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MEC 299

**DESIGN AND FABRICATION
OF CLEANING DEVICE
FOR HOUSEHOLD**

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ABSTRACT

A cleaning device can be defined as a tool that helps humans to do cleaning work easily . Cleaning device has evolved over the years and they prevent the spread of infectious diseases and control allergens, such as dust and mold , helping us to stay healthy. For examples are broom , brush ,mop and vacuum . There are problem for cleaning device such as nowadays , current product cannot extend and cannot be use as multifunction device .it's usually can use for one purpose only for example old design broom can only be use for sweeping the rubbish and dust only . Besides that, most cleaning tools not strong, easy to break and difficult to use due to the design and selection of materials .So from this project ,it is expected to design and fabricate an ergonomic extended broom .It will help housewife or even human to do house chores effectively because this product have an ergonomic design and multifunction product . The manufacturing process for this product are joining and drilling . Hopefully ,from this project it will help the housewife to reduce their working time and at the same time can reduce for energy uses

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CHAPTER ONE : INTRODUCTION

1.0 INTRODUCTION

Shelter or more commonly known as house is a necessity for every human being. Therefore, there are many home cleaning tools created long ago such as toilet brushes, floor sweepers, mops and many more. For this project is focused on the broom and its pair of dustpans. Broom is use for cleaning the floor and yard of a house or building. A house will not be perfect without a broom. The advantages for current broom or product are cheap ,easy to find and get . However, there are disadvantages to current product such as heavyweight and not practical to use for certain area or part of the house

1.1 BACKGROUND OF STUDY

Broom is the device or cleaning tools that has been evolve for a long time ago. Every house, office or even school must have a broom. Currently ,broom mechanism and dustpan are very useful for cleaning purpose because it can work together at one time as shown in Figure 1 . Furthermore , in this study this project aims to make a multifunction broom that can be use more than a sweep the trash and dust .This project leads to make the broom more conventional ,ergonomic and easier to use for human. Some improvement on the current product need to make to make more functionable broom with multipurpose and at the same time lightweight .



Figure 1: Broom and Dustpan