



Faculty of Applied and Creative Arts

## **MOBILE APPLICATION FOR UNIMAS SPORT COMPLEX**

**Poy Venly**

**Bachelor of Applied Arts with Honours  
(Design Technology)  
2018**

# MOBILE APPLICATION FOR UNIMAS SPORT COMPLEX

POY VENLY

This project is submitted in partial fulfillment of  
the requirements for the degree of Bachelor of Applied Arts with Honors  
(Design Technology)

Faculty of Applied and Creative Arts  
UNIVERSITI MALAYSIA SARAWAK

2018

UNIVERSITI MALAYSIA SARAWAK

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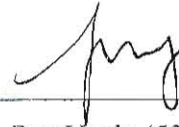
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Senior Lecturer  
Faculty of Applied and Creative Arts  
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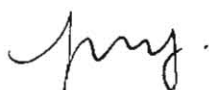
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## **Abstract**

Sport complex is a place where suits for playing sports, having activities and organising events. Meanwhile, UNIMAS Sport Complex also provides variety of services for student, staff and guest. This research will produce a mobile application for the target audience. With this application, it bring convenient to users to manage booking in the fastest way.

## **Abstrak**

Kompleks sukan merupakan sebuah tempat untuk mengadakan aktiviti sukan dan aktiviti riadah, serta penganjuran acara-acara sukan. Projek Ini bertujuan mewujudkan suatu platform aplikasi mobil yang diberi nama “Active+” bagi menyediakan pelbagai perkhidmatan. Dengan itu, applikasi ini akan dapat memudahkan pelajar, staf dan pelawat untuk menggunakan kompleks sukan UNIMAS.

## **Chapter 1**

### **Introduction**

#### **1.1 Background of Study**

Sport is sort of physical activities which carried out by athletes and someone who are passion in it. For example, badminton, basketball, tennis, swimming, running, football, futsal, volleyball, netball and other. Sport centre is a place where everyone can have physical activities and organise event or competition. Nowadays, there are many universities have their own sport facilities. Gratefully University Malaysia Sarawak (UNIMAS) is one of them.

##### **1.1.2 UNIMAS Sport Complex**



**Figure 1.1: UNIMAS Sport Complex**

### **1.1.3 Construction of UNIMAS Sport Complex**

UNIMAS is not only a place for education, it is also for sports. UNIMAS Sport Complex was completely constructed in 2012. The construction of the complex is under a construction company in East Malaysia, which is Speedtrack. The value of the Sport Complex costs RM43 million. According to UNIMAS Chancellor Profesor Mohd Fadzil Abdul Rahman (2012), sport facilities that equipped in UNIMAS Sport Complex consists of indoor and outdoor stadium.

### **1.1.4 Sport Facilities**



**Figure 1.2: Indoor Sport Complex**





**Figure 1.3: Outdoor Sport Complex**

The indoor stadium is built for futsal, badminton, squash and Olympic-class swimming pool, while the outdoor stadium, 55-arcs sports complex comprise Olympic-class athlete facilities with 5,000 seating capacity (Borneo Post Online, 2012). UNIMAS Sport Complex provides services for booking sport facilities and equipment, planning and organising events. University's students and staffs can enjoy this benefit to make a booking on the facilities provided, such as, volleyball court, indoor futsal, badminton court, bowling lawn, basketball court, gymnasium swimming pool, and track and field.

### **1.1.5 Purpose of Sport Complex**

The aim of Sport Complex is to provide more opportunity for students to showcase their spirits in sports by participating sports competition which organized by colleges and faculty. In addition, it also encourages intervarsity sports competitions such as Majlis Sukan Universiti-Universiti Malaysia (MASUM), Sukan Universiti ASEAN (SUKMA). According to New Sarawak Tribune (2016), UNIMAS Sport Complex was recognised as ‘Games Village’ for 18<sup>th</sup> SUKMA hosted from 17<sup>th</sup> to 31<sup>st</sup> July 2016. Besides that, Sport Complex is used to provide facilities and sport equipment to produce potential athletes among university’s students who have the capability to achieve high level in sports, so that UNIMAS can be the most outstanding institution in Malaysia. In addition, the Sport complex as a tool to award university students and athletes who are actively involved in sport activities based on the standard achievements imposed by the university.

1.1.6 Sport facilities booking at UNIMAS Sport Complex

**BORANG TEMPAHAN KEMUDAHAN KOMPLEK SUKAN**

UNIVERSITI MALAYSIA SARAWAK

Kemudahan Pusat Sukan  
Universiti Malaysia Sarawak  
94300 Kota Samarahan

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Nama : \_\_\_\_\_ Follower / Hing / Jab. \_\_\_\_\_  
No. Kad Staf : \_\_\_\_\_ No. Kad Pelajar : \_\_\_\_\_ No. H / phone : \_\_\_\_\_

Tuan:  
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Tarikh penggunaan: **30/10/2017** Masa: **7PM** hingga **9**

Padang Bolasepak	<input type="checkbox"/>	Gelanggang Badminton	<input checked="" type="checkbox"/>	Gelanggang Tennis	<input type="checkbox"/>
Padang Rugby	<input type="checkbox"/>	Gelanggang Bowling Padang	<input type="checkbox"/>	Lapang Sasar	<input type="checkbox"/>
Gelanggang Futsal	<input type="checkbox"/>	Gelanggang Bola Keranjang	<input type="checkbox"/>	Mejaari Tembok Tiruan	<input type="checkbox"/>
Gelanggang Squash	<input type="checkbox"/>	Gelanggang Bola Tampar	<input type="checkbox"/>	Gelanggang Bola Jaring	<input type="checkbox"/>

Tandatangan Pemohon \_\_\_\_\_

**UNTUK KEGUNAAN PEJABAT PUSAT SUKAN**

Tempatan : Diluluskan ☐  
Tidak Diluluskan ☐

Catatan : **COURT 3**

Tandatangan Pegawai & Cop \_\_\_\_\_

Note : Setiap tempahan boleh dibuat bermula pada pukul 9:00pg sehingga 7:00mlm setiap hari bekerja.  
Tiada tempahan untuk hari **Sabtu, Ahad dan Cuti Umum**

Figure 1.4: Reservation form of sport facilities

Students and staffs or sport associations can make a booking by going to office Sport Complex. They are required to manually fill up the form as shown in figure 1.4. The eservation form shows a sort list of sport facilities that can be booked, such as basketball court, rugby court, futsal, squash court, badminton court, lawn bowl, football field, tennis court, archery court and netball court. According to the latest notice provided from the Sport Complex, these facilities are free of charge. In another hand, gymnasium and swimming have fixed price rates, which are RM25 per annum and

RM0.50 per session respectively. One session for the swimming pool is from 3p.m. to 9p.m. The payment can be done by proceeding to Chancellory.

## **1.2 Problem Statement**

It cannot be denied that the services provided at UNIMAS Sport Complex are known as one of the problem. The Sport Complex in University of Malaysia, Sarawak. There has no any systematic service provided to students and staffs. Another problem faced by students and staffs is the booking facilities currently can be done manually by filling up a form at UNIMAS Sport Centre office. For those students who are non-college residences interested in playing sports, whereas, they require to purposely visit to the office sport complex to make a single booking. Also, they need to come to sport complex to and back for twice when booking and playing sports. This is very inconvenience and time consuming.

## **1.3 Research Objective**

The aim of service design in sport complex is to make the design of services better meet the requirement of the service towards public. Therefore, the objective of this research is to identify the services provided by Sport Complex and analyse the benefits of sport facilities to students and staffs. Last but not least, another objective of this research is to develop service design for the improvement of Sport Complex current services.

#### **1.4 Research Question**

One of the research questions from this research is what is the services provided by UNIMAS Sport Complex? Several services are provided by the Sport Complex, such as planning, organizing and managing programs and services related to the development of sports and recreation in UNIMAS. Besides that, the second question is what is the benefits of sport facilities to students and staffs? The last question for this research is how does service design improve the current service of Sport Complex?

#### **1.5 Scope of study**

The research scope basically narrows the information that are related to the research topic. The problems faced by both UNIMAS Sport Complex and target audience will be identified and a mobile application will be designed for users. It is important to have the idea on layout, information architecture, wireframe and usability testing to produce a mobile application for UNIMAS Sport Complex.



## **1.6 Target audience**

Target audience for this research will be focused on UNIMAS student, staff and guest. Majority of them have their own mobile gadgets for communication. Data collection will be collected from students and staff from UNIMAS Sport Complex in order to accomplish this research.

## **1.7 Media**

The media in this research includes promotional posters, bunting, brochure, flyer, mobile application design and promotion video. These medias used to promote the features and advantages of the mobile application.

## **1.8 Limitation of study**

The limitation of the study when carried out the research is the time limit for collecting the data and complete the project. Besides that, researcher always to and fro UNIMAS Sport complex from further distance to conduct this research by observing and interview. There is not everyone would give full attention during interview session.

## **1.9 Significant of study**

The significance of this research is to identify the problems faced by UNIMAS Sport Complex and the data will be collected by researcher. The collected data will be analysed and tabulated to implement in mobile application design that can ease the problems and bring convenient to users or target audience.

## **1.10 Conclusion**

In a nutshell, the goal of this research is to identify the problems faced by UNIMAS Sport complex and target audience, and create a mobile application that can help users to manage their sport facilities booking. Furthermore, this research will study in how to design an aesthetic interface and usability of mobile application.

## **Chapter 2**

### **Literature Review**

#### **2.0 Introduction**

This chapter will discuss about the literature review on service design, service tools including customer journey map, personas, storyboard, system map and blueprint, online services including e-booking and e-payment, existing online service, graphical web design and responsive web design. A new service design is used to improve the existing service for a better interaction between service provider and users.

#### **2.1 Service Design**

Service design is an application of established design process and skills to the development of services. It is a creative and practical way to improve existing services and innovate new ones (Moritz, 2005). According to French (2016), customer experience and the quality delivering are considered as an important key of success in human-centred approach for service design.

“Service design is the activity of planning and organizing people, infrastructure, communication and material components of a service in order to improve its quality and