



**UNIVERSITI TEKNOLOGI MARA
CAWANGAN TERENGGANU
KAMPUS BUKIT BESI**

MEC299

**Design and Fabrication of Holder of An
Umbrella**

**MUHAMMAD SAZROY AIMAN BIN MOHD SAZAILA
2020452302**

**SUPERVISOR:
TS DR SHAHRUL HISYAM MARWAN**

ABSTRACT

Final year project is about the design of the holder of an umbrella. The invention relates to a product which has been designed to enable a person to carry an umbrella without using their hands, thereby leaving the user's hands free. The product will help us to hold the umbrella. The main reason why the project should be done is to solve the problems that can occur when doing outdoor activities like jungle trekking or hiking but cannot hold an umbrella when the weather is not okay or unpredictable. The objective of this project is to design the product, Solidworks is the best solution, and to fabricate the design, 3D printer will be better. The final should be able to achieve the good results which are holder can keep the umbrella securely at out strap bag or the harness and protecting us from bad elements. Test run process is one of the processes that will be involved in the making of this project. The product will be tested until it complies with a good result.

TABLE OF CONTENTS

1.0 INTRODUCTION	8
1.1 BACKGROUND OF STUDY	
1.2 PROBLEM STATEMENT	
1.3 OBJECTIVES	
1.4 SCOPE OF WORKS	
1.5 EXPECTED RESULTS	
2.0 LITERATURE REVIEW	12
2.1 HISTORY OF UMBRELLA	
2.2 TYPE OF UMBRELLA	
2.3 PAST PROJECT REVIEW	
2.4 APPLICATION OF UMBRELLA	
2.5 APPLICATION OF HOLDER	
3.0 METHODOLOGY	28
3.1 PROJECT FLOWCHART	
3.2 PRELIMINARY RESULTS	
3.3 SOLIDWORK DRAWING	
3.4 GANTT CHART	
5.0 REFERENCES	42

CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

This project is basically about an improvement and design of the holder of an umbrella, The project will keep the umbrella hold with the bag or a harness tightly.

All the funding of this project will be getting from student final year project funding from UiTM and some of the material will be provided to the students. In terms of equipment and machines that will be used in this project, it can be accessed at UiTM laboratory. All the process on this project will be done at UiTM laboratory. The process will be done under the supervisor of the lab assistants in order to avoid any unwanted issues.

1.1 BACKGROUND OF STUDY

Umbrella, a hand-held device that is well-used equipment that can prevent us from many bad situations. Extremetemperature like hot weather is a good example. This project is basically focused on the holder of an umbrella, that can be used on society where it can give us many benefits from many ways. Thisproject also can be useful when. This project also can be useful when some people want to protect their bodies from rainy and sunlight when doing some outdoor activities.

1.2 PROBLEM STATEMENT

A lot of people need this product especially for the peoplewho like to do outdoor activities such as jungle trekking and hiking. It is because when doing an activity outside of the house,both of their hands will do something else. Like jungle trekking,both hands can`t hold an umbrella because they must hold the trees to prevent from falling. So, they can`t hold the umbrella when they want to cover their bodies from sunlight or rain.

It also can help people who work outside of the buildings to cover their bodies from sunlight or the other unpredictable weather conditions happen.