

A Corruption less fee distribution system integrated with students attendances in Educational Institutions

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Abstract—The state government of Andhra Pradesh has introduced a new scheme for the white card holders. The white card holders are those whose income is less than one lakhs. The government sponsors the tuition fee for all engineering college students. Our aim is to build a transparent economical system to take care of the disbursement of above said fees directly to the college accounts as and when the student successfully completes their training as well as securing the attendance. A secured web technology framework using with Java, JSP as well as relational database management system in background for building transparent easy deployable and maintainable system have simple menu driven system. The application has to be deployed in university servers which emails the students attendances to the fees re-imbursment authorities of government officials. Attendance Management System is software developed for daily student attendance in colleges and institutes. It facilitates to access the attendance information of a particular student in a particular class. The information is sorted by the operators, which will be provided by the teacher for a particular class. This system will also help in evaluating attendance eligibility criteria of a student.

We chose MySQL technology like representative relational database management system because has: portability, scalability, speed, is easy to use, is open source, is widely used by web developers and provides good security. We watched the analysis of an electronic business. We also presented the technologies that we have used: PHP, MySQL, HTML, and CSS.

Index Terms: Relational database management system MySQL, web frameworks, affiliated universities colleges, technology, and fees reimbursement.

1. INTRODUCTION

Development of a transparent Attendance Management System (AMS) is in close con-tact with good maintenance of databases and with usage of relational databases management system able to do various transactions and to respond in due time needs customers. The purpose of developing attendance management system is to computerize the tradition way of taking attendance. Another purpose for developing this software is to generate the report automatically at the end of the month or semester. We observed that for big quantities of data MySQL server provides high performance of insert transactions [1], therefore we have chose to work with this technology. Development of an AMS involves ensuring of a good security. In the future trust and security will lead to AMS development [2]. To ensure development and

improvement of AMS, re-imbursment of tuitions fees to the colleges uses compliance and communication technologies in large organizations [3]. The current state of knowledge refers to the existence of many types of attendance systems available in the market and the importance of the business models that lead to value creation and performance of the company [4]. In this article we analyze AMS an online attendance, which is based on a MySQL database, JSP and CSS and JavaScript.

The paper describes how to install and configure various server modules and inter communication between the modules. The paper explains installation of various servers, development of system and testing it with real time data of our college Sri Venkatesa Perumal College of Engineering & Technology, Puttur, and Andhra Pradesh, In-dia. The project is developed and hosted at <http://103.10.134.77:8084/NAms5>.

1.1 Need for AMS

How much time the teaching staff, the administration staff to prepare reports, calculating the attendances using excel or similar kind of software and finally to send the reports to the university people to decide the eligibility of the students to permit them to write university semester examinations. The costs associated with this one task can stagger. Between punching clocks, setting schedules, enforcing schedules, absence management, and payroll processing etc, inefficient time attendance management will turn out to be a black hole that sucks a institutes bottom line of earnings

1.2 Feasibility study

The system being developed is economic with respect Colleges point of view. It is cost effective in the sense that has eliminated the paper work completely. The system is also time effective because the calculations are automated which are made at the end of the month or as per the user requirement. The result obtained contains minimum errors and are highly accurate as the data is required. The system working is quite easy to use and learn due to its simple but attractive interface. User requires no special training to work around the system.

2. THE MYSQLS CHARACTERISTICS

MySQL as we have stated is a management system relational database and implements SQL (Structured Query Language), which is the standard query language of relational databases. We choose MySQL because it is open source, is the most widely used and can handle very large databases.

MySQLs characteristics

- High Performance
MySQL can run on a variety of operating systems such as: Linux, Windows, Mac OS X, and Solaris. Meanwhile, it can work with millions of transactions.
- Easy to use MySQL is easy to configure and administered and has a high performance.
- Scalability
MySQL is open source and it can be easily adapted by the user for his own requirements. It also manages very large databases.
- Speed
Implements a variety of customer interfaces such as: Java, PHP, Python, C++, C, Perl and provides a great data processing speed.
- Good security

MySQL provides increased security through the implementation of encrypted passwords and ensure data protection through specific mechanisms.

3. OVERVIEW

Attendance Management System basically has three main modules for proper functioning

3.1 College Administration module

First module is admin who has rights to create space for new batch. Any addition new faculty or relieve of existing faculty, Updating in subject if necessary, and sending notice. Admin having the details such as add regulations, view regulations; view staff dealing is the option to find the particular staff who is handling this particular subject. Relieve staff gives way to relive the particular staff. As per the tool, Admin having all permissions to navigate the system to the heights of possibilities. Attendance reports can be generated in one of the following ways:

- On the basis of academic year branch, year, semester, section and month.



Fig. 1 Admin page

- Students having condoned attendance < 75%
- Students having shortage Attendance <65%

Generating Attendance shortage list < 75%



Fig. 2 shortage list start page

Based on the attendance report we can counsel the students easily. Its very headache to the Head of the department or concerned faculty to find out the irregular students manually, this tool will helps us to free the burden.

We can get the printouts of attendance report directly from the AMS itself.

3.1.1 Registration

Each type of user faculty or student has to register in the AMS to get the service. We can update student address, if needed. It is very easy tool to register not much professional details are required, even though it is powerful tool to maintain. All the student details can be updated through the phpmysql module offered by the MySQL database using one of the many formats offered there. Add a particular student to the class. If any student got detained for current academic year, we can add that student to the same class easily.



Fig. 3 Registration Page

3.1.2 Regulations

Adding student in a particular class is just to follow the academic regulations of the university. We have followed the Jawaharlal Nehru Technological University of Anantapur, Anantapur, India to test our application. Students regulations comprises of their four year academic subjects, branch of study, year, sem and section given to the student by the university and college administration is part of the role happen in the AMS (fig: add regulation). Regulations are said to be rules followed by the student of particular academic batch by universities. Each student must belong to appropriate regulation based on regulation only the exams and many other are related to them so Regulations can be viewed as:

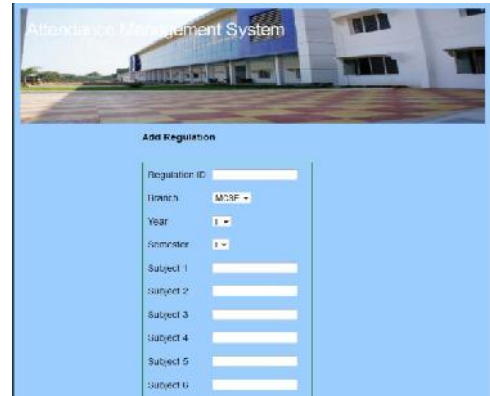


Fig. 4 Add Regulations



Fig. 5 View Regulations

3.1.3 Admin details

Admin having the details such as add regulations, view regulations; view staff dealing is the option to find the particular staff who is handling this particular subject. Relieve staff gives way to relieve the particular staff. Assign subject option have a unique way of solution to assign a subject to a particular staff.



Fig. 6 Admin Details

3.1.4 Student details

Student details having few sub parts as nominal rolls, adding roll numbers, detained students and the students who are registered. We have a particular option to find a student is find student. This will work with the student 10 characters roll number. It gives the details of the student about his Branch, year, and house address and present semester. So as it is very handy tool to use for an administrator to manage AMS.

Fig. 9 Profile update

3.1.5 Faculty module

Second module is handled by the faculty or an operator. Faculty has a right of making daily attendance, generating report. The above page shows the home page of user. User may be admin or faculty or student. We can see the profile of current faculty who is registered with the AMS by selecting profile view.

If the staff want to change his profile or want to update their profile they will choose the option profile update.



Fig. 7 User home page



Fig. 8 Staff home page

The attendance tab having two options as post attendance/marks and attendance report. This fig: post att/marks page having academic year with the current staff who is handling the particular subject(s) with their handling branch, year, semester and section. Our AMS support selects the particular option to view the attendance by monthly. The above fig shows the final monthly report of the particular branch, semester, section and year of the students. This monthly report will be automatically generated with the students who have got less, average and feasible attendance.

Academic year=2011-2012 Branch=MUSE Year=1 Sem=1 sec=, sub=WLAD

| Month | Working Days |
|-------|--------------|
| Jan | 11G01D5801 |
| Feb | 11G01D5802 |
| Mar | 11G01D5803 |
| Apr | 11G01D5804 |
| May | 11G01D5805 |
| June | 11G01D5806 |
| July | 11G01D5807 |
| Aug | 11G01D5808 |
| Sep | 11G01D5809 |
| Oct | 11G01D5810 |
| Nov | 11G01D5811 |
| Dec | 11G01D5812 |
| | 11G01D5813 |
| | 11G01D5814 |
| | 11G01D5815 |
| | 11G01D5816 |

Buttons: Back, Submit

Fig. 10 Post attendance

Fig. 11 Selection option of monthly attendance

Fig. 12 Automated generation of monthly attendance

3.1.6 Student module

In student module every student needs to get register with the AMS. Every register students can have variety of services like they can view their monthly attendance, marks and their status which is available at departments. The registration process is same to every kind of users which will be stated earlier in this paper.

4. ADVANTAGES OF TIME ATTENDANCE MANAGEMENT

- Time saving
- Manage critical student information easily
- Easy work force scheduling
- Monitoring the attendance efficiently
- Monitoring absence leaves etc
- Monitoring student performance

With all the above features and advantages, Attendance software is the best solution for managing attendance efficiently. It will be a one-time investment for lifelong usage. Moreover we choose working with MySQL technology because have many advantages: high performance, easy to use, scalability, speed, increased security. So it is

- **User Friendly** The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover the graphical user interface is provided in the proposed system, which provides user to deal with the system very easily.
- **Reports are easily generated** reports can be easily generated in the proposed system so user can generate the report as per the requirement (monthly). User can give the

notice to the students so he/she become regular.

- **Very less paper work** The proposed system requires very less paper work. All the data is feted into the computer immediately and reports can be generated through computers. Moreover work becomes very easy because there is no need to keep data on papers.
- **Computer operator control** Computer operator control will be there so no chance of errors. Moreover storing and retrieving of information is easy. So work can be done speedily and in time.

5. FUTURE WORK

In future the application can be enhanced to add various features like internal, external marks, student’s external events participation. The application can be designed to help in selecting the best performance student to issue appreciation award or reward by the college or department administration. It can also be included with their library accounts. As the application is launched in a static web address the student or parent can update or view the details even when they are away from their study place.

6. CONCLUSION

The Attendance Management System is developed using MySQL fully meets the objectives of the system which it has been developed. The system has reached a steady state where all bugs have been eliminated. The system is operated at a high level of efficiency and all the teachers and user associated with the system understands its advantage. The system solves the problem. It was intended to solve as requirement specification.

REFERENCES

[1] A. O. Afolabi, A. O. Ajayi, Performance Evaluation of Database Management System (A case study of INTERBASE and MySQL, Journal of Engineering and Applied Sciences 3 (2), Medwell Journals, 2008, ISSN: 1816-949X, pp. 155-160;

[2] K. Changsu, T. Wang, S. Namchul, K. Ki-Soo, An empirical study of customers perceptions of security and trust in e-payment systems, Electronic Commerce

- Research and Applications 9 (2010), pp. 8495;
- [3] K.E. Corey, M.I. Wilson, e-Business and e-Commerce, International Encyclopedia of Human Geography, Elsevier, Oxford, 2009, ISBN 978-0-08-044910-4, pp. 285-290;
- [4] K. Wikstrom, K. Arto, J. Kujala, J. Soderlund, Business models in project business, International Journal of Project Management, Volume 28, Issue 8, IRNOP 2009 in Berlin, December 2010.
- [5] M. Turle, Data security: Past, present and future, Computer Law & Security Report, Vol. 25, Issue 1, 2009, ISSN 02673649, pp. 51-58;