

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF
AUTOMATIC SWEEPER**

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ABSTRACT

A fabrication of a broom and shovels will be proposed in this project. The objective and the main purpose is to reduce the burden of any housewife or anyone who felt tired after a long time on their job. The brush located in front of shovel will have a rotational and clean up the floor. With just a movement, it will make the user feel more relax to clean up the house. The main materials will be proposed are gear, wheel and roller. The conclusion, this item will help people in a lot of ways such as making people feel less tired when cleaning. Therefore, the user will often cleaning up their house. Floor cleaning is a job that requires repetitive arm movement if it is done manually using a broom. This creates fatigue for the cleaner and is also time-consuming. This is the reason for the fabrication of a broom and shovel combination for this project. A brush that is rotated by the forward movement of the product is located in front of the shovel with a trash compartment. The main mechanism used includes gear, wheels, and roller. This allows the user to clean the floor by pushing the product forward with ease. This product is targeted at housewives and cleaners.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

In our future generation, a lot of people try to create a tools that makes things easier with lessen energy. As each person had to clean their house for daily routine. Although, there are equipment that can be use to clean their house, they may be tired from doing it everyday especially people who just done doing their job. In addition, they want to relax and chill after going back from work and do not want to spend more energy on house chores. Therefore, a tool is needed for people to spend lessen amount of energy on doing their house chores.

1.2 Problem Statement

Nowadays, people who have a job also needed to do cleaning chores. With their tiredness after back from work, it will give them a hard time within their amount of energy left to do all the house chores. Besides, if sweeping are done manually, it will take a huge amount of time and energy. Therefore, they will feel lazy to do cleaning for daily routine and will result the house will become dirty and mess. The cause of this laziness are tiredness after back from work. Housewife also want to save up their energy to do others work and not just about energy but they need to save up time for them to rest.

1.3 Objectives

The main objectives of this project are:

- a) To design and develop a semi-automatic sweeper
- b) To fabricate a product that eases the process of cleaning the floor