UNIVERSITI TEKNOLOGI MARA CAWANGAN KUALA TERENGGANU

MEC299

DESIGN AND FABRICATION OF MOUNTED WALL IRON BOARD

MUHAMAD IRFAN HANIF BIN MOHD ROZALY MEE

2020839274

SUPERVISOR:

HANIPAH BINTI GHAZALI

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INTRODUCTION

1.1 BACKGROUND OF STUDY

Nowadays, many people able to fabricate their own product by their self. However, to fabricate a product need to design the product first. Only experienced experts have the knowledge and design skills needed to build the product's complexity. This is because designing an object that can be manufactured entails more than just designing its shape. Everything is all about how the product to be connected and joint? How stable the product is? how to obtain every part of the product and how the product functioning to the community. We offer a data-driven method in this paper that tackles these and other design issues, allowing non-experts to design and build complicated products. Designing has previously been made easier and more accessible to non-experts using data-driven methods. In the context "example based-modelling"(1) , the components of existing items in a database are assembled to create new objects. However, when it comes to generating fabricable designs, there are a few issues that haven't been addressed in earlier studies. To begin, the sample database's components must all be fabricable. Second, any alteration of these components must maintain their structural integrity and manufacturability. Third, mesh mixing and other typical computer graphics techniques cannot be used to connect and build components. To join elements together, they must be precisely positioned and real connectors such as screws or hinges must be used. The best connectors will be determined by the object's geometric, functional, and material qualities. Finally, the model must be structurally sound so that it does not topple or collapse once completed.

1.2 PROBLEM STATEMENT

As a person who is from the community which is a college resident, these issues have been experiencing by myself and make me felt unsatisfied. Every day, most college resident will get ready to go to their class. Neatly dressed is the main requirement for students to enter the classroom. To look neat, students need to wear clean clothes as well that have been ironed. Unfortunately, certain student finds that as a problem because is it hard to iron their clothes in the college. It is happened because there is no specific place for student to iron their clothes. Plus, the dorm room was narrow and had less space to accommodate. Student either might find an alternative way to iron or do not iron constantly. this all stems from no place to iron their clothes to stay looking neat when going to class. So, with this I have figured out a way to help solve this problem. "No one has ever become impoverished as a result of donating"(2). Wall mounted iron board is an idea I got to help solve this problem. From this brilliant idea the students finally had a suitable place to iron. as we know this issue has long made it difficult for students to look neat as well as reduced their confidence level to go to

class. this idea can also help students reduce their time while getting ready so that they can get to class so that they can be on time more accurately.

1.3 OBJECTIVE

- to design wall mounted iron board
- to fabricate wall mounted iron board

1.4 SCOPE OF WORK

Students should always be neatly dressed every time to go to the class. But the lack of an ironing board makes it difficult for students to dress well since the dorm room was narrow and had less space to accommodate. The usual board could get damaged and disappear easily because of many students were sharing the iron board. So, the wall mounted iron board provide space for students to iron their clothes. Also can save more space and not easily damaged and lost from the usual board. The objective of the project is to design wall mounted iron board and to fabricate wall mounted iron board. This project scope of work are only can be useful for student UITM Bukit Besi and the college resident since there was no iron board or the suitable place to iron. So, this project could be very helpful for them to live their daily lives better. This project were made by raw material that available on the lab and workshop. Basically, the contribution the project are to provide student a space where they can iron their clothes to get well dressed also can save more space in a narrow dorm rooms. Also help student to save their time to get dressed.

1.5 SIGNIFICANT OF STUDY

A well-thought-out research design ensures that your techniques are aligned with your research goals, that you collect high-quality data, and that you apply the appropriate type of analysis to answer your questions while relying on reliable sources. This enables you to get valid and reliable findings. A study design may be required as a stand-alone assignment or as part of a broader research proposal or other project. In either case, think about which strategies are the most relevant and practical for resolving your question. As I said before, many ordinary people could fabricate a product but not to design the product since designing a temporary skill that expert could do by their experience and well trained. In this context, it can be proved by many people could fabricate any project due to the technology that makes it easier for them. But, they can not to do that if they do not have the design of the product. Every design requires a very detailed description to make the product successful.