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UNIVERSITI
TEKNOLOGI
MARA

NEW PRODUCT DEVELOPMENT
SMART EXTENSION CORD

FACULTY   : FACULTY OF APPLIED SCIENCES

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1.0 Executive summary

- Smart extension Cord is an extension that comes with a remote control. The remote itself provide bluetooth button and fingerprints recognition.

- Common problems with extension cord are tangles easily, no space for the extension cord wires and the round extension cords has its own space for the wires but need to roll manually.

- The methodology is done by observation and face-to-face interview.

- The limitation of Smart Extension Cord is that the respondents are limited to UITM students only. Therefore, the result may be biased.

- Observation and brainstorming are used for the idea generations meanwhile for the idea screening is conducted among Chemistry students of UITM Shah Alam and sketching and verbal description are the tools used in conducting the concept testing.

2.0 Introduction

Extension cords comes with different shape such as round shape extension cords and strip extension cords. The extension cord also comes with different size. The length is from 7 to 30 meters. It is a handy tool, however, it comes with its own set of problems.

- **Problem statement**

The common problems with extension cord are:

- Tangles easily.
- Strip extension cord does not have space for keeping the wires.
- The round extension cord has its own space for the wire but need to manually roll.

Other problem:

- Fire hazard as the extension cord is put under the rug.

- **Methodology: data collection**

The team used secondary and primary data collection method. Both categories were used by our team to collect information. For primary method, our team used observation method. As for secondary method, resources from website was used as a medium to gain more information and data for product development.

- **Limitation**

The respondents are limited to UiTM Shah Alam students only. The result may be bias.

3.0 New Product Development

3.1 Definition

- Smart extension Cord is an improvement of existing extension to improve current functions and its enhancements.
- Smart extension Cord is an extension that comes with a remote control. The remote itself provide Bluetooth button and fingerprints recognition.
- Bluetooth device is to connect the remote with extension cord which helps in rolling the wire automatically by just pressing the button on the remote after using the extension cord.
- Fingerprints recognition helps in switching on or off the extension cord which can be control easily without the needs to sit nearby the extension cord.