Faculty of Electrical and Electronic Engineering Technology

DEVELOPMENT OF MOBILE BASED FOOTBALL FIELD MANAGEMENT SYSTEM

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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Bachelor of Electronics Engineering Technology with Honours

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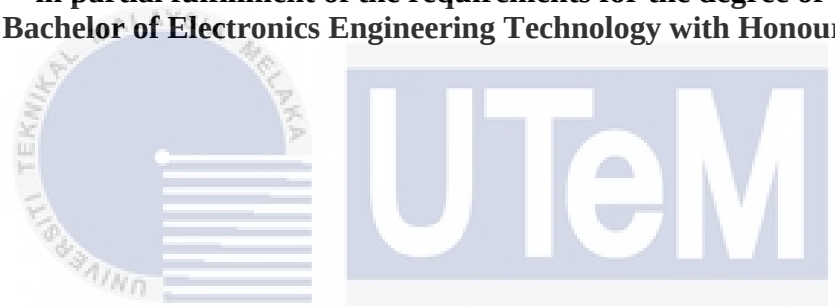
DEVELOPMENT OF MOBILE BASED FOOTBALL FIELD MANAGEMENT SYSTEM

MOHAMED HAZEEM BIN HASHAINI

A project report submitted
in partial fulfillment of the requirements for the degree of
Bachelor of Electronics Engineering Technology with Honours



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I hereby declare that I have checked this project report and in my opinion, this project report is adequate in terms of scope and quality for the award of the degree of Bachelor of Electrical Engineering Technology with Honours.

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DEDICATION

I dedicate this project to my dear parents, who have provided all the support and assistance that has enabled our efforts to succeed. They never surrendered, and I will always remember them.

Next, I'd like to thank the lecturer Mr. Muhammad Izzat Zakwan Bin Mohd Zabidi, who served as my supervisor throughout Project Sarjana Muda 2, for all the assistance and cooperation they provided. Throughout the project, your patience, expertise, and words of encouragement were a tremendous source of inspiration for me.

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ABSTRACT

Football is Malaysia's most popular sport. Football was introduced to Malaysia or Malaya at the time by the British. The natives quickly picked up the game, and it quickly became the country's primary sport. Football was one of the core foundations of most sports clubs in Malaya by the end of the nineteenth century. Football became popular between 1900 and 1978. According to a Premier League poll, Malaysia has around 13.6 million football enthusiasts and 9.4 million English Premier League fans, despite over 32 million people. Nowadays, social football is prevalent in our nation, and there are numerous social football groups. In addition, many new artificial football field rental businesses have recently developed in Malaysia. Eco Ardence Setia Alam Football Arena, Rhino KV Arena Shah Alam, Radia Arena, Arena 26, The New Camp Football Bandar Utama, NPNG Sports Centre, KLFA Football Centre, UM Park, UM Varsity, and many more developed in the Klang Valley area. Communication problem between the football field managers and the football club is critical. This project aims to create a system that will aid users in maintaining effective communication between the football field management and the football club. The proposed solution uses a mobile internet app linked to a football field management database. The planned outcome is that users or football club managers would be able to quickly register and book their slots and be informed of any changes to the football field's status. A proper management system can be implemented into an appropriate football management system, and this business industry will be more advanced in the future.

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ABSTRAK

Bola sepak adalah sukan paling popular di Malaysia. Bola sepak diperkenalkan ke Malaysia atau Malaya pada masa itu oleh British. Orang asli dengan cepat mengambil permainan itu, dan ia dengan cepat menjadi sukan utama negara. Bola sepak merupakan salah satu asas teras kebanyakan kelab sukan di Tanah Melayu menjelang akhir abad kesembilan belas. Bola sepak mula popular antara 1900 dan 1978. Menurut tinjauan pendapat Liga Perdana, Malaysia mempunyai kira-kira 13.6 juta peminat bola sepak dan 9.4 juta peminat Liga Perdana Inggeris, walaupun lebih 32 juta orang. Pada masa kini, bola sepak sosial berleluasa di negara kita, dan terdapat banyak kumpulan bola sepak sosial. Di samping itu, banyak perniagaan penyewaan padang bola tiruan baru telah dibangunkan baru-baru ini di Malaysia. Arena Bola Sepak Eco Ardence Setia Alam, Rhino KV Arena Shah Alam, Radia Arena, Arena 26, The New Camp Football Bandar Utama, NPNG Sports Centre, KLFA Football Centre, UM Park, UM Varsity, dan banyak lagi yang dibangunkan di kawasan Lembah Klang. Masalah komunikasi antara pengurus padang bola sepak dan kelab bola sepak adalah kritikal. Projek ini bertujuan untuk mewujudkan satu sistem yang akan membantu pengguna dalam mengekalkan komunikasi yang berkesan antara pengurusan padang bola sepak dan kelab bola sepak. Penyelesaian yang dicadangkan menggunakan aplikasi internet mudah alih yang dipautkan ke pangkalan data pengurusan padang bola sepak. Hasil yang dirancang ialah pengguna atau pengurus kelab bola sepak akan dapat mendaftar dengan cepat dan menempah slot mereka dan dimaklumkan tentang sebarang perubahan pada status padang bola sepak. Sistem pengurusan yang betul boleh dilaksanakan ke dalam sistem pengurusan bola sepak yang sesuai, dan industri perniagaan ini akan lebih maju pada masa hadapan.

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CHAPTER 1

INTRODUCTION

1.1 Background

Nowadays, social football is very famous in Malaysia. Almost every state in our country has its football field, and there are so many football clubs in Malaysia. Many social football leagues are invented, such as KVL or Klang Valley League, which have five divisions. It is an excellent step to search for new talents for our national football team. Besides the brilliant idea of it, there are some problems. The most serious problem is "double booking" for football match slots. As for now, usually, team managers will only deal to book their slot via phone call and Whatsapp with a person in charge of the football field. There is also the problem of canceling booking match slots. Sometimes it is hard to contact the person in charge of the field. This project aims to develop a software that will enable football club or football team managers to get the up to date information on the slots available on the football field, the way to book slot and referees at the football field, rental of sporting goods, information of weather condition, latest football news, new tournaments information invented at the football field and all the latest information by the football field management or organizations. The information management system has been of great concern to organizations. Proper management strategies can be implemented in the field football management system.

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1.2 Problem Statement

Most social football fields are not equipped with an appropriate management system. In the management system, specific problems suddenly emerged. The rental issue is the more severe problem. The problem of overlapping booking or "double booking" often occurs on the social football field and other fields. It will impact both the manager and the players. As a result of this issue, fewer individuals will not participate in social football games. This problem is not only focusing on a single sector and area; instead, it is present in several industries and regions. Team managers are required to contact the person in control of the football field to determine whether there are any open slots which they may be playing or participating. Plus, there is no proper management or rental record. It will affect the management side when some problems occur, and the management team has some issues keeping track or backtracking the customer's details. There are also no specific spaces to throw or complain about the football field rental issue, such as the field condition, referee decisions, and many more. As we go into a more contemporary period, this is not an effective use of management systems in our time. To solve this issue, we need to put into more effective and efficient systems. Serious action must be taken quickly to provide a management system that is more efficient for the social football field management system.

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1.3 Project Objective

The main aim of this project is to design a project that control and develop measurement model for social football field management system. Specifically, the objectives are as follows:

a) To develop a mobile-based football field management system application that is user friendly.

b) To facilities multi-way communication in managing the football field.

c) To test the efficiency of football field management system mobile application by creating 10 questions of survey and distributing it among 55 respondents.

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1.4 Scope of Project

This system aims to implement this application on any football field in Malaysia. The target user of the system is football field management, team managers, and team players. This project mainly emphasizes developing an application system for displaying and reserving the football field slots. It is also to help smooth the management system for all the football fields in Malaysia. It will also include some other functions that can help the target users to improve their performance

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A literature review is a comprehensive analysis of the most significant features of the material that is presently available on a particular topic. In the justification, you'll find an explanation of why the research question, theoretical or conceptual framework, and methodology were chosen. Within the scope of this sub-review are included both the system or current review and the method review. It is essential to investigate the present system to see if any new functions that deserve special attention have been added. A review of the processes and procedures that were followed in building a system is known as a method review.

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2.1.1 Football facility and equipment management

This study examines football facility and equipment management to offer the most critical success criteria and planning aspects that should be taken into account. The results, which are based on an analysis of secondary data and a study of the relevant literature, comprise both descriptive and prescriptive components. The results give football managers precise and practical recommendations on the issue and establish a theoretical framework for future growth. In addition, they highlight that matters concerning the administration of football facilities and equipment are not, and should not be considered, separate activities that fall under a single roof. They are all components of a more extensive system, which means that its elements are interconnected, both during the design and operating phases. In addition, it was discovered that they are intricately interwoven with the larger strategy and marketing activities. Furthermore, they make up a considerable portion of the value proposition that the club presents to its direct consumers, implicit customers, industry associates, and broader society.

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