with dirt. Near 500 B.C., the Greek city of Athens devised one of the first-known regulations regarding trash—residents were forbidden from throwing waste in the street. [1] In areas with low population density waste generation may have been negligible. In higher population areas even largely biodegradable waste had to be dealt with. Sometimes this was released back into the groundwater with environmental impact like Nor Loch.

Next, the bin is very important for collect all waste so as to avoid littering. So, every place must have at least one bin. For example, restaurant, playground, sidewalk, mosque and hospital. However, it's must have many manpower to maintain all bin not full or overload. Intelligent Compress Bin is the solution because it can compress the waste with big size and it can save space, save the use of waste plastic and manpower to organize that bin. As we can see, at restaurant specifically, sometime bin is full and overload because their restaurant is very busy and their worker did not have time to change the plastic bag. In conclusion, Intelligent Compress Bin s very useful to that restaurant to avoid from the garbage overload or full with waste.

### 1.2 Problem Statement

Generally, in the era of modern technology, it too many modern bin which is already on the market. For example, bin with sensor to open the cover, bin can change that size and bin that can short by size. Most of them are very useful. However, compress bin is more useful because it have many advantage. For example, it's can reduce the use of plastic, keep hygiene and less manpower.