Online Hostel-Mess Management System

DBMS Project Report

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CERTIFICATE

This is to certify that the project entitled "Online Hostel-Mess Management" embodies the original work done by Keshav Gupta & Kartik Arora under my supervision.

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Mr. Parteek Bhatia

ACKNOWLEDGEMENT

Here we gladly present this project report on "ONLINE HOSTEL-MESS MANAGEMENT SYSTEM" as part of the 3rd semester DBMS project. At the time of submitting this report we use this opportunity to mention those people who were with us during the work. We take this occasion to thank God for blessing us with his grace and taking our endeavor to a successful culmination. We extend our sincere and heartfelt thanks to our esteemed guide, Mr. Parteek Bhatia for providing us the right guidance and advice at the crucial junctures and for showing us the right way.

Last but not the least; we would like to thank our friends for the support and encouragement they gave us during the course of our work.

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ABSTRACT

"ONLINE HOSTEL-MESS MANAGEMENT SYSTEM" is basically a Web-App developed for managing various activities in the hostel and 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 these institutions. And hence there is a lot of strain on the persons who are running the hostel and softwares are not usually used in this context. This particular project deals with the problems on managing a hostel as well as mess and avoids the problems which occur when carried manually. Identification of the drawbacks of the existing system leads to the designing of such a computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented. We can improve the efficiency of the system, thus overcome the drawbacks of the existing system.

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INTRODUCTION

PROJECT OVERVIEW

The online hostel-mess management system is web based application to provide hostel students certain online facilities which they can avail more efficiently. This project also keeps details of the hostellers. It is headed by Warden. He will be the administrator.

This document is intended to minimize human work and make hostel-mess management an easier job including mess calculation, complaint registration and notice board etc. Hostellers can view notice board, register complaints, make their leave entry for hostel as well as mess, can see their mess menu, monthly mess bill, total leaves and many other facilities simply by login into their respective online system.

PROJECT OBJECTIVES

- Students can make their leave entry in the leave form while going to their home.
- Students can also register complaints.
- Hostellers can check the status of their complaints.
- Admin can edit notice board and each student can view it.
- Mess secretary can calculate total monthly mess fee by considering mess fee and total leaves and can also edit mess menu.
- Hostellers can check the status of every month's mess fee
- Hostellers can check their total no. of leaves in hostel.

SYSTEM ANALYSIS

EXISTING SYSTEM

The existing system is manual based and need lot of efforts and consume enough time. It may also lead to corruptions in the mess fee calculation process. The existing system does not deals with mess calculation and complaint registration more efficiently. Here hostellers have to make their leave entries on pen and paper which is further difficult to maintain such records.

DISADVANTAGES:

- More human power
- More strength and strain of manual labour needed
- Repetition of same procedure.
- Low Data security.
- Data redundancy is not there.
- Difficulty to handle.
- Difficulty to update data. Record keeping is difficult.

PROPOSED SYSTEM

The proposed system is having many advantages over the existing system. It require less overhead and very efficient. The proposed system deals with the mess fee calculation and complaint registration process and other processes more efficiently.

ADVANTAGES:

- Less manual labour required.
- More fast process than existing system.
- More transparency is present.
- Integrity of data is there.
- Data redundancy is more.
- More data security.
- Backup of data can be easily generated.

CASE STUDY OF THE PROJECT

In a university there are many hostels. Every student is associated with a particular hostel.

For every student there is an individual mess bill amount, complaint registration system, leave entry system. Every student can access these facilities by logging in into their respective system. Every student can make the leave entry while going home, register for their complaints, check status of their compliants, check their monthly mess bill and leaves etc.

FEASIBILITY STUDY

TECHNICAL STUDY

The technical feasibility in the proposed system deals with the technology used in the system. It deals with the hardware and software used in the system whether they are of latest technology or not. It happens that after a system is prepared a new technology arises and the user wants the system based on that technology.

This system use WINDOWS platform, PHP as front end technology and PL/SQL as backend technology. Thus ONLINE HOSTEL-MESS MANAGEMENT SYSTEM is technically feasible.

ECONOMICAL FEASIBILITY

Economic analysis is the most frequently used method for evaluating the effectiveness of a new system. More commonly known as cost/benefit analysis. PHP software and PL/SQL database is easily available on the internet.

OPERATIONAL FEASIBILITY

The project has been developed in such a way that it becomes very easy even for a person with little computer knowledge to operate it. This software is very user friendly and does not require any technical person to operate .Thus the project is even operationally feasible.

REQUIREMENT ANALYSIS AND SPECIFICATIONS

Functions and features delivered to the end users

The end users of the proposed system are:

Administrator module:

In administrator module administrator manages the master data's like server details and student details. Accept the leave entry application form of students, view the application forms, view the complaints of the students in the hostel and delete from the database.

Student Module:

In student module, they can submit application form regarding leaves, change password, can check status, view monthly mess fee and submit the leave form when going home, register complaints.

Mess-Secretary Module:

In secretary module, the secretary can calculate the mess bill, and edit the mess menu, view the notice board and also inform the students about any event that is going to organized in mess say Hostel night, etc.

HARDWARE CONFIGURATION

The section of hardware configuration is an important task related to the software development insufficient random access memory may affect adversely on the speed and efficiency of the entire system. The process should be powerful to handle the entire operations. The hard disk should have sufficient capacity to store the file and application.

Processor: Pentium IV and above

Processor speed: 1.4 GHz Onwards

System memory: 128 Mb minimum 256 Mb recommended

Cache size: 512 KB

RAM: 512 MB (Minimum)

SOFTWARE CONFIGURATION

A major element in building a system is the section of compatible software since the software in the market is experiencing in geometric progression. Selected software should be acceptable by the firm and one user as well as it should be feasible for the system.

This document gives a detailed description of the software requirement specification. The study of requirement specification is focused specially on the functioning of the system. It allows the developer or analyst to understand the system, function to be carried out the performance level to be obtained and corresponding interfaces to be established.

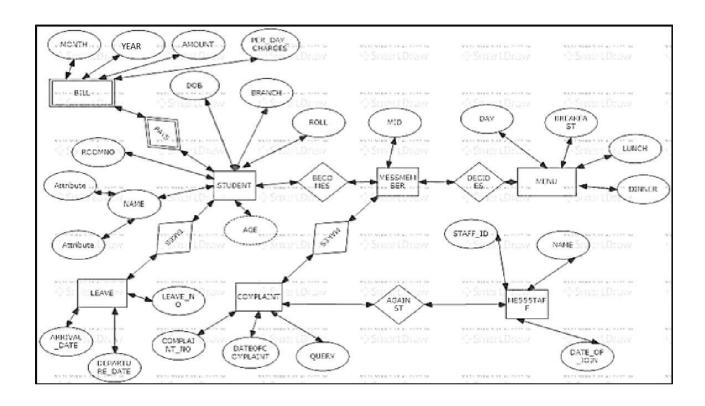
Front end tool: PHP as scripting language

Backend tool: ORACLE SQL 11g version for database

Operating system: Windows 2007/2010

Client Side: HTML, CSS

ER-DIAGRAM



NORMALISATION OF DATABASE TABLES

STUDENT-TABLE

I	ROLL	DOB	F_NAME	L_NAME	BRANCH	ROOM_NO	CITY	STATE	MOBILE

1ST Normal Form:

Restricting the user to enter only single values for mobile number. It is found that it is already in 1st Normal form as for every entry of the above relation there exists atmost a single value.

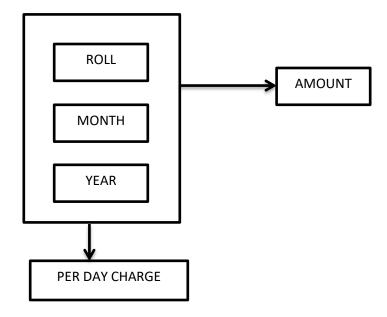
2nd Normal Form:

Again by the definition of second normal form it is found that it is in second normal form as every non-key attribute is fully functional dependent over the primary key.

3rd Normal Form:

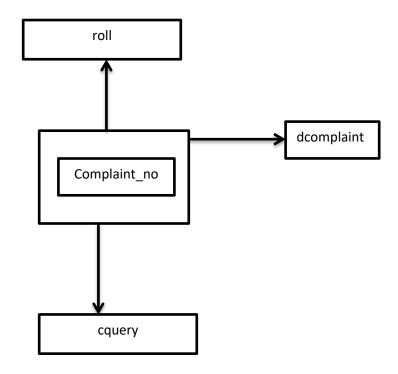
It is also in 3rd normal form. Hence it is now a normalized table.

• Bill Table:



From above FD diagram it is clear that it is already normalized according to 1st normal form, 2nd normal form as well as 3rd normal forms.

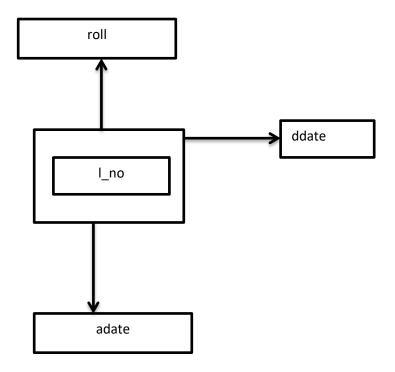
• Complaint Table:



From above diagram,

It is in 1st normal form as for every relation there exists atmost single value. And for 2nd normal form ,every non key attribute is fully dependent over the primary key. Again it is in 3rd normal due to the absence of transitive dependence.

• Leave Table:

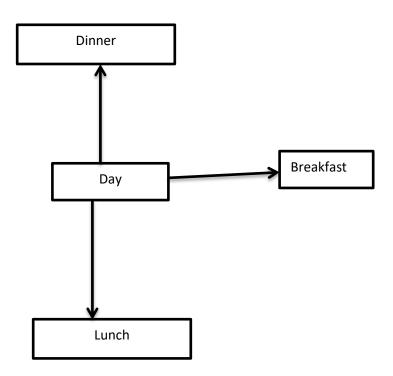


From above diagram,

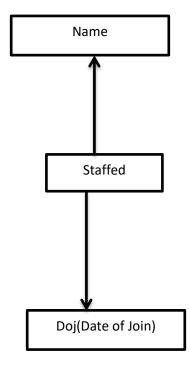
Similarly, It is in 1st normal form as for every relation there exists atmost single value. And for 2nd normal form, every non key attribute is fully dependent over the primary key. Again it is in 3rd normal due to the absence of transitive dependence.

• Menu Table:

It is already in Normalized form here according to below FD Diagram:

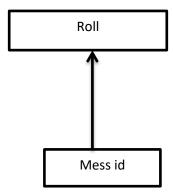


• Mess Staff Table:

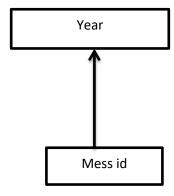


So from above diagram it is in 1st as well as 2nd and 3rd normal form already .Hence we can say that this is already a normalized table.

• Mess member Table:



• Mess ID Table:



So from above diagrams it is in 1st as well as 2nd and 3rd normal form already .Hence we can say that this is already a normalized table.

CONCLUSION

To conclude the description about the project, developed using PHP and ORACLE SQL 11g is based on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement. ONLINE HOSTEL-MESS MANAGEMENT SYSTEM is very useful for mess fee calculation, register complaints & leave entries. This hostel-mess management software is designed for people who want to manage various activities in the hostel. For the past few years the numbers of educational institutions are increasing rapidly. And hence there is a lot of strain on the person who is running the hostel and softwares are not usually used in this context. This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried 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 user friendly and more GUI oriented.

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