Scoring Management System

Amritha,M[1], Arakkonam Srinivasan Swetha[2],R.Ruhin Kouser[3]

Department of Computer Science and Engineering

Students[1,2] Assistant Professor Research Scholar[3]

Kingston Engineering College, Vellore, India

Abstract

In history, the cue sports uses manual scoring that could neither track auto-scoring nor dispense backend analysis. The calculation of scores was taped by human and done manually in pool table emerge in low efficiency. Thus the Manual Scoring becomes muddle to the game. Our Objective is to bloom an Android application for Score Management that will have the features of recording scores and event details. We use NFC technology for the conveyance. Near Field Communication (NFC) is a set of very small range wireless technologies, typically chosen a distance of few centimetres to begin connection. NFC allows imparting or exchanging small payloads of data between two powered devices in a peer-to-peer vogue within pervasive computing and the Internet of Things environments. This application aid the role of Scorer thus quash manpower from the game.

Keywords*:* CueSport,Auto-scoring,Recording scores, NFC,Android.

I. INTRODUCTION

Billiards is one kind of interesting athletics, which could train our thinking for the reason that the player has to consider the next positions in advance after breaking shot, called "Position Play". Billiards has been popular for hundreds of years in some form. At first, people used wood sticks to hit the balls into holes outside, which was called "rolling balls" before. This game in turn was moved to inside tables for play. Afterward, people opened some holes on the table, which turned into "pool tables"[1]. In the past, the reckoning of scores was recorded by human and was wrote down on the blackboard or lodge in the calculator on the pool table, which resulted in low efficiency. Besides, it could neither present the live game nor proceed post-analysis Thus Our scrutiny is to develop an android application that has a characteristics of recording scores with timer and fabricate match synopsis at the end. Router is used to affix personal computer as a server by Ethernet cable and gadget as a display screen. Where all client nodes are connect through Wi-Fi. Android application is owned by the user end(referee). Server stores the database of entire event details. We use NFC technology for the communication. Near Field Communication (NFC) is a set of very short range of communication between powered devices. When referee thumb the score on mobile, it fetches the information from database and exhibit score on the display board. Complete event is monitored by chief referee also foster the automated score sheets.

II. EXISTING SYSTEM

 In the past, calculation of scores was recorded by human and was wrote down on the blackboard or registered in the calculator on pool table, which resulted in low efficiency. Besides , it could neither present the live game nor proceed post- analysis. As a result, the score –calculating computer system appeared. It could not only present the game lively but also record performance of each player.

DISADVANTAGES

1. Low efficiency in time.
2. Human errors in calculating scores.
3. Too many manpower required.
4. No automated score sheets are generated.
5. No live record performance of each player

III. LITERATURE SURVEY

PAPER .1: A QUIZ MANAGEMENT SYSTEM Based on P2P Near-Field Communication On Android Platform for Smart Class Environments:

The NFC-based applications in the educational domain are still below their real potential, and the use of NFC technology in the context of a university ambient needs to be explored. The main objective of this research is to implement a working solution based on software and hardware components to automate the process of performing quizzes, relying on NFC enabled Android smartphones. A Quiz Management System (QMS) is built using Android's client and server apps. The server app is under the control of the instructor, who can browse results of performing the quizzes with calculated scores on the smartphone. In addition to the experimental evaluation based on the built prototype, a questionnaire has been designed and the results of the simulated-class experiment as well as the feedback from the questionnaire indicated more than 80% of the respondents at least agreed with the choice of platform technology and QMS features.

PAPER .2: . SMART ATTENDANCE SYSTEM USING RFID IN IoT:

This project has application in colleges and corporate offices for capturing the attendance of a person. This project uses two main components: RFID reader and RFID tag. The RFID tag is in turn a combination of silicon chip and antenna. The silicon ship is used for temporarily storing the data and antenna is used for transmitting the data to the RFID reader. The silicon chip is usually placed inside a white card having a particular card number. When a new student gets enrolled to the college or the company is hiring a new employee, each person is tagged to a particular serial number and this data is printed on the card as card number. There are two types of tags: Active tag and passive tag. The active tag has power enabled to it for functioning. The passive tags are activated by the power from the RFID

reader. The reading range of active tag is more compared to passive tag. The RFID reader can be a static or moving device. The RFID reader directly communicates with the microcontroller. The RFID reader reads the time of contact of the RFID tag and RFID reader.

PAPER.3: THE DEVELOPMENT AND IMPLEMENTATION OF AN INTERACTIVE SNOOKER GAME:

The computer games industry is a rapidly developing market that is consistently pushing back the boundaries of what technology can achieve.This development project explores the design and development of an interactive snooker game. The importance of current techniques utilised for this specific genre will be investigated and implemented, and any limitations placed on my own development examined. The difficulties of simulating this interactive environment are also considered, with appropriate interaction methods reviewed. The implementation and testing of the system is then presented and discussed. The dissertation concludes with an evaluation of the game produced, with logical future improvements outlined.

IV. PROPOSED SYSTEM

The proposed system is to develop an android application that has a characteristics of recording scores with timer and produce match Summary at the end. Android application is used at the user end. Server stores the database of players and entire match details. Through IOT - client display screen is projected . Main goal is eliminate multiple Scorer from the game. As referee enters authentication id to start the match, When the referee enters the score on smartphone ,within 500milliseconds the score will be displayed on the screen. The score database gets stored in the server as a result it can be easy to retrieve whenever necessary. It avoids wastage of time and energy.

ADVANTAGES

1. High efficiency in evaluating time
2. Errors are reduced with effortless calculation
3. Vital Information are stored in server and recouped.
4. Automated score sheets are fostered abruptly.
5. Live record scores are displayed on scorer board for spectators and players.

V. SYSTEM DESCRIPTION

Server Configuration

Admin configure WAMP server and network configuration. On open network and sharing change the connection type as wifi where IPv4 used which enables the address of 192.168.1.10with subnet mask and default gateway. On a WAMP server localhost is implemented where php my admin the required
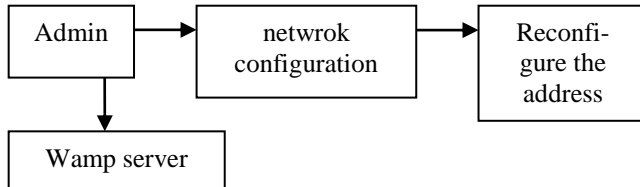
folder is selected.

Fig.1. Configuring a Server

Database setup

User has an initial level Registration Process at the web end. The users provide their own personal information for this process. The server in turn stores the information in its database. After Registration, user can upload files to the server. Uploaded files will be stored in a wamp Server. There are totally 7 tables done by mysql.
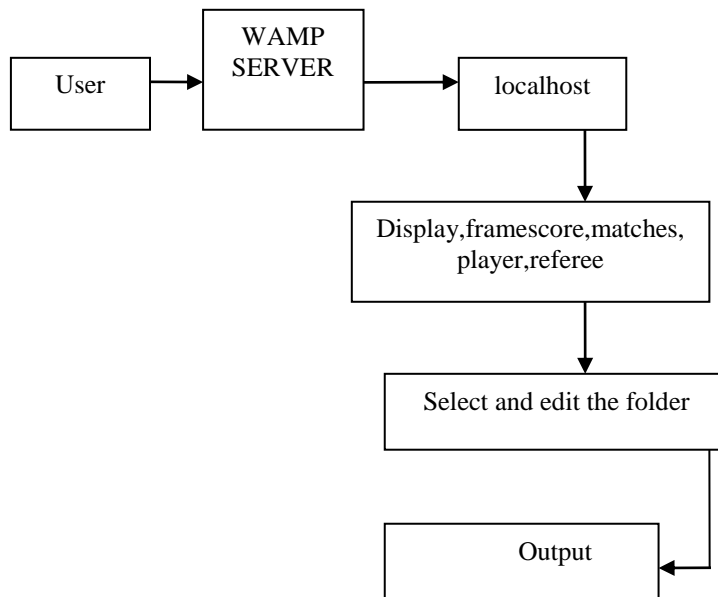

Fig.2. Database setup

Display presentation

The service codes for php where values are updated in score board. Each values are updated in display as well as the android app.The scores are updated in every 500 milliseconds . The codings scripted in Javascript (J Query) .The entire display screen are connected in a wired network.

Mobile Application

The application has three layouts, where is developed in Android studio.The start up include authentication key,where the design are scripted in XML with java . for every key press it fetches the information from database through wifi . The android application have following process button click, updation of scores, show the final output.

Real-time Playing	Real-time display	Calculate the scores by auto-Calculation instead of Traditional manual scoring.
Query services	Query scores records	Provide the previous scores records to referee and players
	Query players' information	Only allow referee and players to query the players personal informations
	Update score records	Update and maintain the score records
	Update player information	Update and maintain the player informations.

Manager system		authorize the id before match event
	Authorize	Login the interface from the backend system
	login	

Fig.3.The instruction of detailed function

VII.ARCHITECTURE

Fig.4.Architecture

Mapping the scenario to the smart phone domain, Pool table can be replaced by the smart phone itself, storing both the scores and their solutions in database. The performance of the players can be facilitated on the smart phone in place of the manual process based on the hard-copy papers. Allow for automatic and instant scores updates. Although there was several alternatives for wireless communications between smart phones are held on WiFi. Therefore, our system adopts to transfer data from the smart phone associated with the referee to the display board, and control panel is used by chief referee where he

monitors the entire process. The whole match details are uploaded in cloud server to the respective organisation. Finally the score sheets are printed .

VIII.ALGORITHM

```
if ( $obj = @mysql_fetch_object($r) )
{
$isRunn = $obj->isRunn;
}
if($isRunn=="1")
{
if($point=="1","2","3")
{
$undokey = "red","yellow","green";
}
else if($point=="4","5","6","7")
{
if($isFoul=="No")
{
$undokey = "brown","blue","pink","black";
}
else
{
$undokey = "brownFoul","blueFoul", "pinkFoul","blackFoul";
}
}
else
{
$undokey = "unknown";
}
$q1 = "INSERT INTO `tablename` (`id`, `matchId`, `frameNo`, `breakNo`, `forWhom`, `points`,
`timeStr`, `isFoul`) VALUES (NULL, '".$mid."', '".$frameNo."', '".$breakNo."', '".$forWho."',
'".$point."', '".time()."', '".$isFoul."');";
{
$curaid = $obj3->aid;
$nxtaid = $curaid + 1;
}
else
{
$nxtaid = 1;
}
```

```
$q2 = "INSERT INTO `tablename` (`id`, `mid`, `aid`, `action`, `time`) VALUES (NULL, '".$mid."',
'".$nxtaid."', '".$undokey."', '".time()."');";
$r2 = mysql_query($q2);
echo "allok";
}
else
{
echo "fail";

}
```
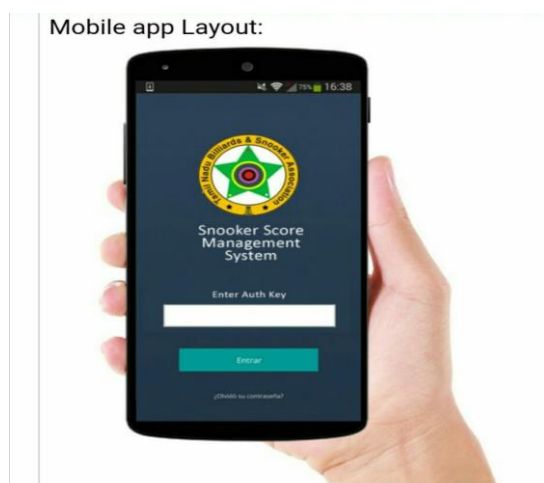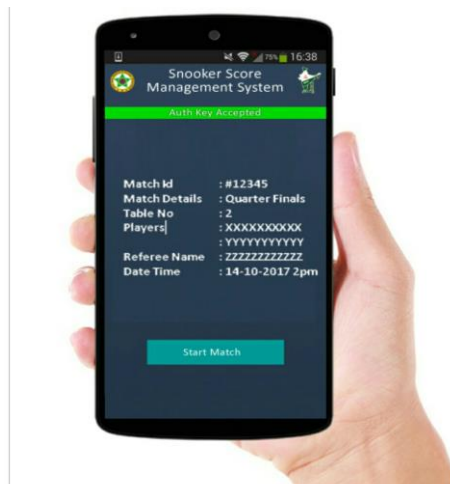
IX. CONCLUSION

This work differs from existing approaches in that it automatically translates the score is displaced on the screen ,the players find it convenient and the players can just concentrate on the game, it avoids time consumption . The database stores information about match events. As use of android is convenient and makes friendly in day to day use. This application is not only applicable only for this particular game, the source code can be implemented in different kinds of games. This project makes the game simpler and easy understandable. Hence providing wider scope and demand for this game.

X.FUTURE ENHANCEMENT

There is still a plenty of research that could be done in our proposed field. Our future work will relay on the enhancement in using sensors to track the balls pointing in pocket. Misconception can be detected through implementation of artificial intelligence. On the other side analysis of complexity of the present approach is rather informal .Much remains to be done in this regard. This work hopes to be a first step towards further understanding this important issue.

XI.SNAPSHOTS

XII.REFERENCE

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