Using online attendance management system constructs the function of score evaluation and score search

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Abstract

Each class all of the students can use telephone to login by recognition the QR Code. And using this system can evaluate score and search score. Compared other attendance management system if you don't have a computer also can use this system to login in class. Both the faith and correct attendance information can be gained by using this system. It can improve learning efficiency in class by evaluating students' multiple score. All of the system interfaces are designed by HTML at the windows environment. It Operates database and interfaces by PHP that are considered the link bridge. The many of functions can be realized by it. The system interfaces can be operated at web browser by using apache. Data is saved in database. Teachers can find the data from database. Concerning score evaluation teachers make the score of each class test and the score of each class lab to multiple evaluate.

Keywords: QR Code, attendance, score.

1. Introduction

In recent years student information is expanding with the school scale development. It manages them by using many of human and material resources at the schools. Using oral call and record paper roll call does it for the college attendance management. It makes low efficiency and easy to make mistakes to do that. And now using the student card in attendance management though it has neither the faith nor correct attendance information what can be gained.

If there are computers in a class, when it can use those computers to login, but networks and computers used are limited. Using telephones with the mobile

terminal which are configured network login attendance management system, as it has been considered. Because it many of students have mobile phones.

And now using human evaluates score, it will take much time. And it does also in order to improve the education effect and education efficiency, as that it considers construct the score evaluation and score search in this system. So it is one purpose for improve the evaluation accuracy by using the telephone make flexible use of attendance management system to evaluate score.

2. Attendance Management System Existed And Problem

2.1 The Method Of Attendance Confirm

Using student card manages attendance information. Students can use the IC card to login. For the attendance information is automatic control so that it does not need to confirm. Class time can be effective used.

And using computer manages attendance information. Students can use the student number and password to login with the computer putting on a table.

2.2 Problem

Using the IT technology reads the records which are attendance information. It has neither the faith nor correct attendance information what can be gained. And using the computer connected network. Both equipment set place and technology, the cost spent is a big problem.

3. Generating Ideas

3.1 Using Telephone Confirm Attendance

In this paper if there is not putting computers in class, it

logins manage attendance system by use the mobile phone. Concerning mobile phone it is not limited by place. And not only set the server when it connects to the network, but also not need to spend a big cost. Now many of students have the mobile phone so that it considers the attendance management system by mobile phone.

3.2 Score Evaluation and Score Search

Doing score evaluation can save time. And it improves the effect of students' score evaluation. So it considers use online attendance management system to construct the function of score evaluation and score search.

4. System Design

This system is a browser and server model. Using WAMP(Windows Apache MySQL PHP) technology design the interfaces and functions of system.

4.1 System Construction

Students can use the mobile phone to touch QR code, and it will be recognized link into login interface. Students also can use the computers to login with student number and password. Teachers use the computers to login to operate the data. System construction shows the Fig.1.

Fig.1 System Construction

4.2 Flow Chart

Concerning system flow chart it is divided into three parts to introduce. One is the OTP attendance system's flow chart, the other is teacher login's flow chart, and another is student login's flow chart.

1. OTP Attendance System's Flow Chart

Fig.2 OTP Attendance system's flow chart

2. Teacher Login's Flow Chart I

Fig.3 Teacher login's flow chart I

3. Student Login's Flow Chart

Fig.4 Student login's flow chart

4.3 Use Method

Using mobile phone and computer can login this system. One case: Using computer login this system with OTP and student number. The other case: Using mobile phone login

this system with QR code which will be recognized. The first using mobile phone to touch the QR code to jump student attendance login interface before login .Next it can login this system with the Password got and student number.

According to the Fig9, teacher logs in the system and choose class to generate many of QR codes assigned to students. Students get the QR codes which show the start password from teacher. After students received the QR codes using those respond the login interface by mobile phone. Last students login the attendance management system with the start password. Once more QR codes assigned to students when the class is over. Next the same step is that students get the QR codes which show the start password from teacher. After students received the QR codes using those respond the login interface by mobile phone. Last students login the attendance management system with the over password. At the end operation of students and teacher are over.

Fig.9 Operation order of attendance

5. Result

5.1 Attendance Management Application

According to the table.1 it shows result that is condition of student attendance management, and it shows Fig.10, Fig.11 and Fig.12

Subject	Electric Circuit 2
Class Date	2012/11/27, 2012/12/03, 2012/12/19
Student Number	11349439, 11349440

Table.1

According To Subject Student Attendance Condition

Student Number: 11349439		All Class count:5	
Class Date	Attendance count	Class Number	Attendance Rate
2012/12/19	1	5	20%

Student Number: 11349440		All Class count:5	
Class Date	Attendance count	Class Number	Attendance Rate
2012/12/03	2	3	40%
2012/11/27	1	1	

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Fig.10 According to subject student attendance condition

According To Date Student Attendance Condition

2012/11/27		
Student Number	Attendance Count	Class Number
11349440	1	1

2012/12/03		
Student Number	Attendance Count	Class Number
11349440	2	3

2012/12/19		
Student Number	Attendance Count	Class Number
11349439	1	5

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Fig.11 According to date student attendance condition

OTP	Student Number	Class Date	Attendance Count	Class Count	Last Class Count	Attendance Rate
ELEC21127	11349440	2012/11/27	1	1		100%
ELEC21200	11349440	2012/12/03	2	5		40%

Fig.12 According to student number student attendance condition

5.2 Score Valuation Application

According to the table.2 it shows result which is condition of student attendance management, and it shows Fig.13

Subject	Electric Circuit 2
Student Number	11349439, 11349440
Score Evaluating	Test1, Test2, Test3

Table.2

Student Number	Name	Middle Test	Term Test	Test1	Test2	Test3	Test4	Test5	Test6	Test7	Test8	Test9	Test10	Test11	Test12	Test13	Test14	Test15	Test16	All Score
11349440	No Login	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11349439	No Login	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fig.13 Score evaluation

6. Discussion

Concerning term score evaluation it can improve the evaluation accuracy by basing on all of tests and attendance rate to evaluate score. And the evaluation result could be more accurate rather than using less comprehensive evaluation of the type test.

7. Conclusion

It makes flexible use of attendance management system to construction function of score evaluation and score search. To compare other attendance management system, score evaluation and lab score evaluation and score search are designed in this system. Concerning term score evaluation it considers base on all type tests that are test and lab and presentation and homework to calculate comprehensive term score, and final plus attendance rate.

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