UNIVERSITI
TEKNOLOGI MARA
MALAYSIA

SANDZ SMART WATCH
COMPANY NAME: SANDZ CO.

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1.0 EXECUTIVE SUMMARY

Nowadays, a smartwatch is a wearable PC as a wristwatch that provide touchscreen interface to utilize in daily life. while a related cell phone application accommodates the executives and telemetry. During their early models production, smartwatches could perform as basics tasks, for example, calculations, advanced time telling, interpretations, and game playing. In 2010s smartwatches developed into more broad usefulness closer to cell phones, including portable applications, a versatile working framework and WiFi/Bluetooth network. Some smartwatches work as compact media players, with FM radio and playback of advanced sound and video documents by means of a Bluetooth headset. A few models, called 'watch telephones', have portable cell usefulness like making calls.

Day by day as technologies changes, smartwaches production are very competitive among the company such as Apple, Sampung and etc. Therefore, many innovative idea had been develop to create this smartwatches technologies.

This project started from idea development to decrease the rate of crime in this world. As we know, there is the crime easily occur because the most victims have no self-defense while been attacked. Some of them carry safety equipment such as pepper spray, electric teaser and many others to protect themselves from harm. Some of the maybe not carry with them because it takes a lot of room to carry around. Therefore, we must think to create a product that always being carry by everyone to act as defense to their user. As watch is an accessory that being use by most people either man or woman. Thus, we develop this idea to invent the smartwatch by equipping it with some defense mechanism is our group project for new project development.

This product have features that can protect person wearing it from crime as there is built-in pepper spray at the side of the smartwatch. When pressing a button on the right side of the screen, it will quickly release a spray which automatically help in defencing the user. This watch also permits electric shock when the user is in harmed and act as a defence for the user. Furthermore, this smart watch can locate certain people as it equipped with Global Positioning System (GPS) which helps people to determine their location. Next, other special features for this smart watch compared to others is that it is a Muslim-friendly watch as it has a compass which can help in determining the qibla. It also has a time reminder for every prayer. Moreover, this smart watch has a smart lock and the lock is by fingerprint. The lock is only applicable for the owner and cannot be simply access by anyone. Therefore this samrtwatch is totally secured for the owner.

2.0 INTRODUCTION

2.1 Problem Statement

Malaysia is ranked as top 20th country of highest crime rate, 61.15 in the world based on crime index of 118 countries on midyear 2018. In Shah Alam, crime rate keep increasing with crime index 59.91. Crime such as robbing, kidnapping and raping keep occurring since Shah Alam is a big city especially Section 7 which is one of the largest and most developed sections in Shah Alam as it is well-comprised of residential, commercial, educational, entertainment and also industrial developments.

For instance, a case that occurred on Nov 2017 of university student that was raped and robbed by a man who pretended to ask her for directions when she was waiting for the bus at the bus stop after shopping at 'Pasar Malam Section 7'. Thus, people especially students cannot help to feel insecure and unsafe with the crime that happening around their neighbourhood. As precaution, people need to walk in a group but sometimes its inconvenient due to their schedule and working hours. Besides, people who take public transport such as grab or taxi also feel unsafe with the case of grab driver robbing and raping their passenger.

Therefore, self-defense is essential for everyone nowadays especially for women. But this skills cannot be learn overnight and need time to develop it. Moreover, people nowadays do not have time to spend it to attend the self-defense class with their daily busy schedule, and the class fee too is quite expensive for people with the low salary or for students. Thus, we need a product that always being carry by everyone to act as defense to their user. Smart watch is an accessory that being use by everyone either man or woman. Thus, inventing the smart watch by equipping it with some defense mechanism is our group project for new project development.

2.2 Methodology

Our group have done some interviews to get feedback about smart watch around university and Section 7, Shah Alam. Through the interviews and findings that was collected, our group have decided to invent the smart watch to defense smart watch. The interviews were done in Shah Alam since there are a lot of people from different backgrounds around here such as public workers and students. The interview started with the introduction of our

product. After giving the responder the overview and the benefits of defense smartwatch, they gave us their feedback and opinions about the defense smartwatch.

The first responder is Nurazlin Binti Dzulkifli, a workers at Mahkamah Seksyen Shah Alam. She stated that she would buy a defense smart watch due to the feel of insecurity and unsafe around her neighbourhood. Although her neighbourhood has security, but she felt unsafe especially when she needs to wait for the bus earlier in the morning and only coming back from work in the night. If she has a defense smart watch, she will feel more secure and safe. But, she would like it if the smart watch also has the emergency alarm that automatically connect to the police when she presses it in time of emergency.

The second responder is Nurfarah Aryssa Binti Mohd Fadzuri, a student from Faculty of Architecture at UiTM Shah Alam. She stated that; she needed a smart watch with defense mechanism to protect herself. But, the smart watch design must be trending, which is not too large and light because she is active with sport and club.

The third responder is Wan Nor Aziemira Binti Wan Zahari, a student from Faculty of Civil Engineerig at UiTM Shah Alam. She stated that she would buy the defence smart watch for her safety, but the price must be affordable since she is still a student. Based on chart that shows in Figure 1 below, the SANDZ smart watch feature that interested by 10 responders is shown.

DEFENSE SMARTWATCH FEATURE

Location Tracker 15%
Emergency Alarm 23%
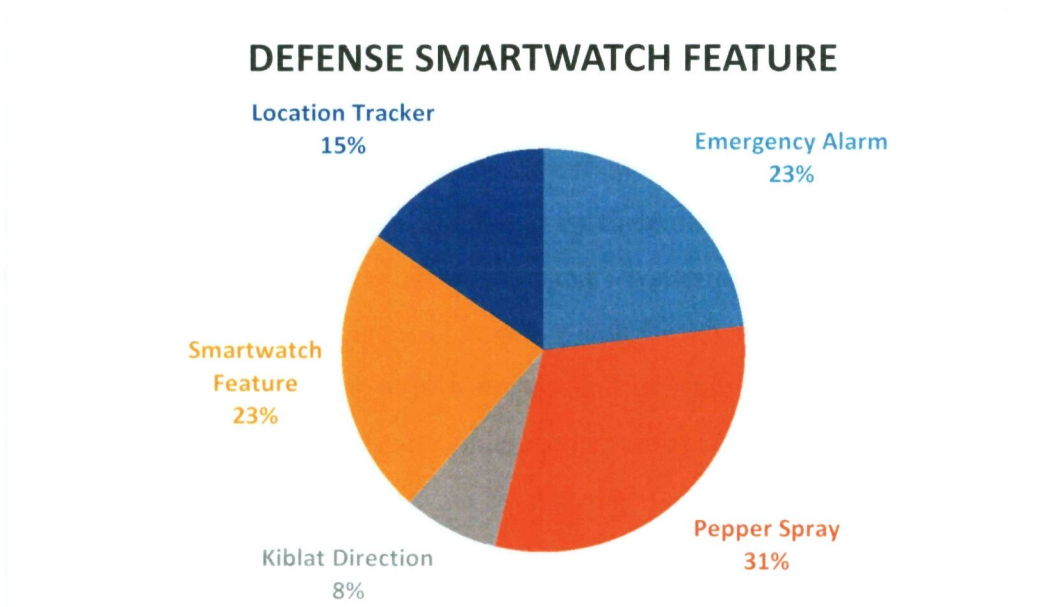Smartwatch Feature 23%
Pepper Spray 31%
Kiblat Direction 8%

Figure 1: The percentage of defense smartwatch features interested by 10 respondents