

UNIVERSITI TEKNOLOGI MARA

**DEVELOPMENT OF A PROTOTYPE
MOTION SENSOR MINI CANDY
DISPENSER**

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ABSTRACT

Candy is one of the most favoured food by many especially little kids. Nowadays, candy is still favoured by a lot of people and it is evolving which the candy came in different sizes, shapes, and tastes. Most candies were mostly served in a bowl when sharing with the family members or guests or generally eaten straight from the packet came with the candy. The only problem with this, there is a possibility of spreading germs from one and another which can be dangerous and having no other way of preserving the candy if wants to be eaten later on. Therefore, a few companies already created a candy dispenser most of it need to be operated manually by the user which can be tedious. Thus, the aim of this project is to created automated candy dispenser with low prices, low weight, and fully functional like the ones in the market.

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TABLE OF CONTENTS

	Page
CONFIRMATION BY SUPERVISOR	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
CHAPTER ONE : INTRODUCTION	1
1.1 Background of Study	1
1.2 Problem Statement	1
1.3 Objectives	2
1.4 Scope of Study	2
1.5 Significance of Study	2
CHAPTER TWO : LITERATURE REVIEW	3
2.1 Benchmarking/Comparison with Available Products	3
2.2 Related Manufacturing Process	6
2.3 Sustainability/Ergonomic Related Items	6
2.4 Patent and Intellectual Properties	7
2.5 Summary of Literature	10
CHAPTER THREE : METHODOLOGY	14
3.1 Overall Process Flow	14
3.2 Detail Drawing	15
3.3 Engineering Calculation and Analysis	21
3.4 Bill of Materials	22

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Candy is a well-known snack that is loved by many. Children usually were given candy by their parents as a sign of love and appreciation[1]. Some parents give their children candy according what's best for them, some give them money so they could go choose and buy what they want[1]. Based on Data Bridge Market Research, they analyses that the candy market was valued at USD 226.38 billion in 2021 and is expected to reach USD 308.39 billion by 2029, registering a CAGR of 3.94% during the forecast period of 2022 to 2029[2]. This is because candies are easily accessible and cheap. It can be found from technically everywhere, from pharmacies to grocery stores to convenient stores to gas stations[3]. Besides children, adult also enjoys eating candies. They eat candies as a pick-me-up snacks to fill their empty stomach to keep energize because of most candies is packed with sugar which in fact, provides a lot of calories and energy that can be felt immediately[1].

1.2 Problem Statement

Though eating candy is very pleasant and all, but it has its own flaws when it comes to storing the candies. Once the packaging of the candy such as M&M has been opened, there is no way to close it unless the person who opened it could finish eating it. If not maybe because they want to save it and eat it later on, they usually put it aside somewhere contained, which usually ended up ants comes crawling inside the candy packaging. Besides that, if the candy is served in a bowl and shared between a lot of people, the candies may or may not be affected by other people germs from their hands. This incident could cause someone to feel nausea and sick after a while because of the spreading germs from other people.