

TECHNOLOGY BLUEPRINT PHYSIO SMART WATCH

Faculty : Faculty of Health Science

Programme : Bachelor of Physiotherapy (Hons).

Programme code : HS 244

Course : TECHNOLOGY ENTREPRENEURSHIP

Course code : ENT 600

Semester : 7

Group name : Physio Smart Watch

Group members : Nik Normadiana Binti Nik Mohd Zawawi(2016251142)

Nurhaziga Binti Borhan (2016251128)

Nur Fatin Amani Binti Aili (2016251108)

Wan Nur Afiqah Binti Wan Zakaria (2016251152)

Anis Nabilah Binti Abdul Rashid (2016251112)

Adlin Nasreen Binti Mohd Azam (2016251118)

Submitted to : Dr. Sharifah Zannierah Binti Syed Marzuki

Submission date : 12 December 2018

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	. 3
2.0	PRODUCT OR SERVICE DESCRIPTION	. 4
3.0	TECHNOLOGY DESCRIPTION	. 6
4.0	MARKET ANALYSIS AND STRATEGIES	. 7
5.0	MANAGEMENT TEAM	21
6.0	FINANCIAL ESTIMATES	32
7.0	PROJECT MILESTONE	38
8.0	CONCLUSIONS	41
9.0	REFERENCES	42
10.0	APPENDICES	43

1.0 EXECUTIVE SUMMARY

Nowadays, people are concerning about their health and know the important of an exercise in their daily lives. There are a lot of benefits of performing exercise such as it can improve muscle strength, maintain healthy weight, reduce risk in developing coronary heart disease, diabetes and osteoporosis to the bone. Self-monitoring of vital signs such as blood pressure, pulse rate and body temperature are important as it can help to track the person's cardiovascular fitness during exercise. It also is important to ensure the person's safety during performing an exercise. Currently, many of them are using a smart watch or fitness tracker that only detect and monitor heart rate before, during and after exercise. The current product is still lacking in terms of monitoring other vital signs of the human body such as blood pressure and body temperature.

Thus, we created and choose to develop a smart watch called "Physio Smart Watch" that monitored all combination of human vital signs such as blood pressure, pulse rate and body temperature. There are additional features such as exercise prescription that helps users to perform their exercise in a correct way. This feature is beneficial to the patient that suffered from osteoarthritis or knee pain, back pain and patient that having obesity problem. Other than that, "Physio Smart Watch" are also comes with additional feature which is sensor alarm or precaution alarm that will alarm the users if their body is not suitable to perform the exercise. For instance, a situation where the person's blood temperature and body temperature were too high during exercise, the alarm in a Physio Smart Watch will "beep" indicate that the person need to stop from performing the exercise as it will danger and harm herself or himself if he or she continue the exercise.

This "Physio Smart Watch" has function and advantages that was not found in today's common smart watch or fitness tracker, thus providing a competitive advantage over more established competitors.

2.0 PRODUCT OR SERVICE DESCRIPTION

Nowadays, people are using phone, watches, fitness tracker or other gadgets to track their fitness level and monitoring their steps or pulse rate during performing an exercise. Other than that, there are a lot of people out there that having and facing musculoskeletal (MSK) problems such as osteoarthritis or knee pain, back pain and obesity.

Thus, our company has come with this idea in order to reduce the danger and harm to the body during performing an exercise by continue monitoring the vital signs and to reduce the number of persons that having MSK problems by providing a correct exercise prescription. By taking the advantages toward this situation, the Physio Smart Watch has been invented with special features.

Physio Smart Watch monitored all combination of human vital signs such as blood pressure, pulse rate and body temperature. There are additional features such as exercise prescription that helps users to perform their exercise in a correct way. This feature is beneficial to the patient that suffered from osteoarthritis or knee pain, back pain and patient that having obesity problem. Other than that, "Physio Smart Watch" are also comes with additional feature which is sensor alarm or precaution alarm that will alarm the users if their body is not suitable to perform the exercise. For instance, a situation where the person's blood temperature and body temperature were too high during exercise, the alarm in a Physio Smart Watch will "beep" indicate that the person need to stop from performing the exercise as it will danger and harm herself or himself if he or she continue the exercise. It also has been completed with correct exercise prescription to those who are having MSK problem such as osteoarthritis, back pain and obesity.

Moreover, it comes with a variety of colourful colour such as black, white, blue, pink, yellow, red and green. It is important to make this product comes with a different and variety of colour. This is because everyone has their own preference colour and personal taste that may influence their emotion and behaviour. So, by having different colours, it will attract our potential customers to buy this product.

Furthermore, Physio Smart Watch are also have a lot of special featuristics such as Bluetooth connection, MP3 or radio, waterproof, rechargeable and long lasting battery. The rechargeable battery can be use up to 500 times or within 6-12 months depends on the person frequency to exercise. Thus, it can save a lot of electricity usage and the customers doesn't need to buy another battery to continue on using this smart watch.

Silicon material has been used to make straps of this watch. There are several reasons to choose silicone compared than other materials. This is because silicone is a durable material, light weight, flexible, non-absorbent, rubber like material and the most important is it is easy to wear. If the watch wet because of the sweat or spill of water, the customers only need to wipe it right off since the silicone materials does not absorb the liquid.