REAL TIME COUNTING AUDIENCE SYSTEM IN FOOTBALL STADIUM

ABDUL RAHMAN BIN KRAM

SCHOOL OF COMPUTER AND COMMUNICATION ENGINEERING
UNIVERSITY MALAYSIA PERLIS
2007

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by

ABDUL RAHMAN BIN KRAM

Report submitted in partial fulfillment
of the requirements for the degree
of Bachelor of Engineering

APRIL 2007

ACKNOWLEDGEMENT

IN THE NAME OF ALLAH, THE MERCIFUL, THE COMPASSIONATE

Peace and the blessing of the Almighty are on our beloved Prophet, Muhammad, his relatives, his companions and all those who follow them. Amen.

A great thank to all who much helped me to complete this project. Firstly I would like to wishes a great thank to Madam Norsuhaida Ahmad for serving as the supervisor for this project. Her mentorship and valuable advice were instrumental in the course of this project. Without her guidance, encouragement and support I believe I can't successfully complete this project on time

Special thank to University Malaysia Perlis, UniMAP , the Yang Berbahagia Lt. Kol. Prof. Dato' Dr. Kamarudin B Hussin and all lecturers and staffs especially School of Computer and Engineering who much help to study at here and gave a lot of valuable information to implement my project with great successful. Not forget to Suruhanjaya Perkhidmatan Awam, SPA Sarawak scholarship who subsidizes all the expenditures that keep me living here.

Commonly a lot of thank for all members of UniMAP communities for their concern and contribution to improve my knowledge and skill have brought tremendous achievement in my project. I would like to consign special thanks also to Professor Madya Dr.Syed Alwee AlJunid Syed Junid, Dean Deputy of Research and Academic School of Computer and Engineering for his advice and sharing information with me.

In my last word, a gigantic thank to my beloved family for gave me a lot of moral support and become my inspiration to be more successful to complete my project.

Thank you.

APPROVAL AND DECLARATION SHEET

This project report titled Real Time Counting Audience System in Football Stadium was prepared and submitted by Abdul Rahman Bin Kram (Matrix Number: 031080006) and has been found satisfactory in terms of scope, quality and presentation as partial fulfillment of the requirement for the Bachelor of Engineering (Hons) (Communication Engineering) in Univesity Malaysia Perlis (UniMAP).

Checked and Approved by

_____

(NORSUHAIDA BINTI AHMAD)
Project Supervisor

School of Computer and Communication Engineering
University Malaysia Perlis

MAY 2007

I declare that this thesis is the result of my own research except some quotations of which I have cited the sources in the reference section. I furthermore declare that this thesis is not concurrently being submitted for any other degrees.

Signature :……

Writer : ABDUL RAHMAN BIN KRAM

Date : 16 MAY 2007

To,

My beloved parents,

Kram Hj Saini and Nurazimah Abdullah,

my sister and brothers,

who endless help to support and

preface me toward peak of victory in traverse hardship goals of study.

What I owning right now is really I appreciate and

will conscious throughout of my life.

Grateful and thank also for praying my success and hoping me to

moving forward for goal future.

A huge contribution from all UniMAP members is very worth for me

especially from close buddies who rise and fall together

in guidance and sharing information along my career studies at here.

SISTEM NYATA PENGIRAAN PENONTON DI STADIUM BOLA SEPAK

ABSTRAK

Bola sepak merupakan antara sukan terbesar di dunia dan diminati oleh semua peringkat umur di dalam masyarakat. Ini sekaligus menarik ramai penonton bertandang ke stadium bagi menyaksikan perlawanan-perlawanan yang menarik. Justeru itu sistem pengesan adalah merupakan salah satu cara bagi mengira kehadiran penonton. Tetapi keadaan ini tidak mengambil kira jumlah para pekerja dan staff yang turut juga berada di stadium tersebut. Kapasiti yang melebihi keupayaan stadium untuk menanggung beban penonton boleh dikhuatiri meranapkan struktur stadium. Oleh itu sistem pengira berupaya untuk mengira jumlah sebenar penonton yang berada di stadium pada suatu masa. Sistem ini dipasang pada pintu masuk stadium bagi memudahkan sistem pengiraan dilakukan. Dengan mengambil kira keluar masuk penonton sistem pengesan ini akan menambah atau mengurangkan bilangan kehadiran penonton pada data dan merekodkannya ke sistem pengkalan data. Semua statistik kehadiran penonton yang direkodkan dalam pengkalan data adalah menggunakan perisisan 'Microsoft Access'. Sistem pengira menggunakan pengesan inframerah bagi mengesan kehadiran penonton apabila melalui pintu masuk. Data ini diintegrasikan dalam Visual Basic yang mana membina antaramuka di antara perisian dan peralatan. Gabungan ini sekaligus mewujudkan sistem yang fleksibel, efektif dan dinamik. Peningkatan ke atas sistem keselamatan stadium daripada pengiraan kehadiran penonton melalui sistem inframerah pengesan adalah salah satu langkah bagi mengetahui jumlah sebenar penonton yang berada di stadium di samping berupaya mengelakkan keruntuhan pada struktur stadium.

ABSTRACT

Footballs are one of the largest sports in the world and have fans in all ply society. Therefore it adorable a lot of audiences come to the stadium for beheld the great matches. Hence the counting systems are one of the ways to reckon the attendance of audiences. However this situation not yet involves the counting over the workers and staffs inside the stadium building. The flood capacity which surpass the ability stadium to carry the overload of audience is worried can bring the restlessness of structural stadium. Therefore this counting system is capable to count the total of real audience in stadium at one time. This system placed at entrance of stadium for convenient to implement the counting. With considering the circumstances in and out audiences at stadium this system will commit to increment or decrement the present of audience at data before recorded into database system. The wholes of data that recorded at database system are using the Microsoft Access software. This counting system is using the infrared sensor as detector to track the presence of audience when they pass over the entrance stadium. At last stage the database are integrated in Visual Basic which build an interface between software and hardware. These combinations clarify the flexible, effective and dynamic systems. Enhancement over the security stadium through the counting system which generate by infrared sensor is one of way get to know the real total numbers of audiences in stadium and able to evade the destruction of structural stadium.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

RTCAS	-	Real Time Counting Audience System
MS Access	-	Microsoft Access
COM	-	Component Object Module
VDC	-	Volts Direct Current
MDR	-	Microsoft Data Report
ADO	-	ActiveX Data Object
mA	-	mille Ampere
VB	-	Visual Basic
UML	-	Unified Model Language
OLE DB	-	Object Linking Embedding Database
MS	-	Microsoft
LED	-	Light Emitting Diode
IR	-	Infrared
(RAD)	-	Rapid Application Development
(GUI)	-	Graphical user interface
(SQL)	-	Structure Query Language

LIST OF TABLES

LIST OF FIGURES