

## TECHNOLOGY BLUEPRINT



### PRO-TECH PEN

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# **CHAPTER 1**

## **1.0 EXECUTIVE SUMMARY**

The product to be developed is a Pro-tech pen. We want to develop this product as we found out that most students have problems in catching up with their daily lectures. They find that the lectures can be too fast. This Pro-tech pen is equipped with camera, scanner, microphone, speaker and roll-able display screen that can help students to capture notes, record voices and scan notes or documents. All the images and audios will be stored in the software inside the roll-able display screen.

Our target markets are students. We estimated that 5% of students in Malaysia will purchase this Pro-tech pen considering its price that is more affordable than the competitor's price. The overall cost to produce this Pro-tech pen is RM424,75.

In the management team, the Team Leader leads Financial Team, Operational Team, Marketing Team and Project Team. Each team and Team Leader has their own specific responsibilities and work together to ensure the successfulness of making this Pro-tech pen. Each person in each team will be paid an amount of salary.

## **CHAPTER 2**

### **2.0 PRODUCT DESCRIPTION**

#### **2.1. Introduction**

The product to be developed is a Pro-tech pen. Students use pen in their daily classes to write down notes. However, we found out that students have difficulty in catching up with the lectures. The lectures can be too fast for the students to write down important points. Students also tend to capture notes using their phone's camera or record their lecturer's voice so that they will not miss any points during classes. By developing this product, we hope it can help students to ease the note-taking process during class. The students will not have to take out their phones to capture or record instead, they can directly use the features equipped in the Pro-tech pen.

#### **2.2 Purpose of development**

The purpose of the product development is to help students in maximizing their efficiency in their daily classes and lectures by capturing images and recording voices. Besides that, students can also use the scanner equipped in the Pro-tech pen to scan notes where the scanned notes will be kept in a document in the Pro-tech pen.

#### **2.3 Product Concept**

This product is equipped with features such as camera, microphone and speakers for students to substitute the hassle of having to take out their phones to capture images or record voices. This Pro-tech pen aims to help students in their daily classes when they can't keep up with the lectures by capturing notes or recording their lecturer's voice by using this Pro-tech pen.

#### **2.4 Application**

##### **2.4.1 Functions**

- Scanner – Scan words and graphics and stores up to 100 pages of scanned documents in text form.
- Microphone – Record audio.
- Speaker – Produce various sound that has been recorded previously
- Camera – Capture images in good resolution.

- Roll-able display – Display information, run software, store scanned documents, captured images and recorded audio.

## 2.5 Unique features

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

- Roll-able display where the display can be rolled into the pen if it is not in use.
- Scanner that can scan text and images where the images can be converted into text form and stored inside the pen's memory.
- Camera that can captures image in high resolution even if it is in a long distance
- Speaker that can record audios clearly.

### 2.5.1 Picture description



**FIGURE 1** : The temporary prototype that our team develop before