## UNIVERSITI TEKNOLOGI MARA

# DESIGN AND FABRICATION OF PORTABLE MULTIPURPOSE CLEANER

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#### **ABSTRACT**

A small, portable mini machine concept that acts as a cleaner of any kind of thick dirt such as stains, moss, dust and so on. People nowdays are busy with hectic work and got limited time and energy to take care of hygiene. When people feel exhausted, they will just procastinate. So, I come out with this portable multipurpose cleaner.

The objectives are to Design and fabricate a Multipurpose Portable cleaner. The design are established using Solidworks software while the fabrications will undergo several steps of mechanical process. The fabrication process took about 11 weeks and its done at the workshop of UiTM Pasir Gudang every Sunday to Thrusday from 12p.m to 6p.m. Fabrication process that occur such as bending, cutting, drilling and tapping.

This portable multipurpose cleaner also equipped with a brush and coupler to assemble both with the cleaner. Also come with an LED light to assist place that slightly dark or less light expose.

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# CHAPTER ONE INTRODUCTION

#### 1.1 Background of Study

Dirt such as oily stains, dust or muds and moss must be an unpleasant thing for us to see it especially regarding places that we usually visit such as house or workplace where we will see it frequently. Maybe for those with lack sense of hygiene will ignore and take it for granted but opposite with those that take care and full of responsibility towards hygiene. Sometime, these people are just too exhausted and extremely busy with their work[1] on the workplace and handling children at home for the married ones until they overlooked about the hygiene, especially when the dirt are thick and require longer time and more energy to clean it off.

End up, they will just wait for the right moment and timing, according to their moods and energy for cleaning their houses or workplace. The worst case is they abandoned for months until forgot, thus the dirt will become thicker and hard to be removed.

Therefore, this product is focusing on every household or workplaces that may have some thick dirts such as oily stains on their stove or mud and moss in their bathroom and sink so that instead of using cloth or brush and scrub it hardly, they can ease their work cleaning it off gently and shorter time required. Besides that, our hands are less expose to those contaminants because no need to squeeze the cloth that used to clean up the dirt.