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Study on Tournament Management System

Shashank Shivaramkrishna, Kshitij Jain, Himanshu Nagda, Deep Chitroda and Nilakshi Jain,
Department of Information Technology,
Shah and Anchor Kutchhi Engineering College, Mumbai, India

***Abstract*—** Android application for the purpose of managing and organizing tournaments. To develope an application where users will be able to organize tournament by registering for the same. Interested users can register for the tournament by entering their details including their previous record. All registered users will be able to see this post. The enrolled users will also get a reminder for the tournament one day prior with the ground address. There is also a provision for people who don't play football but love to watch it, they just have to click on Guest. Doing so, they can go to watch the matches being played. The application will also segregate the teams in two slots on the basis of their profile (no. of matches played, won, lost). The fixtures for round 1 will then be made. Apart from tournament, if someone wishes to play football he can do so. He just has to enter the ground details and the timing. The algorithm used here is priority based. Currently there is an android application for the same which has provision only for one tournament that can be organized.This app can be used by anyone who wishes to organize football tournaments in their vicinity, specially football players and professionals. Colleges can too find this app useful. Only football tournaments can be organized at present.

***Keywords*—** *Football, Soccer, Tournament Manager, Tourney, Events, League.*

I. INTRODUCTION

In this application users will fill the form and register for the app. If a user is organising a tournament then he can post his complete tournament details. All registered users will be able to see this post. Interested users can register for the tournament by entering their team details including their previous team record (tournaments played, win, loss etc.). The enrolled users will also get a reminder for the tournament one day prior with the ground address. There is also a provision for people who don't play football but love to watch it, they just have to click on Guest. Doing so, they can go to watch the matches being played. The application will also segregate the teams in two slots on the basis of their profile (no. of matches played, won, lost).The fixtures for round 1 will then be made. Apart from tournament, if someone wishes to play football he can do so. He just has to enter the ground details and the timing. So the interested players can contact him to play with him or can inform him about their interest. Coaches can also use this app so that can conduct trials if they need new players in their respective academy. Fixtures will be made by the application itself but only for Round 1 on the basis of the information entered in the team details, that is strong teams will get strong opponents and vice versa. People who like to watch football can also register as a guest and follow the tournament details to watch the tournament.

II. STUDY ON RELATED SYSTEMS

In this paper we have detailed how to use the Dual Priority algorithm as a global scheduler in a multi-processor system and the problems found to adapt it to these platforms. The solution proposed is a hybrid model with two phases for every task: a dynamic phase where periodic tasks can execute on any processor and a static phase, where the periodic task has to execute on a particular processor to meet its deadline. With this scheme, all periodic task deadlines remain guaranteed. The periodic processor utilization upper bounds are the same than in single processor systems, but the remaining processing capacity is available to a periodic load. With extensive simulations we have shown that this method achieves very good mean a periodic response time. Furthermore, when the system is heavily loaded it can achieve better performance than an optimal local scheduler as the Slack Stealing with a periodic tasks migration implemented. This performance gain is greater when the number of processors is small. We have also identified the characteristics of particular periodic task sets that perform badly with Dual Priority. We have shown that this effect is less important when the number of processor increases. Nevertheless, a further research could be done to cope with these situations. [1]

At present, the setting scheme of background advertisements in sport stadium is mainly presented through PowerPoint in the forms of literature and pictures, which lack the reality and intuitiveness and cannot, provide sport sponsors with three-dimensional and intuitive setting effect of background advertisements during the course of television broadcasting. By applying virtual reality technology to the background advertisement setting in the sport stadium, a three-dimensional virtual environment for the sport stadium is built, in which the virtual background advertisement setting in the virtual sport stadium can be really simulated before the match and this result can be saved and exhibited to the sport sponsors. In this way, the sport sponsors can get a

intuitive understanding for the spatial position distribution of their own background advertisements before the match, the communication links between the organizer and the sponsors of sport events can be reduced and the sport events transaction cost can be lowered, which helps to the event negotiating and the sport events sponsors seeking, what's more, it also helps to the realization of the marketing approach converted from a single, flat and paper-based mean to the intuitive, three dimensional and digital one.[2]

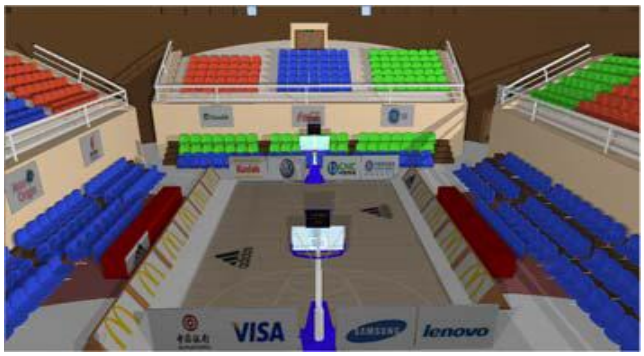

Figure 1: Sport Field.

In the simulation of scheduling, we have executed experiments under the best condition, and we have designed three cases to test the performance of the MDPGA and the GATS and have compared with real data. Under the best condition, take the time of completion as example, the MDP-GA outperforms in all three cases compared with the GATS. When the complexity of the problem is getting higher, the scheduling efficiency in time of completion of the MDP-GA is better than the GATS. If the size of the problem is 10 by 6, it can increase efficiency to 270%, and if the problem size is 50 by 50, then it can increase about 2000%. It means that when it is under the best condition, the MDP-GA indeed performs the best, in addition, the MDP-GA can also resolve the issue of instability in implementation. We can conclude that when the difference between completion times of each job is large, then the MDP-GA is the best method and can gain the best efficiency in the scheduling problems. [3]

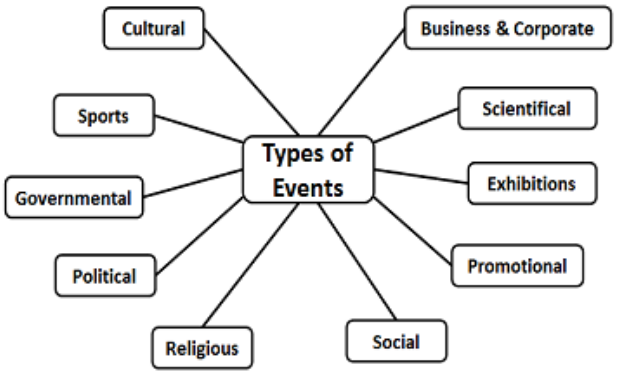

Figure 2: Categories of Event.

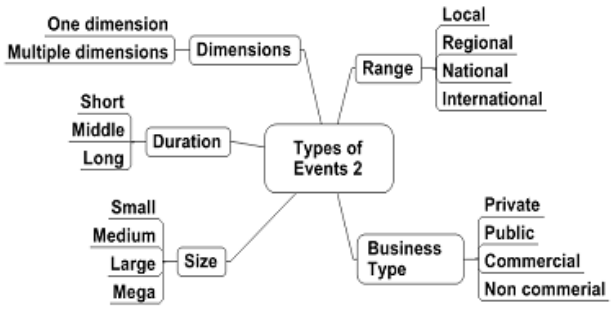

Figure 3: Classification of Event.

This paper discusses the problem of jointly scheduling tasks with hard and soft real-time constraints. A new analysis applicable to systems scheduled using a priority preemptive dispatcher is presented, with priorities assigned dynamically according to the EDF policy. Further, a new efficient on-line algorithm which is also called as the acceptor algorithm for servicing a periodic work load is presented. The acceptor algorithm transforms a soft periodic task into a hard one by assigning a deadline. Once transformed, all periodic tasks are handled in exactly the same way as tasks with hard deadlines. The off-line algorithm runs in pseudo polynomial time O (m n), where n - number of hard periodic tasks and m - hyper period/min deadline. The proposed algorithm is shown to be optimal in terms of providing the shortest periodic response time among fixed and dynamic priority schedulers. It always guarantees the perfect execution of periodic hard tasks. The approach is comprises of two parts: an off-line analysis and a run-time scheduler. [4]

This paper focuses on the problem of jointly scheduling hard deadline periodic tasks and soft a periodic task. The periodic tasks are assumed to be scheduled according to some fixed priority assignment scheme and a periodic task is allowed to be serviced any time, subject to the condition that all periodic deadlines be met. We develop a new a periodic scheduling algorithm called the slack stealer**,** which is proved to be optimal in the sense that it guarantees a periodic response times are minimized over all a periodic service methods. We conducted simulation studies to evaluate the potential performance gains of the slack stealer over conventional a periodic service methods such asbackground, polling, and the sporadic server. Results indicate that in some circumstances, the sporadic server can attain near optimal performance while in other circumstances all conventional a periodic service methods are significantly outperformed by the slack stealer. Moreover, it is shown that a periodic response times that the slack stealer yields are very close to those predicted by a queue model, under a wide range of conditions. In addition to its performance advantages, the slack stealer can be extended to service hard deadline a

periodic tasks and to reclaim processing time unused by the periodic tasks when they require less than their worst-case execution times. Although the implementation requirements for the slack stealer can be high in some cases, it provides the basis for approximate algorithms which can be implemented efficiently. [5]

Technological and financial innovations are the two aspects of payment industry which affect consumers' choice of payment vehicles by providing more convenient payment methods. Consumers now use electronic payment methods more extensively than in the past. A recent Federal Reserve payments study found that in 2009 electronic payments exceeded three-quarters of all non-cash payments, with 60% attributed to payments made with cards, such as debit, credit and prepaid cards.

Table 1: Statistics of Cards.

	2006	2009	CAGR
Total (billions)	95.2	109.0	4.6%
Checks (paid)	30.5	24.5	-7.1%
ACH	14.6	19.1	9.4%
Credit card	21.7	21.6	-0.2%
Debit card	25.0	37.9	14.8%
Prepaid card	3.3	6.0	21.5%

In recent years, the global card market has expanded rapidly as consumer spending patterns are changed. Cards are useful and convenient way for consumers, accepted by merchants widely, and is the best way of payment. They have replaced cash payment to a great extent. It is estimated that every 1sec around the world there are 10k payment card transactions made. According to data provided from the Census Bureau of U.S, there were 176 million credit card holders and 181 million debit card holders in the United States in the year 2008. These numbers are projected to grow to 183 and 188 million respectively in 2011. These numbers continues to grow and is expected to reach 585 and 1,278 million respectively in 2014. On the other hand, innovations and new technologies also created more complexity and introduced new risks factors. These factors are presented by new technologies and new products and providers and also have become an enticing target for criminals to attack. Unfortunately, as card has become the primary payment vehicle in retail industries, they have also become an enticing target for criminals to attack. [6]

In this paper, we have presented a multi-objective evolutionary algorithm for fixture determination for the sport of AFL football. Like many team sports that involve teams spread over significant distances, fixture designers for the AFL face the difficult problem of balancing a number of different, often conflicting, factors like competition fairness, amount of travel, availability and distribution of games, and of course revenue. Our multi-objective approach to this problem produces a range of different fixtures, each varying the trade-offs in the objectives by differing amounts. This provides the organising authority the ability to explore different "what if" options, allowing them to choose the option that best suits their requirements. Our experiments show that this multi objective approach is able to evolve solutions that strictly dominate the existing fixture, promising better returns in every measure of success. [7]

The paper proposes a novel model to find the interesting pattern in football match. The model is examined by the experiments. TSDM and traditional data mining are all considered in this model. Some useful patterns are yielded from the experiments, and they can guide the football coach and players to establish effective system against the opponent tactics. The achieved pattern from the decision model can predict the cooperation custom and pass pattern effectively. So the decision model is scientific and feasible. Of course, there are some drawbacks in the decision model, for example, the relative error range of time of TSDM should be studied in the further research. In the future, more work and experiments will serve as motivation for efforts in the development of decision model, to make the use the model more effective, more useful. [8]
This article describes the data mining of association rules mining, and discusses the application of the improved mining algorithm in the most commonly used movements of kicking 180 goals in football match. Moreover, common association relations of the technical movements will be extracted, which provides a decision for coaches to train and guide the football players. It makes it an important tool to enhance the level of competition by applying data mining technology in football match. [9]

III. DIFFERENCE W.R.T EARLIER PRODUCED SIMILAR SYSTEM

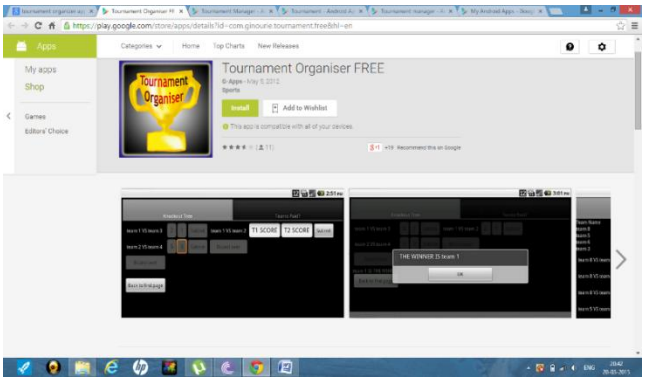

Figure 4: Comparison With Other Present System

1) In the above app, the tournament organizer is used specifically for a single tournament.

2) The main drawback of this app is that it is used only to organize 5 a side tournament.

In our app:

1) There will be no limit on the no of sides.
2) Each registered players will have news feed on his wall about the tournament being organized in the area
3) A player can create tournament and put up all related details about the his tournament and post it on this app
4) Player's record will be tracked in the application.

CONCLUSION

Literature survey describes the complete idea of the project and what is the difference between the earlier made topics and which we are making. Introduction part consists of the main aim of our project, what it consists of, working, etc. The summary of the recent technical papers related to our topic is provided above in the section 2. It gives the brief difference between the projects already made and which we will make. The comparison of our topic with the one of the application is described in the comparative analysis part. A table is also given above which gives information about the abbreviations which we will be using in the project.

Acknowledgment

Firstly, I would like to express my sincere gratitude to my Madam Nilakshi Jain for the continuous support and related research, for her patience, motivation, and immense knowledge. Her guidance helped me in all the time of research and writing of this thesis. We promise to deliver the best system service to provide the best user experience like never before. We will be working constantly in future to introduce new features in our application so that the user doesn't has to rely on other service to accomplish the task.

Last but not the least, I would like to thank my family: my parents and to my brother and sister for supporting me spiritually throughout writing this paper and my life in general.

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