



اَوْنِبُوْرَسِيْتِي تِيكِنُوْلُوْمِي مَبَارَا  
UNIVERSITI  
TEKNOLOGI  
MARA

**ENT 600**

**BLUE PRINT: CADU (SELF-HEATING FOOD  
CONTAINER)**

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# **CHAPTER 1**

## **1.0 PRODUCT DESCRIPTION**

### **1.1 INTRODUCTION**

Our team has made observation towards primary school students lunchboxes, the team had chosen a product that may helps in ensuring a healthy meal for younger children. The product is called CADU which is a self-heating food container. Nowadays, there are many cases where children are getting food poisoning from the food provided in school canteen. Moreover, even if they bring home-cooked meal, the food is not as fresh as it was before after a few hours. This product may help in maintaining the quality of the food.

### **1.2 PURPOSE OF DEVELOPMENT**

The purpose of the product development are:

- i. To ensure the home-cooked food that are prepared for students at school are in good condition and safe to eat.
- ii. To help develop a habit among students to bring home-cooked meal to school instead of buying from school canteen.

### **1.3 PRODUCT CONCEPT**

- i. To maintain the food condition when stored for a long period of time.
- ii. To provide a system that can reheat the food stored
- iii. To use natural clean energy such as solar or light energy.

### **1.4 APPLICATION**

#### **1.4.1 FUNCTIONS**

- i. Heating system – the food container is able to reheat the food inside using heating coil
- ii. Energy Conversion – the photovoltaic box converts light energy absorbed from solar panel to heat energy

## 1.5 UNIQUE FEATURES

The uniqueness of the product for availability in Malaysia market consists of :

- Interactive electronic LED that lights up if energy stored is full.

### 1.5.1 PICTURE DESCRIPTION



Figure 1 : TOP VIEW

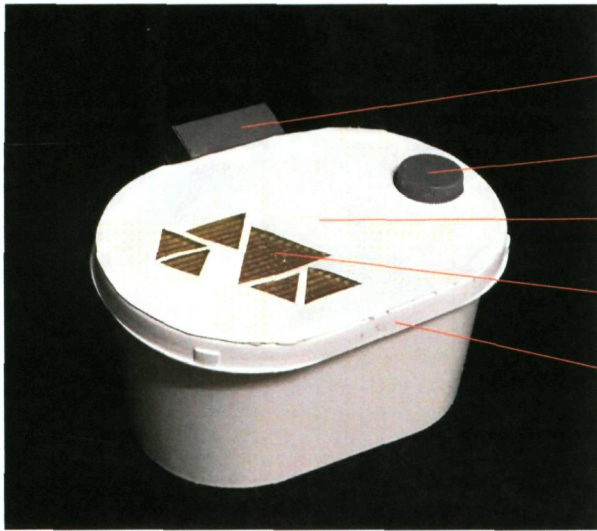


Figure 2 : FRONT VIEW

## CHAPTER 2

### 2.0 TECHNOLOGY DESCRIPTION

#### 2.1 OVERVIEW OF PRODUCT PROTOTYPE



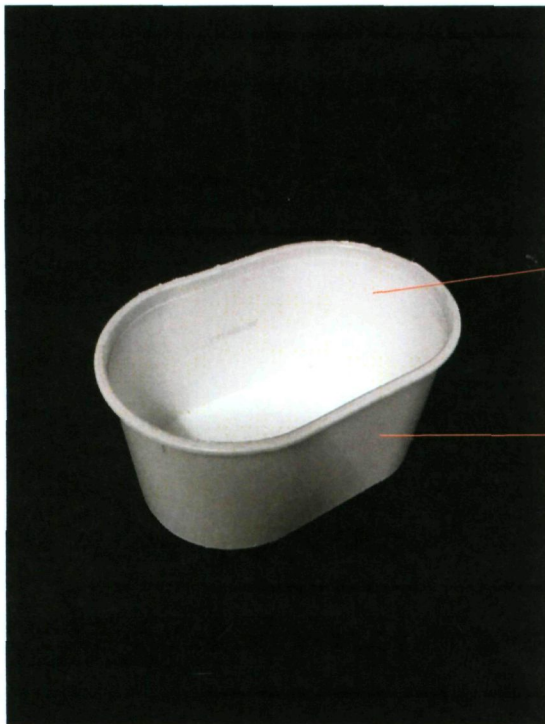
C

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