UNIVERSITI TEKNOLOGI MARA

DEVELOPMENT OF A PROTOTYPE AUTOMATIC GARBAGE COLLECTOR

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ABSTRACT

A good drainage system is one of the important needs for any country that have the possibility to be flooded and Malaysia is a good example for that statement. Nowadays, the world still keeps improving the technology to easy to keep drainage system going well. Usually, peoples only use their hand to collect and clean the waste in the drainage. This project aims to design and fabricate the Automatic Garbage Collector as a proof of concept as long as can give opportunities to people to easier them to keep drainage always clean. The design concept has been developed by using morphological chart. The designs will be then finalized using a Pugh Chart. Pugh Chart also play their role to help choose the best design by looking at several criteria. Based on the selected design concept, SolidWorks 2021 used to design product that will working using mechanical concept. Having this product will help people to keep drainage clean from clogged and keep healthy environment.

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INTRODUCTION

1.1 Background Of Study

The majority of the society in Malaysia frequently discusses the issue of clogged drains [1], particularly in residential areas. When rain falls in the area, this prevents water from flowing properly and causes water to overflow. This occurs as a result of careless people dumping trash down the drain from all directions. They are unaware of the terrible repercussions that will occur.

This problem can be handled if the housing community committee members cooperate to create a hygiene association that will keep an eye on the cleanliness of the housing area, including sewers and other areas. Together, they cleaned the dirty region, including the drains that were clogged with trash and prevented water from flowing. Besides, from these issues will bring to find one of another solution which is Automatic Garbage Collector Using Conveyor Belt System. This will help to solve this problem and reduce human power to make sure the drains won't get clogged.

The aim of this project is to design an Automatic Garbage Collector that can help to reduce the garbage in the drain and make sure water can flow properly. This can help to prevent drains clogged by garbage.