

GYMNASTIC EVENT MANAGEMENT SYSTEM

Dhwani Hingu¹, Viraj Satpurkar², Tanveer Shinde³, Chintan Shah⁴

^{1,2,3}Student, Department of Information Technology Engineering, Vidyalkar Institute of Technology, Mumbai, India

⁴Professor, Department of Information Technology Engineering, Vidyalkar Institute of Technology, Mumbai, India

Abstract - Athletes who perform gymnastics face several issues like registering for an event, documents verification, event schedule, etc. With such a mess to just register for an event, It even becomes difficult for the athletes to know their ranking and performance.

The gymnastic event management system enables athletes to register for an event, upload documents and details online. The inbuilt algorithms will generate a schedule and inform the users for the same, this will help athletes to easily keep track of their upcoming events. Based on their performance judges will rank them and results will be generated in real time and the same will be updated on website/app, basically a real time scoreboard will be shown on system.

This system will thus help athletes to keep tracks of their events and performance, it will also reduce the overhead for the organizers to manually schedule the events, verify documents and update scoreboards.

Key Words: Athlete, gymnast, gymnastics, event management system.

I. INTRODUCTION

Gymnastics is a sport that needs balance, strength, flexibility, agility, coordination and endurance. Gymnastics events are governed by the Fédération Internationale de Gymnastic (FIG). Competitive artistic gymnastics is the most known and famous of the gymnastic events. It involves the women's events of vault, uneven bars, balance beam and floor exercise as well as the men's events of floor exercise, pommel horse, still rings, vault, parallel bars and horizontal bar.

Gymnasts who perform gymnastics face several issues like registering for an event, documents verification, event schedule, etc. With such a mess to just register for an event, It even becomes difficult for the athletes to know their ranking and performance.

Gymnastics Event Management System is a system to help organize competitions. The system primarily has 4 modules: Registration, Event Day Logistics, Record/Result History and Personal Profile Management for the in-house players.

The Registration module allows home players of a club to enrol into upcoming events. Guest athletes can apply for

their desired event or sport as per the Age, Apparatus, Element, etc.

Event Day Logistics consists of all participant records playing at the event which will be used to schedule players, provide scoresheets, generate ranking, publish scores and update records.

Verification: Participant documents are verified and approved.

Scheduling: The system schedules the competition as per the Age Group, Apparatus and Gender to display order of events.

Scoring: An online scoresheet for Judges to enter scores for each participant and view the next participant. Scoresheets can also be reviewed to settle disputes.

Ranking: Once judges finalize the scores, it can be displayed on the scoreboard and ranking will be done to be displayed on the websites.

Updating: The results and achievements will be uploaded to the system for in-house players.

Record/Result History maintains a log of all events and results of events held at this club till the current date.

Personal Profile Management provides a portfolio for its players. In-house players can upload their certificates and medals won at external clubs into the system.

As part of quality of life features, all database objects such as participation forms, results, history of an athlete, etc could be converted to a different version of soft copy such as PDF or Word file and can be downloaded as and when required.

II. LITERATURE SURVEY

- A. In the year 2016, Khalil Pinjari et al [1] proposed a paper on event management system. In this paper he explained the events such as wedding, festivals etc. have become a part of life which has given rise to event planning and Management Companies. With the increasing rate of customers and events, it gets complicated to manage using traditional system using spreadsheets, traditional database and more. Due to this, a new Smart Event Management System has been introduced which uses the latest technology of .Net Framework for managing

various tasks and planning for employees, customer, location, transport and more. With the help of this system, the transparency between customer and management team has increased.

B. In the year 2014, Phanuphong Hathaiwichian at el [2] propose the paper on event management and information propagation. It intends to solve the problems of propagating news and information, and also alleviate the issues of conventional event managing procedures such as loads of paper work, or long queue at the registration desk. The aim of this project is to build an android application which provides interesting news and events. The users will be able to manage their event participation, such as reserving their seats in events, registering at the event site, and so on. The application uses QR code to provide an easy way to verify participants' identity in an event.

III. AIMS AND OBJECTIVE

- To allow In House gymnast to automatically register for an event.
- To maintain Accolades of gymnast.
- To update results and achievement to In House database.

IV. PROBLEM STATEMENT

Gymnastics in is still a very niche sport in India but that hasn't stopped hundreds of people from playing it and participating in gymnastic competitions. Such competitions should have a nice and fluid system to register participants for a competition and be able to record all required information about players digitally so that it can be retrieved as and when required by event staff, judges or even club members to schedule, score or analyze a player's data and maintain and database of all players in that club.

However, such a system is non-existent at the time being which has made the entire process of enrolling into a club and participating in any kind of event a huge chore. All processes from enrolment to registration is done on paper and hence is extremely time consuming. Almost an entire day could be spent easily on just filling registration forms and verifying them. A lot of staff is also needed on the day of the event just to retrieve and distribute these information sheets. All of the staff are also on a separate payroll for the event days which is cost that can be cut down of the system was a bit more streamlined and did not require so many staff doing small jobs.

Thus to make it this entire process a lot simpler, a software system can be introduced which enrolls players into a club, maintains records of all enrolled players, can conduct events and provide judges with an interface to score the participants, all the while eliminating the need for

hardcopies and need for extra staff that would otherwise be required. It also makes it extremely beneficial for a club if the software can maintain and help coaches analyse every player's strengths and weaknesses to help them get better results

V. PROPOSED SYSTEM

The proposed system is an website which can run on any internet enabled devices. Gymnastics Event Management System will assist organizing a gymnastics competition. Thus this will make entire process a lot simpler, a software system can be introduced which enrolls players into a club, maintains records of all enrolled players, can conduct events and provide judges with an interface to score the participants, all the while eliminating the need for hardcopies and need for extra staff that would otherwise be required. It also makes it extremely beneficial for a club if the software can maintain and help coaches analyse every player's strengths and weaknesses to help them get better results.

VI. SCOPE

The scope of the project is to save the time in managing the events. The participants will be updated of the newly events which are upcoming The user can easily learn how to use the system and as well can easily manage the events by using our system. The participants data/information is safe and secure at the back end. The events results are displayed on the spot, which saves judges as well as participants time. This system can also be used in any type of event management system.

VII. METHODOLOGY

The software has Registration for participants, Event day management and Distribution of certificates. This software also maintains the In-house player data i.e. achievements, Rankings, etc.

A. Registration

- **Players Registration form** :- Online Forms for the Registration of the players from other teams.
- **In-house Players Registration**:- The In-house players could register automatically using internal portal.

B. Event day process

Documents Verification:- Verification will be done of the documents submitted by the players on the event day.

1. **Scheduling**:- After the verification, the software will arrange the players in the certain categories and schedule their events. The Scheduling will be done according to the No. of participants, Age Group, Gender, Events and

Apparatus. The schedules will be displayed on Website.

2. **Scoring System:-** At the event Judges are able to see the players score card according to the apparatus and events as per the schedule.
 - Score card will be displayed where judges can enter the scores.
 - After finalizing the scores, judges can confirm the final scorecard.
 - After confirmation of the scorecard judges can view the scorecard of the next player immediately.
3. **Displaying Result:-** After each performance scores will be updated. At the end of the particular event, judges will finalize the scores and the scores will be displayed. If any changes in scores, judges can edit the scores and confirm it finally.
4. **Ranking:** After end of the event finalized scores will be computed and ranking will be generated.
5. **Distribution of Certificates and Medals:-** Once the final Rankings are decided, the software will print the certificates. Organizers can keep track of distributed Certificates and Medals.

C. In-house Players profile management

This feature records the achievements and details of the players and information of coaches.

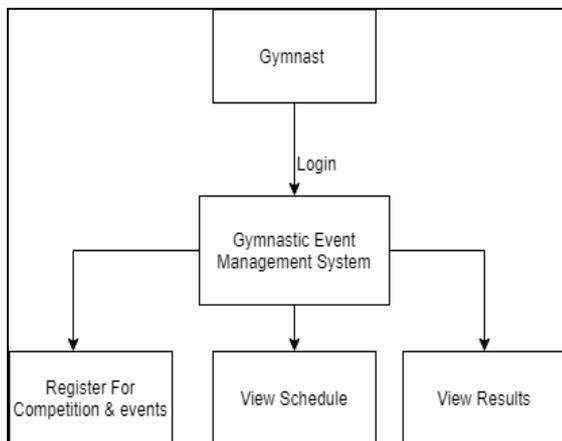


Fig.1 Gymnast Flow

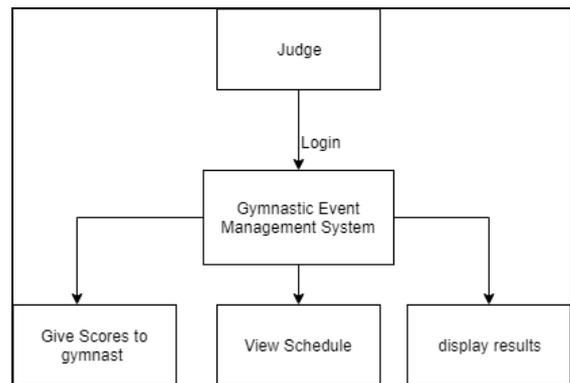


Fig.2 Judge Flow

VIII. CONCLUSION

Considering existing problems faced during gymnastic competitions, we developed gymnastics event management system in order ease the process of gymnastic competitions for gymnast, judges and organizers. Using our system organizers can easily organize gymnastic competitions, gymnast can easily register to the competitions as well as judge can easily give scores to all gymnast performing the events.

XI. REFERENCES

- [1] Assist. Prof. Khalil Pinjari Khan, and Khan Nur, "on smart event management system", IJCST- Volume 4 Issue 2, Mar- Apr-2016.
- [2] Phanuphong Hathaiwichian, Lapas Siriwittayachoen, Apinat Wongwachirawanich and Chaiyong Ragkhtiwetsagul, "Android application for event management and information propagation", IEEE-14685311, 26-27 MARCH 2014.