



اَبُو سَيِّدِي تَيْكُو لُو كِي مَارَا  
UNIVERSITI  
TEKNOLOGI  
MARA

**MEC332 MECHANICAL ENGINEERING DESIGN  
FINAL YEAR PROJECT**

**TITLE: AUTO C-TAPE**

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## **1.0 INTRODUCTION**

### **1.1 PROBLEM STATEMENT**

There are a few main problems that can be found when using the current design of the cello tape device. Firstly, many users have a hard time finding the end of the cellophane tapestrip easily. The users also have trouble with properly cutting the cellophane tape from its roll. This is because it would be easy for the tape to stick to its own end after cutting it. As for the tape cutter device, it exposes users to the cutters, albeit small, and can be dangerous to unsuspecting victims, especially children and toddlers. And lastly, the tapes' sticky side are often smudged with users' fingerprints, making them less adhesive.

These is where we came out of an idea to create an automatic cellophane tape dispenserwhich can help user to dispense tape with a press of a button. The different between the normal cellophane tape dispenser and this Auto C-Tape dispenser is we can enter the lengththat we want and it came out with a press of a button easily. It is portable and use electricity.

### **1.2 DESIGN OBJECTIVES**

The objective of this project:

1. To establish a design parameter for Auto C-Tape.
2. To design Auto C-Tape using Solidworks with the established design parameter.
3. To conduct analysis and simulation of the established Auto C-Tape using Solidworks.
4. To build an automatic cellophane tape cutter device that can make users' work faster and easier.
5. To lessen the contact area and time between users' fingers and the sticky side of thetape.
6. To help users cut the tape without frequent exposure to cutters.
7. To give users the option of managing their own desired length of tape without havingto pull it out.