CHAPTER 6

SUMMARY AND CONCLUSION

Application of motion detector by using an infrared in real system nowadays maybe not a new invent in world of engineering technology. However with rehashed this theory concept of motion detector as sensor system was a good idea to evolve it function. The counting audience system which developed in real time system make this project appropriate to develop further for enhances the system. Since the motion detector field is wide, this research project will be base only on the infrared utilization.

Based on this project, the study scope is to create a counting system which combination of device and visual basic program. Obviously this invention project within procedure involves the knowledge base approach. This system with equipped high standard of electronic sensor circuitry helps the stadium management to reckon in auto system in order to obtain the statistic of audience such as how many audience going out or going in, bench available and most important the total number of audience within stadium at one time. The user system also can know the level of audience presence. In good condition where the level of audience beneath the capacity stadium, the system will light the green LED as indicator to represent ‘Stable’ condition. ‘Warning’ condition will lit the yellow LED to show that the number presence of audience almost reach the capacity stadium. When red LED lit, indicate the ‘Overload’ condition represent show the number of audience surpass the capacity bench stadium and can bring the restlessness of destruction of structural stadium.

UML diagram is one the method design applies within this project to create the flow of interfacing process. The UML diagrams that have been used in this design project involves such as Activity Diagram, Sequence Diagram and Use Case Diagram. In order

to make the design more effective work the Visual Basic and Microsoft Access Database language utilized.

As the conclusion, the project have a several potential advantages which give the benefit to stadium management particularly and commonly to audience.

i. Improve the security level

The current methods used by stadium management to count the real total of audience within stadium from ticket selling have a weakness and not effective to obtain the real number of audience at one time. With this system, it can solve that problem with quick count and precisely.

ii. Low cost installation

The equipments within this system are consisting of basic components. Circuit design only involve the sensor system and easy to construct with needless component within. On software part utilize the visual basic program which contains short instruction program but able to handle such huge counting process at entrance and other additional application at stadium. This program language of visual basic yield the friendly user environment and easy to understand when consume the program.

iii. Avoid the disaster

The counting system also equipped with warning alert to know the status presence of audience. This important to make sure the total number of audience not surpasses the capacity stadium. When the level of audience reach the overload condition, the red LED will light on to represent the dangerous level. Therefore, this system flow process can avoid the collapse of structure stadium building.

iv. Enhance the management

Database system which using the MS Access will store the entire information in proper arrangement and easy to altered without interfere the information.

CHAPTER 7

RECOMMENDATION

7.1 Recommendation

RTCAS project have a huge potential to develop further. In long term plan this system able to fulfill the basic requirement of stadium management and can control the entire flow system within network which relate to anything about football. The invention of RTCAS was a paradigm shift in order to create the flexible and dynamic system that helps the stadium management to count the audience in systematic way.

From the technology view, the RTCAS projects still have the weakness and lack of information about the entire stadium features. It suggested that this system add another available function not only count the audience but can be anything that relevant and appropriate to stadium utilization. The additional that features must give the benefit to either management or audience.

Apart from that, the RTCAS programming which using the Visual Basic 6 language expandable it application via the internet network with wide coverage and diffuse over the world. As the result, it can give the high profit especially to market the services and disposal several items that relate to football through the online purchase. Nevertheless the development of this system must be concord to current demand which the environment of football arena always changeable.

7.2 Future Enhancement

For future development upon this system, have to consider more precisely sensor system which quick act and flexible to surrounding. This important feature emphasized because certain of detector systems are easily too influenced by nature environment such as air movement and slow performance of system might interfere the internal program system.

The improvement can be executed in several ways such as:

a) Consolidate the system with SQL server, where the system directly able to accept database from SQL server.

b) Combine this system with scan system through barcode to enhance and expand the system function.

c) Constitute the system with other language such as JAVA, C, C++ and etc which contain the rashness program for create more powerful system.

d) Implement the search engine in order to search the current demand and requirement at stadium to invent the relevant system.

e) Make the enhancement upon the RTCAS within web application to develop dynamic system and able to band this system with entire stadium network in Malaysia