

#### BLUEPRINT: HOVERBIKE

FACULTY : FACULTY OF CHEMICAL ENGINEERING

PROGRAM : BACHELOR OF ENGINEERING (HONS.) CHEMICAL

PROGRAM CODE : EH220

COURSE : TECHNOLOGY ENTREPRENEURSHIP

COURSE CODE : ENT600

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**SUBMISSION DATE:** 

13th DECEMBER 2018

13/12

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### **CHAPTER 1**

### 1. PRODUCT DESCRIPTION

#### 1.1. Introduction

Hover board is a self-balancing personal transportation consist of two motorized wheels connected to a controller pad where rider place their feet. Recently certain country have banned these hoverboard due to lack of safety. Many cases have been reported that an accident occur due to imbalance of using the hover board. Parents were advised to not to buy these hover board for children under 14 years old age. Therefore, the team decided to innovate the hoverboard become hoverbike. Hover bike is easy to ride and more stable compared to normal hover board. It consists of three tire which is more stable and have a compressible seat for rider to rest instead of standing in a long time. With hover bike, parents won't be worrying anymore about their children on falling from the hoverboard.

### 1.2. Purpose of development

The purpose of the product development are:

- To improve the safety of using hover board
- To upgrade the hover board becoming more comfortable and stable
- To make it more friendly user at wide range of age

#### 1.3. Product Concept

- · For children or elderly can ride freely without guidance
- Can be part of daily short distance transportation

### 1.4. Application

Hover bike similar with hover board where it is used as a personal transporter. It can be used for indoor such as school, office, shopping mall or it also can be ride as outdoor transportation.

#### 1.4.1. Functions

- Compressible seat: from a normal hover board, it can transform into a bike where
  the compressible seat will came out from the hover board. The seat attached with
  back tire to make it more stable and secure safety
- Adjustment Controller button: to control the height of the seat depending on user's height and leg length.
- Compressible shades: to protect from bad weather such as rain and sunny day

### 1.4.2. Unique features

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

- USB port that can act as a charger for smart phone or power bank.
- Shades consist of solar energy absorber so that the hoverbike does not required frequently charging.
- Light weight: easily hand carry and can bring anywhere like hoverboard

### 1.4.3. Picture description

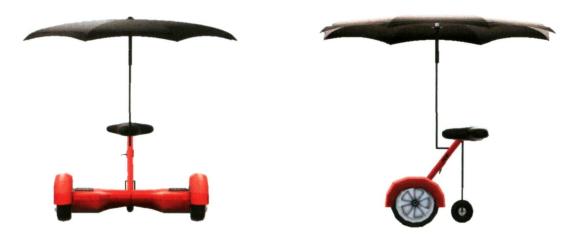


Figure 1: Hover bike front and side view

## **CHAPTER 2**

# 2. TECHNOLOGY DESCRIPTION

# 2.1. Overview of product prototype



Figure 2: Design Hover Bike

# Legend:

| Label | Device       |  |
|-------|--------------|--|
| A     | Hover Board  |  |
| В     | Solar Shades |  |
| C     | USB port     |  |