

ENT600 TECHNOLOGY BLUEPRINT



TECHNOLOGY BLUEPRINT TITLE (ELECTRONIC TAEKWONDO VEST)

Faculty : HEALTH SCIENCES

Program Code : HS 243

Group : 7A

Course : ENT 600

Semester : Sep-Jan 18/19

Group Name : HUCKLEBERRY

Group Members :

1) AAINA AFRINA BT ABDUL MANAF	2015229426
2) ABDUL HALIM B. ABDULL RAZAK	2015217378
3) MUHAMMAD ASRI B. BAHRUM	2015441674
4) NUR ASHIKIN BT HASHIM	2015875464
5) NURUL ATHIRA BT MOHD ISA	2015829976

Submitted to

MADAM HAJAH ZANARIAH BT ZAINAL ABIDIN

6 DECEMBER 2018

Good but fally
persond of

HUCKI FRERRY SON RHD



Contents

CHAPTER	1
1.0 PR	ODUCT DESCRIPTION1
1.1	Introduction1
1.2	Purpose of development1
1.3	Product Concept1
1.4	Application1
1.4.	1 Functions
1.5	Unique features2
CHAPTE	3
2.0 TE	CHNOLOGY DESCRIPTION3
2.1 Ov	rerview of product prototype3
2.2	Taekwondo Vest (1)4
2.3	RFID Tag (2)5
2.4	Piezoelectric Sensor (3)5
2.5	RFID Reader (4)6
2.6	Processor (5)6
CHAPTER	7
3.0 M	ARKET RESEARCH AND ANALYSIS7
3.1	Target Market7
3.2	Market Size and Market Share7
3.3	Competition and Competitive Edges8
3.4	Estimated cost per Unit8
3.5	Selling Price
3.5	Marketing strategies9
CHAPTER	12
4.0 FI	VANCIAL PLAN
4.1	Start-up cost

CHAPTER 1

1.0 PRODUCT DESCRIPTION

1.1 Introduction

The product is Oriental Electronic Taekwondo Vest (ETV). This product is suitable for Taekwondo tournament to be judge more precisely; it helps to make marking easy, fair and reliable. It can detect kicks and punches and give out scores. The scores are link to computer software.

1.2 Purpose of development

The purposes of the product development are:

- To track the impact of the athlete kicks and punches during a match in progress.
- To make easy for marking score in taekwondo tournament
- To make the score process is more reliable and less potential of argument.

1.3 Product Concept

 To improve scoring system in taekwondo tournament make the competition smooth and fair.

1.4 Application

- The Oriental ETV is use as body protector and aid in scoring system.
- It is for athlete to be worn in match during tournament and also in training activities

1.4.1 Functions

The electronic taekwondo vest has piezoelectric sensor works to detect pressure and force applied on the vest and converting them to an electrical charge. The electrical charge will be detected by the RFID tag and reader which connected wirelessly with the processor (computer). Therefore, the point collected will be shown on the screen of the processor.



CHAPTER 2

2.0 TECHNOLOGY DESCRIPTION

2.1 Overview of product prototype

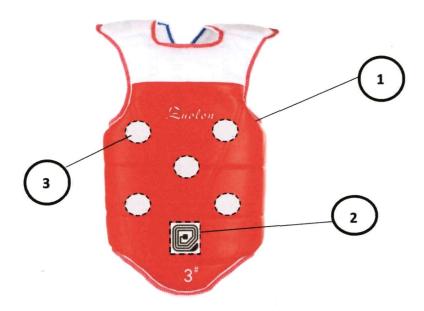
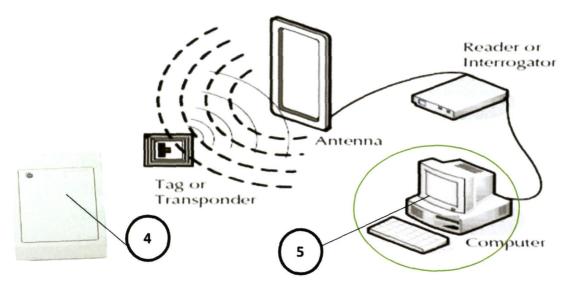


Figure 1: front view (see through inside)



Figure 2: Side view (see through inside)





Legend:

Label	Device
1	Taekwondo Vest
2	RFID Tag (front)
3	Piezoelectric sensor
4	RFID Reader
5	Processor

2.2 Taekwondo Vest (1)

- i) Description: A body protector with high-density foam vest extends to provide added coverage to chest, kidneys, collarbone, and shoulders. The adjustable web straps tie in the back for a secure fit.
- ii) Specification:
 - Materials: Soft vinyl, high density foam, cotton stripes
 - Size: XS, S, M, L, XL, XXL.
 - Color: Red or Blue
- iii) Target Supplier: Bruce Yu Baoding Youxing Sports Goods Limited Company https://cnyouxing.en.alibaba.com/company_profile.html