

LEAVE MANAGEMENT SYSTEM

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Abstract—In our college, there are lots of manual procedures for applying leave. The candidate has to first fill the form and then get signature from the respective staff, HOD, etc and then submitted to their respective authorities. It takes too much time. But its okay incase of day scholar leave when comes to hospital leave approval they has to submit in time in order to go to their home. They has to search for HOD, CEO to get sign in their leave form and finally they have to submit to their warden in time. My project is to simplify the manual by automation. In this application which I create the candidate can either apply day scholar leave or hostel leave after pressing the submit button the leave form will be send to the respective class adviser. If he/she give approval it will send to their HOD. If he/she gives approval the confirmation message for leave will be send to the day scholar candidate. In case if the leave form is reject notification will be send to the candidate. If it is a hostel leave form the process goes on form class advisor, HOD, CEO, and finally warden. My project will eliminate the manual process and thus saves time and papers.

Index Terms – Leave Management, HoD, CEO, Warden.

I. INTRODUCTION

The project entitled “Leave Management System” is developed using Php as front end and Sql server as back end. Leave Management System is a Web based Application. The main objective of this project is to maintain the Leave requests for the Day scholar student, hostel student and to perform the leave requisition forms, electronically. The Day scholar Student or Hostel student from anywhere can access the Intranet and request their Leave and Permission. Every College Admin such as Advisor, HOD, , and Warden had their ID to enter the Login Page. Once he/she enters the Login, their Login time is been detected. All authorized users have unique User-id. Using the User-id and the admin(Advisor, HOD, and Warden) can login. The administrator(Advisor, HOD, and Warden) can view the Student request details. Only authorized Student can logon and request the leave or

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permission. The administrator has full rights to access the database. The Administrator details can be viewed or deleted only by the administrator. The Student View the status from administrator.

II. SYSTEM DEVELOPEMNT

1)Existing System:

The existing leave Management system has many shortcomings associated with it. Manually administered leave management programs are costly to manage, difficult to track and often result in errors. Automated LMS can drastically change this scenario. Students are therefore always looking for paperless, effective solutions that reduce or eliminate the margin of error in leave benefits calculations.

Disadvantages:

- Everything is done by manually, so it is very difficult to maintain the records.
- It's also very difficult to find the particular employee details.
- Long time process.
- It takes more time to prepare the various events within the short time.
- The modification is done, but it is not in a clear manner. The confusions can be occurring.

2) Proposed System:

Leave management encompasses the processes student use to request time away from college and HOD and class in charge use to grant or deny leave based on college policies. Hostel student send request to warden. Smooth automation of existing manual systems based on an college's unique processes. Easily accessible and consolidated leave information for analysis and reporting. Workflow communicates with the leave database to display student leave history during login. Once an in charge and HOD confirms a student's leave status and updates the leave count, the LMS cycle is completed.

Advantages:

- Speed and accuracy is increased
- Fully automated.
- If suppose we want to modify any records in a customer means it is possible.
- Takes less time to do the process.

III. PROPOSED MODULES

1) Module Description:

Admin:

A. Class Advisor entry

In Class Advisor entry Module Administrator Add the New Class Advisor entry details. It Contains Information about the Advisor ID, Advisor Name, Gender, Mail ID, Phone Number, address, and experience. Administrator only maintains details of the Advisor and administrator can finally store the information in database.

B. HOD entry

In Head of the department entry Module Administrator Add the New HOD details. It Contains Information about the hod id, hod Name, Gender, Mail ID, Phone Number, address, and experience, department. Administrator only maintains details of the hod and administrator can finally store the information in database HOD Table.

C. Warden entry

In Hostel warden entry Module Administrator Add the New warden details. It Contains Information about the warden id, warden Name, Gender, Mail ID, Phone Number, address, and experience. Administrator only maintains details of the warden and administrator can finally store the information in database warden Table.

2) Student

In Student entry Module Administrator Add the New Student details. It Contains Information about the Student id, Student Name, Gender, Mail ID, Phone Number, address, and department, semester, year. Administrator only maintains details of the

warden and administrator can finally store the information in database warden Table.

A. Student Request to Leave

In request to leave module used to send leave request and get approval. Hostel student send request to Class adviser and HOD in college, and also send request to Hostel vice president and warden in hostel. In leave request contain information about leave request id, student id, date, purpose.

B. View Status

Student send leave request to class advisor, hod for regular days student. Hosteller student send request to class advisor, hod, vice president and warden. All are accept or reject the leave request. If accept means student get leave permission otherwise leave request rejected.

3) Class advisor

A. View Leave Request

In view leave Request module used to Class advisor get the request from the student. This request has the information about leave request id, student id, date, purpose.

B. Send Response

Class advisor view the request from student. Class advisor has permission accept or reject the student request. This response sends to Class head of the department.

4) HOD

A. View Leave Request

In view leave Request module used to head of the department get the request from the class advisor. This request has the information about leave request id, student id, date, purpose.

B. Send Response

Head of the department view the request from class advisor. head of the department has permission accept or reject the class advisor request. This response sends to particular department student.

5) Warden

A. View Leave Request

In view leave Request module used to warden get the request from the vice president. This request has the information about leave request id, student id, date, purpose.

B. Send Response

Warden view the request from vice president. warden has permission accept or reject the vice president request. This response sends to particular Student.

IV. TESTING METHODS

It is the process of exercising software with the intent of finding and ultimately correcting errors. This fundamental philosophy does not change for web applications, because web based system and applications reside on network and inter-operate with many different operating systems, browsers, hardware platforms and communication protocols. Thus searching for errors is significant challenge for web applications.

1) Testing issues:

- Client GUI should be considered.
- Target environment and platform considerations
- Distributed database considerations
- Distributed processing consideration

2) Testing and Methodologies

System testing is the state of implementation, which is aimed at ensuring that the system works accurately and efficiently as expect before live operation, commences. It certifies that the whole set of programs hang together System testing requires a test plan, that consists of several key activities and steps for run program, string, system and user acceptance testing. The implementation of newly design package is important in adopting a successful new system

Testing is important stage in software development. System test is implementation should be a confirmation that all is correct and an opportunity to show the users that the system works

as they expected It accounts the largest percentage of technical effort in software development process.

Testing phase is the development phase that validates the code against the functional specifications. Testing is a vital to the achievement of the system goals. The objective of testing is to discover errors. To fulfill this objective a series of test step such as the unit test, integration test, validation and system test where planned and executed.

3) Unit testing

Here each program is tested individually so any error apply unit is debugged. The sample data are given for the unit testing. The unit test results are recorded for further references. During unit testing the functions of the program unit validation and the limitations are tested.

Unit testing is testing changes made in a existing or new program this test is carried out during the programming and each module is found to be working satisfactorily. For example in the registration form after entering all the fields we click the submit button. When submit button is clicked ,all the data in form are validated. Only after validation entries will be added to the database.

Unit testing comprises the set of tests performed by an individual prior to integration of the unit into large system. The situation is illustrated in as follows:

Coding-> Debugging ->Unit testing -> Integration testing. The four categories of test that a programmer will typically perform on a program unit

- Functional test
- Performance test
- Stress Test
- Structure test

Functional test involve exercising the code with nominal input values for which the expected results are known as well as boundary values and special values. Performance testing determines the amount of execution time spent in various parts of unit program through put and response time and device utilization by the program. A variation of stress

testing called sensitivity testing in same situations a very small range of data contained in a bound of valid data may cause extreme and even erroneous processing or profound performance degradation.

Structured testing is concerned with a exercising the internal logic of a program and traversing paths. Functional testing, stress testing performance testing are referred as “black box” testing and structure testing is referred as “white box” testing

4) Validation Testing

Software validation is achieved through a serious of testes that demonstrate conformity with requirements. Thus the proposed system under consideration has been tested by validation & found to be working satisfactory.

5) Output Testing

Asking the user about the format required by them tests the output generated by the system under consideration .It can be done in two ways, One on screen and other on printer format. The output format on the screen is found to be correct as the format designed n system test.

6) System Testing

In the system testing the whole system is tested for interface between each modules and program units are tested and recorded. This testing is done with sample data . The securities, communication between interfaces are tested.

System testing is actually a series of different tests whose primary purpose is to fully exercise the computer based system although each test has a different purpose all work to verify that all system elements properly integrated and perform allocate function.

It involves two kinds of activities namely

- Integrated testing
- Acceptance testing

1) Integrated testing

Integrated testing is a systematic technique for constructing tests to uncover errors associated with interface.

Objective is to take unit tested modules and build a program structure that has been dictated by design

Acceptance testing

Acceptance testing involves planning an execution of a functional test, performance test and stress test to verify that the implemented system satisfies the requirement.

The acceptance testing is the final stage of the user the various possibilities of the data are entered and the results are tested.

2)Validation testing

Software validation is achieved through a series of test that demonstrates the conformity and requirements. Thus the proposed system under consideration has to be tested by validation and found to be working satisfactorily. For example in customer enters phone number field should contain number otherwise it produces an error message similarly in all the forms the fields are validated

3) Testing results

All the tests should be traceable to customer requirements the focus of testing will shift progressively from programs Exhaustive testing is not possible To be more effective testing should be which has probability of finding errors

The following are the attributes of good test

- A good test has a probability of finding a errors
- A good test should be “best of breeds”.
- A good test to neither simple nor too complex

V. SYSTEM IMPLEMENTATION

System Implementation is the stage in the project where the theoretical design is turned into a working system. The most crucial stage is achieving a successful new system and giving a user confidence in that the new system will work efficiently and effectively in the implementation stage. The stage consist of

1. Testing a developed program with sample data
2. Detection and correction of error
3. Creating whether the system meets a user requirements
4. making necessary changes as desired by users.
5. Training user personal

The implementation phase is less creative than system design. A system design may be dropped at any time prior to implementation, although it becomes more difficult when it goes to the design phase. The final report of the implementation phase includes procedural flowcharts, record layouts, and a workable plan for implementing the candidate system design into a operational design. PHP and MY SQL has offer very efficient yet a simple implementation technique for development of the project.

VI. CONCLUSION

The “Leave Management System” has been developed to satisfy all proposed requirements. The process is maintained more simple and easy. The system is highly scalable and user friendly. Almost all the system objectives have been met. The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it eliminates the human errors to zero level. The design of the database is flexible ensuring that the system can be implemented. It is implemented and gone through all validation. All phases of development were conceived using methodologies. User with little training can get the required report. The software executes successfully by fulfilling the objectives of the project. Further extensions to this system can be made required with minor modifications.

FUTURE WORK

Thus Leave Management System is very useful for college to maintain the leave records of the students and employees. The system not only maintains the leave details of the students, it also maintains the leave applications of the staff. The higher authorities may accept or reject the leave applications requested by the staff. Thus, this system automates the excess amount of job done by college to maintain the leaves. This system offers a reliable and easy to access. It can be used as a base for creating and enhancing applications for viewing reports, tracking attendance for colleges. Students and their parents will also view attendance and curriculum details using this application. It provides

high security and a system that reduces the work and resources required in traditional process. The proposed system provides the new way of computing and displaying records with responsive and attractive user-interface.

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