

A Synopsis on

ERP System for Employee Management

Submitted in partial fulfillment of the requirements
of the degree of

Bachelor of Engineering

in

Information Technology

by

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CERTIFICATE

This is to certify that the project Synopsis entitled “**ERP System for Employee Management**” Submitted by “**Saif Inamdar (16204022)**”, “**Anam Quraishi (16204017)**”, “**Isha Owalekar (15104011)**” for the partial fulfillment of the requirement for award of a degree **Bachelor of Engineering** in **Information Technology**.to the University of Mumbai,is a bonafide work carried out during academic year 2018-2019

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We declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Abstract

In any organization, different types of leaves are granted to its employees. There has always been a traditional practice where employees submit handwritten applications to the higher authority to apply for a leave. The problem arises when we want to keep track of such leaves taken by the employees or manage their availability and workload in the organization. Such problems can disturb the normal proceedings in an organization and can lead to decreased productivity and efficiency. We therefore intend to provide an IT Solution by developing a web system which will have the capability to dynamically provide statistics of every employee regarding their past leaves, shared workload and their current availability. The goal of this system is to increase productivity and efficiency of an organization by managing employee availability and providing dynamic workload sharing.

Introduction

The project idea focuses on problems faced in an organization with an adequate workforce. An organization faces many problems which are observed while managing workload between employees when some employees are on leave. Because of such unavailability of employees, managing their workload becomes a tedious task. It also becomes a difficult task for the higher authority to evaluate employee's performance based on their leave records and workload. Therefore we have proposed a system which can tackle such problems of an organization. The old practice of hand-written applications between the employees and higher authority regarding Leaves and workload sharing will be taken over by this web system. This system will display all the records of employees regarding their schedule, leaves and workload to the higher authority. Such display of statistics will make the job easier for the higher authority to make a decision regarding employee's leave requests and workload sharing.

Objectives

- **General Objectives:-** Current Objective is to Develop a Web System for an Educational institute which will replace the old process of Leave and Availability Management of an Employee along with Workload Sharing between Employees and Dynamic Display of Individual Statistics.
- **Specific Objectives:-**
 - To Provide a Secure Login Interface for all Users.
 - To Provide an Interface for Employees which will display their leave statistics in Graphical Charts & Tables.
 - To Provide an Interface for Employees which can be used to apply for a leave along with Description and Load Sharing to the higher authority.
 - To Provide an Interface for Employee which can be used to accept/reject load sharing requests by employees.
 - To Provide an Interface for Higher Authority which can be used to view/accept/reject Leave Requests made by Employees.
 - To Provide an Interface for Employees which can be used to view/edit their Schedule/Timetable.
 - To Provide an Interface for Employee & Higher Authority which can be used to view/edit/update their Profile.
 - To Provide an Interface for Higher Authority to view Statistics regarding All/Individual Employees.
 - To Provide an Interface for Higher Authority to view Current Location of an Employee according to their Schedule/Timetable.
 - To Develop a Notification System which will be used to notify Employees & Higher Authorities via SMS & E-mail.
 - To Develop a GUI which displays Statistics in Appropriate Charts for better Representation.

Problem Definition

Following are the problems faced by an educational organization regarding availability of employees:-

- Consider a scenario where an employee applies for a leave and the higher authority is having a tough time finding past leave applications of an employee to calculate his eligibility for the leave.
- Consider a scenario where the higher authority is trying to physically locate an employee in the organization.
- Consider a scenario where an employee who is supposed to be on a leave in future has to share workload with any colleague.
- Consider a scenario where the higher authority has to keep handwritten or printed records of each employee's past leaves.
- Consider a scenario where a special event has been scheduled in the organization and each proactive employee will receive some benefit from it. such extra work for the organization must also be recognized and recorded by the higher authority.
- Consider a scenario where the higher authority wants to know the total no. of leaves taken by the employees in this particular month/year.it will result in lot of time being invested just to get that simple statistic.
- Consider a scenario where the higher authority wants to check which employee('s) are available on a particular time-slot/day just to schedule some extra work or a special event.
- Consider a scenario where the higher authority wants to analyse the performance of an employee for appraisals considering leaves and extra proactive work.

Considering the above scenarios, we have proposed a web system which will dynamically manage such problems to improve the overall efficiency and performance of the organization.

Proposed System Architecture/Working

Following architecture of a ERP web system will be developed for an educational institute and will be based on its hierarchy.

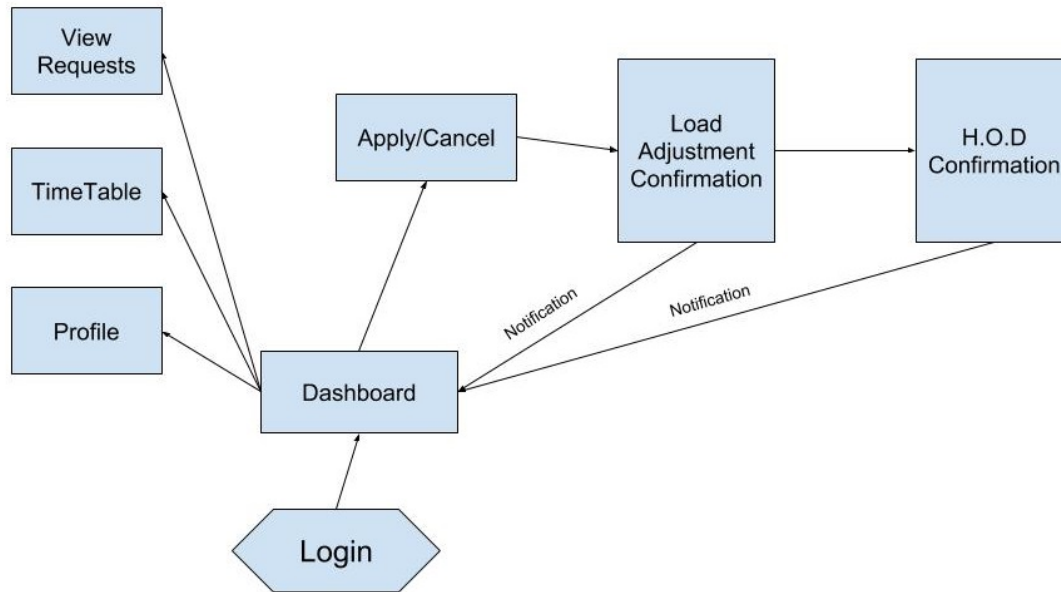


Figure 1: Employee Login Flowchart.

- **Dashboard:** It will display current leave statistics of employee and navigation to different pages. The statistics will display all types of leaves that can be taken and how many of them are remaining. It will also display past record of leaves that has been taken by the employee in the current academic month/year.
- **Apply/Cancel:** It will display an interface which can be used to apply for a leave or cancel a pending leave. The leave application will consist of four details:-
 - Leave Date & Time
 - Type of Leave
 - Description
 - Request of Load Sharing with Colleague.
- **View Requests:** It will display pending load adjustment requests from other employees. The employee can choose whether to accept or reject the request.
- **Timetable:** It will display an interface which can be used to view or edit employee's schedule/timetable.
- **View/Change Profile:** It will display an interface to view/edit user profile information.

Proposed System Architecture/Working (Contd...1)

- **Load Adjustment Confirmation:** It will notify the employee through sms/e-mail when a colleague has accepted his/her load sharing request.
- **HOD Confirmation:** It will notify the employee through sms/e-mail when the higher authority(HOD) has accepted his/her load sharing and leave request.

Educational Institute Hierarchy:

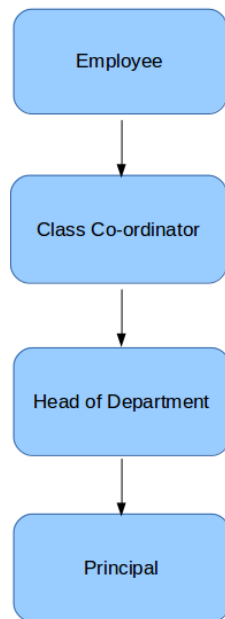


Figure 2: Hierarchy.

Proposed System Architecture/Working (Contd...2)

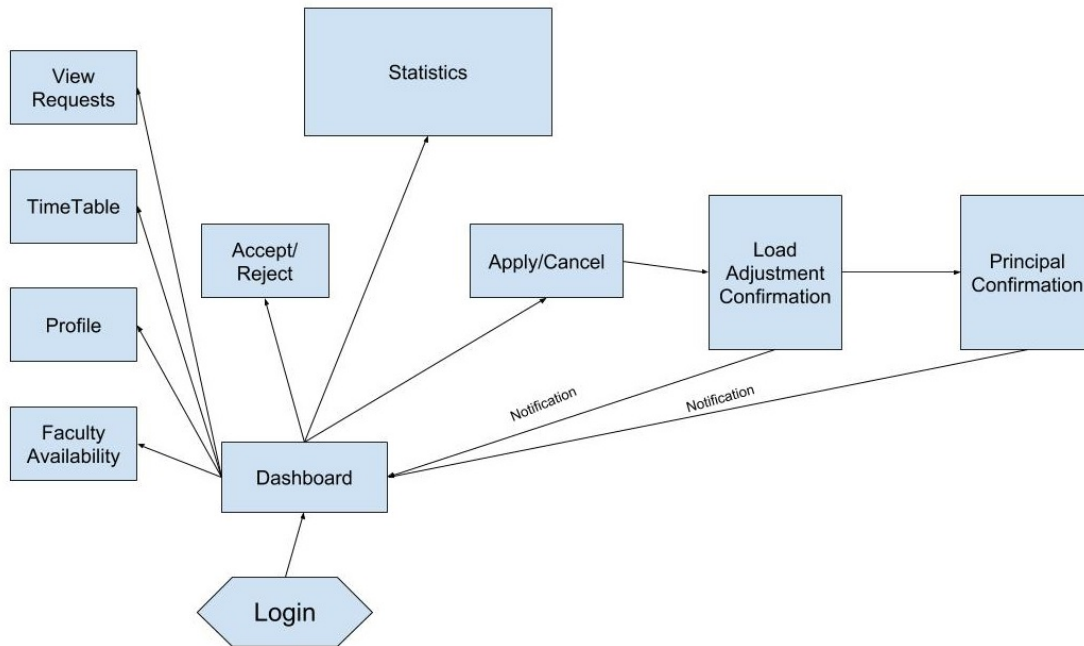


Figure 3: Higher Authority Flowchart.

Note: As the higher authority can also be an employee. Thus, he/she will have all the interfaces of an employee as described previously. in this scenario HOD is the higher authority and principal has been granted the supreme authority.

- **Accept/Reject:** This interface will display leave requests of an employee whose load sharing has been confirmed by his/her colleague. The higher authority (HOD) can choose whether to accept or reject the leave request with a provided remark.
- **Statistics:** This interface will display statistics of employees to the higher authority. This statistics will include the following:-
 - Overall leaves granted in this month/year to all employees.
 - Leave record of an employee in this month/year.
 - Most leaves taken by employees in this month (descending order).
 - Employees who pro actively participated in this month/year (descending order).
 - Employees who applied for a leave on the system after taking it.
- **Faculty Availability:** This interface will display if the faculty is having a free-slot during a specified slot(s) in a day. It will also display the current location of an employee in the organization according to his/her timetable.

Summary

The work presented in this report is related to Employee Availability Management System. This Web System is Designed to tackle the problems faced in an Organization regarding Availability of Employees. It will Manage all the Leave Applications, Load Sharing Requests and Employee Availability in an Organization. It will dynamically display Statistics to Employees and Higher Authorities which will help them make decisions quicker and better. It aims to increase Productivity and Efficiency of Employees in an Organization. It also aims to reduce time & energy consumption of Employees & Higher Authorities in activities which are not work-related.

This Web System will be Developed using following Web Technologies:

- HTML.
- CSS .
- JavaScript.
- PHP
- MySQL