

HOSTEL MESS ATTENDANCE MANAGEMENT SYSTEM USING WIFI

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Abstract:- "HOSTEL MESS ATTENDANCE SYSTEM USING WI-FI" is software developed for maintaining attendance sheet for hostel mess. For the past few years the number of educational institutions is increasing rapidly. Thereby the number of hostels is also increasing for the accommodation of the students studying in this institution. And hence there is a lot of strain on the person who are running the hostel and software's are not usually used in this context. This particular project avoids the problems which occur manually. Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more users friendly and more GUI oriented.

Keywords: - Pre-attendance of each student, menu, bill payments and guest requests. PHP, SQL Server, HTML, JavaScript, Browser, mess management, information system, document management system etc.

I. INTRODUCTION

The online hostel Mess attendance system is web based software to provide college students accommodation to the university hostel more efficiently. This project also keeps details of the hostellers and applied students. It is headed by Warden. He will be the administrator. For accommodate a large number of students into hostel. We have seen over the years that the process of manual attendance has been carried out across almost all educational institutions. The process is not only time consuming but also sometimes inefficient resulting in the false marking of attendance. Today, we need not maintain pen and paper based attendance registers. Following this thought, we have proposed an attendance monitoring system based on the concept of Wi-Fi which is implemented as an online mobile application that communicates with the database residing on a remote server. The purpose of developing attendance management system is to computerized the tradition way of taking attendance. Another purpose for developing this software is to generate the report automatically at the end of the session or in the between of the session. The scope of the project is the system on which the software is installed, i.e. the project is developed as a desktop application, and it will work for a

particular institute. But later on the project can be modified to operate it using Wi-Fi.

II. PROJECT OUTLINE

The Mess management system is a web application build in PHP. There are many such software are available in market but the unique thing is that this is web based application so that it can be managed from anywhere in the world, admin can keep track of all things on the go. Also the tedious task of managing network is reduced here because this is web based only internet is required for this. Also data is stored at central web server so data is secure and can be backed up frequently.

This application is developed in order to reduce the complicated task for small business like maintaining attendance and maintaining customer data.

Modules:

- Student
- Administrator
- Mess management system
- Mess secretary

In student module check daily menu, make attendance, view notices, make guest request. In administrator module admin view attendance, select menu, manage student, vote for today's menu. The mess management system is the database storage. In mess secretary module, the secretary is a supplier of needs and handles whole accounts.

III. LITERATURE SURVEY

The attendance tracking system is a tedious process. The system is used to track the attendance of the students in a systematic manner automatically. The development of the application reduces the inefficiency of the attendance system. So Before developing the tool it is necessary to determine the time factor, integrity and security of the system. Once these things are satisfied, then next step is to determine the operating system and language can be used for developing the tool. Many systems and applications have been developed

in this regard to solve the automating the process of attendance, but almost none of them fulfill the whole requirements. Many problems can be seen on those existing applications, some lack GUI, some lack automating the process of informing the care taker or guardians. There are software's available for automating such problem of attendance but being the fact that desktop consumes more energy or power than the mobile.

Nowadays, attendance is generally taken on the piece of paper in register. Using mobile for taking attendance, consumes not only less energy but also helps in reducing the wastage of paper and can serve as green way for taking the attendance. Use of paper, nowadays can be eliminated by the use of mobile or automating the process of attendance.

Today's fast paced world is overloaded with new and ever changing technologies, to cope up with these technologies and constant rise in the user demands one need to maintain a very high quality of each and every product being launched. The software industry is no different and is constantly striving hard to develop and maintain high quality software.

Mess Management System will help small business owner to manage their business. This project is developed for Hostel Mess Management System. Much such software is available in market but they are tedious and complicated with complicated user interface. But Mess Management System is web based application so we can provide very user friendly UI which is easy to understand and manage

The approach/model used for developing software depends on the kind of system we want to develop. We analyzed the requirements thoroughly first and then spent lots of time in System Designing. But when we went for implementing the desired system, we realized some shortcomings in the design and had to revise the design again. We aimed at following waterfall model but finished up using Modified waterfall Model.

While making design of the system emphasis was put on having an efficient modular design. It has been implemented during implementation phase by taking care of basic things which ensure effective modular design.

Software testing is very critical element of software quality assurance and represents the ultimate reviews of specification, design and coding. Testing represents an interesting anomaly for the software. Testing is vital to the success of the system. Errors can be injected at any stage

during development. System testing makes a logical assumption that all the parts of system are correct; the goal will be successfully achieved. During testing, the program to be tested is executed with set of test data and the output of program for the test data is evaluated to determine if the program is performing as expected.

Mobile Based Attendance Management System Using Android, We have seen over the years that the process of manual attendance has been carried out across almost all educational institutions. The process is not only time consuming but also sometimes inefficient resulting in the false marking of attendance. Today, we need not maintain pen and paper based attendance registers. Following this thought, we have proposed an attendance marking and calculation system which is implemented on Android mobile application integrating biometric scanner that communicates with the database and verification can be achieved. This Android application will give the students information on attendance and change in timetable if any whereas the biometric scanner is used for verification, authentication and to avoid proxy.

IV. HARDWARE AND SOFTWARE SPECIFICATION

➤ Server System (Minimum Configuration)

- Processor : Pentium 3
- RAM : Minimum 512 MB or above
- Hard
- Disk : 40GB

➤ Client Side:

- Processor : Pentium 3
- RAM : Minimum 512 MB RAM
- Hard Disk : 40GB

➤ Software Specification

- Platform : Window XP, Window 7, Window 8
- Front End : HTML, CSS, JavaScript,
- Back End : PHP, MySQL
- Browser : Internet explorer 8.0 and above, Mozilla Firefox, Google Chrome etc.

V. FEASIBILITY STUDY

Once the scope of the project had been defined, it was reasonable to ask: "Can we build system to meet this scope? Is the project feasible?" Our feasibility study focused more on the cost, efforts and resources required for the system.

Software feasibility is based on four solid dimensions, which were taken into consideration before moving ahead:

Technical Feasibility

Technological feasibility is carried out to determine whether the company has the capability, in terms of software, hardware, personnel and expertise, to handle the completion of the project when writing a feasibility report.

The proposed system can be implemented with some existence technology. The company is already having the hardware and software required for proposed system. The company already has a Local Area Network (LAN). The proposed application will be installed on the server and the interfaces, resources and related data of the proposed system will be shared to all workstation. The workstations will be connected to the server to all workstation. The workstation will be connection to the server over the network so that all users are able to share the application's resources and work individually. Thus it can be found that the proposed system is technically feasible.

Economic Feasibility

As the development work for the system going on smoothly as was planned during the project-planning phase and the company had licensed copies of the software's required for the development of the project and hence need not pay any additional cost for the same and hence the system is economically feasible.

Time Feasibility

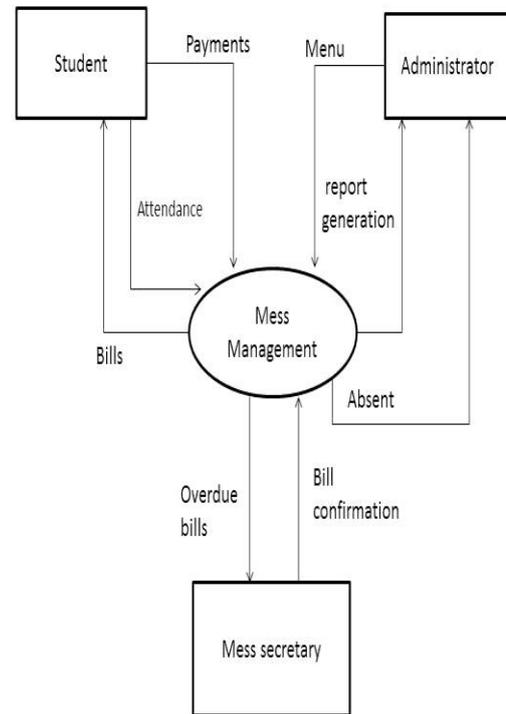
The development work for this software is running under the specified time period there was no need for extra resource for the development and hence the system is timely feasible.

Operational Feasibility

This project provides a simplified way to search for any customer details. Along with this here we will update various details related to Customer and plans on mess.

VI. SYSTEM DESIGN

• **Architecture diagram**



Architecture diagram

The architecture diagram of the system consists of major four modules. Student, mess management, administrator and mess secretary.

Student module

The student module consists of all activities performed by student. Student performs following actions:-

Make attendance:-

Student mention that he is attending a lunch/dinner or not. As our system provides the pre attendance system, the student can tell the admin at morning that he will present at the evening or not.

View notices:-

Student can view the notices and give corresponding response. The notices would be about any occasion or in the case of mess closed.

1. **Mention guest:-** Student can have guests with him but he must inform that to administrator. Student should mention how many guests are coming. He can also delete the request before time limit. The time limit means limited time in which student must have to make attendance, request for guest.
2. **View menu:-** The student can view menu. Also we are providing the options for student that he can choose any one menu for that particular shift (morning/evening) and do voting for it.
3. **Update profile:-** Student can update his profile. In this module student can change his password, profile picture, or any other updates.

Admin module

Admin is the person who handles and manages the whole system. Admin performs following functions:

1. **Manage student:-** The admin can manage student. In this module student addition, deletion, updation etc.
2. **Menu:-** The administrator provides options of menu for student and as per voting of student menu will be selected by user
3. **Notices:-** Administrator can generates notices about occasion, events or in the case of mess closed. Student can only view these notices.
4. **Messages:-** Administrator can view birthdays of students and send them wishing message. He can also send occasion message.
5. **Guest:-** Administrator view the requested guest and add their food in that particular shift.

Mess management module

The mess management system is nothing but the database in which all data is stored. It is server and central system. It provides requested data to user. It backup the deleted students data.

Mess secretary

The mess secretary is owner of mess. He checks bill payments. Labors payments, the required raw material.

1. **Overdue bills:-** The mess secretary checks bills if there are bills which are not paid by student then he can take an appropriate action.

2. **Bill confirmation:-** Administrator is responsible for providing the all reports. The bills provided by administrator are checked by secretary.
3. **Supply needs:-** As the secretary is main incharge of accounts he is totally responsible for providing the needs required for mess.

Functional Independence:

The Functional independence has been achieved by developing modules with single-minded function and on dislike to excessive interaction with other modules. In simple word we took care of two things,

- We ensured that each and every module and function has a high degree of **cohesion**. That is they focus on one target only.
- Interdependency between modules has been kept a less as possible by us to minimize **coupling** and ensure that failure of one module doesn't fail the whole system.

VII. FUTURE SCOPE

- Our future scope is to add account section.
- Barcode generated identity cards/fingerprints recognition attendance system.

REFERENCES

1. James R Groff and Paul N Weinberg, "Complete reference SQL". Second Edition
2. Agnes Molnar and Adam Granicz, "Net with Visual C# 2010".
3. Css files, from W3 schools. <http://www.School.com/css file>
4. Hostel form, from cusat hostel. http://cusat.ac.in/hostel_form
5. Css files, from Wikipedia, the free encyclopedia. http://www.en.wikipedia.org/wiki/Wireless_security.
6. Jamil, T; Dept. of Electro. & Computer Eng., Sultan Qaboos University, Al Khod, Oman, Automatic attendance recording system using mobile telephone, Telecommunications Forum (TELFOR), 2011 19th 1297 – 1299
7. Shehu, V. ; Contemporary Sci. & Technol., South East Eur. University, Tetovo, Macedonia ; Dika A. , Using real time computer vision algorithms in automatic attendance management systems, Information Technology Interfaces (ITI), 2010 32nd International Conference on 397 – 402

8. Saraswat, Chitresh; Kumar, Amit, An Efficient Automatic Attendance System using Fingerprint Verification Technique. International Journal on Computer Science & Engineering. 2010, Vol. 2 Issue 2, p264-269
9. Mobile Based Attendance Marking System Using Android ... – IJIRST www.ijirst.org/articles/IJIRSTV1I1027.pdf
10. COLLEGE MANAGEMENT SYSTEM Srikant Patnaik¹, Khushboo kumari Singh², Rashmi Ranjan³, Niki Kumari⁴ <https://www.irjet.net/archives/V3/i5/IRJET-315136.pdf>