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## TECHNOLOGY BLUEPRINT SMART BUS STOP

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**Group Name** : ABRIGO

**Group Members** :

- 1. AIMAN BINTI MOHAMMAD DIN YATI (2017136041)
- 2. FARAH IZZATI BINTI AHMAD RAMLI (2017527433)
- 3. FAZRIN HUSNA BINTI AHMAD FAIZUL (2017114113)
- 4. HANIS SYAHIRAH BINTI MAYUDDIN (2017580121)
- 5. SHAHIDA FARISA FITRI BINTI SHAHRIR (2017328185)

**Submitted To**

MADAM ZANARIAH ZAINAL ABIDIN

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# **CHAPTER 1**

## **PRODUCT DESCRIPTION**

### **1.1 Introduction**

The product to be developed is a Smart Bus Stop. Bus is a common public transportation used to travel from one place to another and the bus stop is provided to give protection against weather to the public. However, for some reason, public don't go to the bus stop since the bus stop provided is in a horrible state and lack of information provided.

Thus, the team is developing a Smart Bus Stop which consist of several unique features for the convenience of the public.

### **1.2 Purpose of Development**

The purposes of the development are

1. To provide a better experience for consumers while waiting for the bus.
2. To effectively communicate the relevant information to the target audience.
3. To create a value for businesses and public transport providers.

### **1.3 Product Concept**

- Encourage more people to use public transport
- Provide information to the public on the bus routes, schedules, arrival time and fare details
- Provide some services to the public to use it easier
- Lightning protection systems used to prevent or lessen lightning strike damage to structures

## 1.4 Application

### 1.4.1 Functions

- Closed-circuit television (CCTV) – video surveillance to help prevent and detect any potential trouble
- Charging port – the port can be used to charge any electrical appliances such as mobile phones
- Panic button – sends off a loud noise and alerting public safety official in an emergency cases when the button pressed on
- Wireless Fidelity (WIFI) - to provide users wireless high-speed Internet and network connections
- Solar panels – used to absorb the sun's rays and converting it into usable energy (electricity or heat)
- Lightning rod – used to prevent or lessen lightning strike damage to structures and protect the people under the roof.
- Top up machine – provide for people to reload or check balance in their concession cards
- LCD screen - used to display information such as live bus route tracking, estimated arrival time, fare details, bus details information, advertisements and public information

### 1.4.2 Interface of Mobile Application

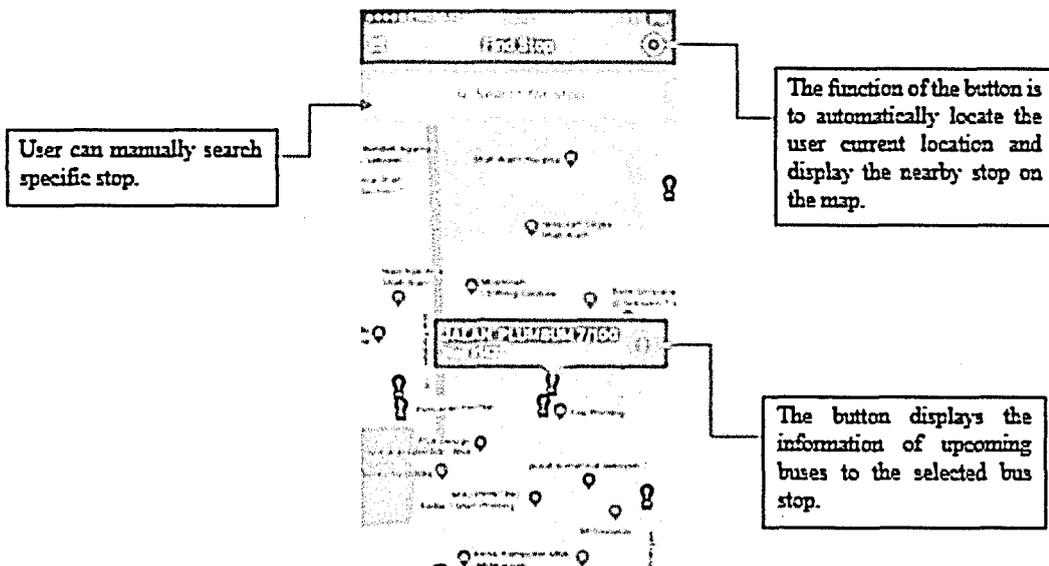


Figure 1: Main page for Smart Bus Stop's mobile

## CHAPTER 2 TECHNOLOGY DESCRIPTION

### 2.1 Overview of Product Prototype



Figure 4: Front view of prototype

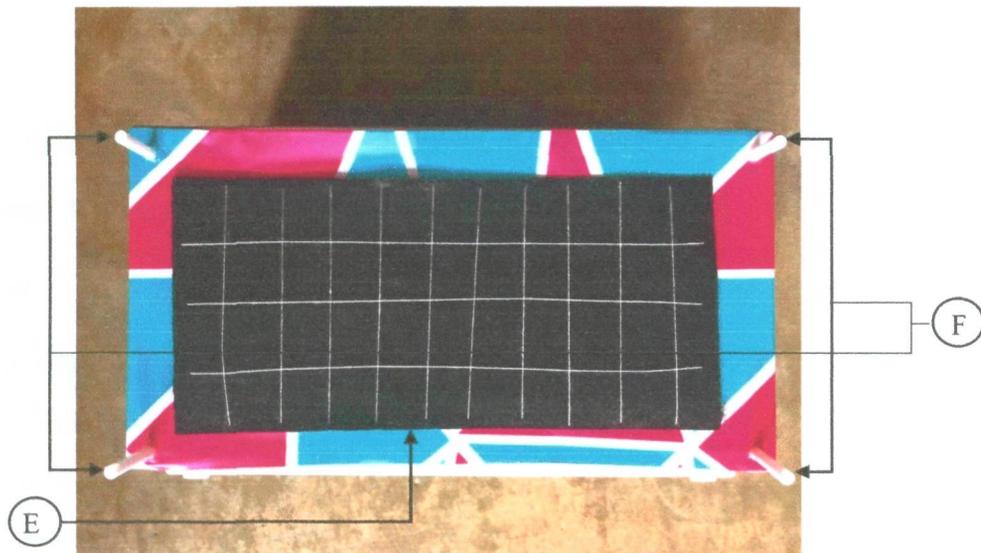


Figure 5: Plan view of prototype