

Employee Availability At Fingertips

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Abstract--- Staff record plays a significant role in an organization as it provides information needed to manage their employee performance. Many institutes are still using the conventional methods which are merely paper-based used to record the data of their employees, manage and maintain their leave records & manage availabilities. This often results in downright, waste of time in generating reports or searching for employee records. These inadequacies in the conventional method are characteristically eluded for the justification in developing an ERP system for Employee Management. This paper discusses the development of a web-based system which manages & maintains records of employees. This system is basically designed for two aspects firstly, to keep track of leaves taken by the employees and second is to manage their availability and workload in the organization dynamically. The registered people are employees, HODs and principal of the particular organization. Employees will be able to view/edit their timetable. Higher

Authorities can view current availability and location of an employee as per their timetable. A notification system for all users to notify them about updates on the system as well as about the scheduled activity or seminar or any special event via Sms/Email. When an employee desires to take leave then load sharing will take place between the employee who will be on leave and another employee who is free in that particular time slot according to the timetable which will be displayed on the system. The employee who is going to take over will get notification regarding load sharing request and will have the choice to accept or reject the request regarding load sharing. The employee is also able to view history of their previous leaves, dynamic requests and activity.

Keywords--- ERP, HOD, Principal, Employee, load adjustment, statistics, notification ,dynamic workload sharing.

I. Introduction

The project idea focuses on problems faced in an organization with an adequate workforce. An organization faces many issues that 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, workload sharing and load adjustment.

II. 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.

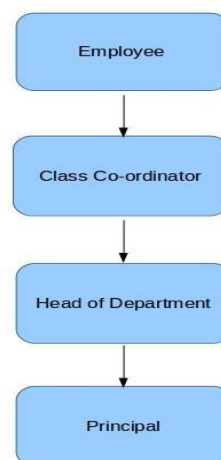
III. Proposed System

This system will be web-based which will provide 24x7 availability & usability. It will be developed using various web technologies. Different interfaces for Employees & for HOD & Principal (Admin). Broadly classified into two modules:

1. Availability Of Employees.
2. Leave Management for Employees.

Employee will apply for a leave application with complete details. This leave application can be for slots/days. Admin will approve /reject the leave application. Employee will be provided an interface for load balancing. Employee will be provided an interface which will display his/her balanced/availed leaves along with pending applications.

Educational Hierarchy:



IV. Proposed System Architecture/Working

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

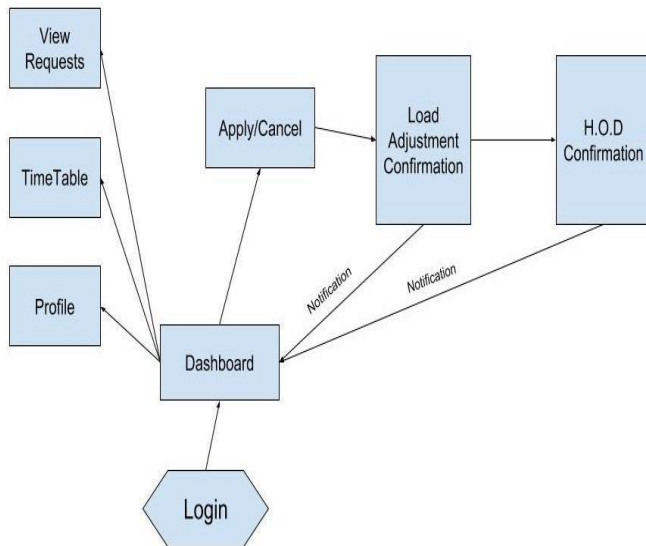


Figure 1: Employee Login Flowchart

- **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.

- **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.

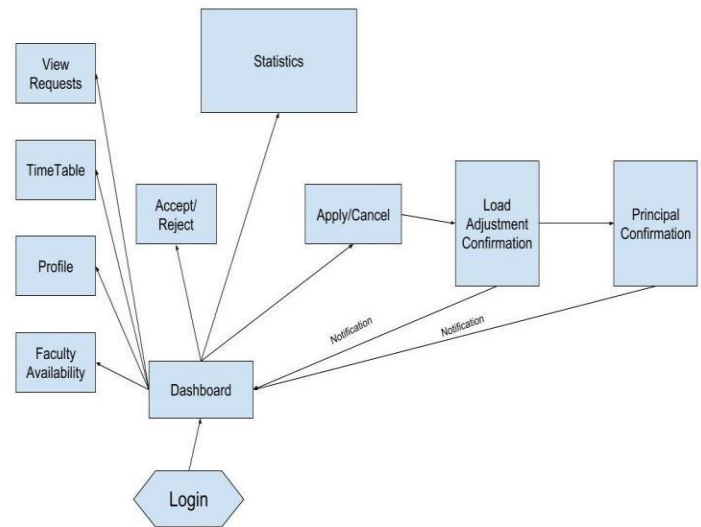


Figure 2: Higher Authority Flowchart

- **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. These 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.

V. Result

APSIT

Dashboard

Dashboard

Profile

TimeTable

Apply for a Leave

Workload Requests

Leave History

Notifications

Dashboard

Remaining Leaves:

Current Academic Year

Casual

Sick

Earned

Unpaid

Total Leaves Taken This Month:

Total Leaves Taken This Year:

Pending Leave Applications:

Type	Subject	Status	Date of Leave
CL	ABC	Awaiting workload confirmation	12/10/20
SL	DEF	Awaiting HOD confirmation	10/10/20
PL	XYZ	Awaiting workload confirmation	9/10/20

APSIT

Dashboard

Profile

TimeTable

Apply for a Leave

Workload Requests

Notifications

Edit TimeTable

Please enter the Lab/Class No. for occupied slots.
Blank Slots will be Considered as Free Slots.

	9:10 to 10:10	10:10 to 11:10	11:10 to 12:10	12:10 to 1:45	9:10 to 10:10	9:10 to 10:10	9:10 to 10:10
Monday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tuesday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Wednesday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Thursday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Friday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Update TimeTable

APSIT

Dashboard

Profile

Time Table


Apply for a Leave

Workload Requests

Leave History

Notifications

Leave History :/12/10/18



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Application for Leave

Date: 12/10/18

Name of Faculty & Designation :- ABC

Department :- IT

Type of Leave :- Casual Leave

Period of Leave :- 4 Days,

From 13/10/18 To 16/10/18

First Half / Second-Half

(*Applicable only in case of half day leave).

Type of Leave :- Casual Leave

Status of Leave :- Proposed

No. of days passed after availing the leave (A-B) :-

(*Applicable only if the leave is already availed.)

Reason for Leave :- This is my reason for the leave.

Alternate Arrangement for Leave

Name of Faculty & Designation :- XYZ

Department :- IT

Academic Workload:-

Work	Alternate Arrangement	Status
This is shared workload for academics	This is how it will be managed	Approved

Department Workload:-

Work	Alternate Arrangement	Status
This is shared workload for Department	This is how it will be managed	Approved

Granted

(Approval of H.O.D.)

This is a computer generated document and does not require a signature

Print

APSIT

Dashboard

Profile

TimeTable

Apply for a Leave

Workload Requests

Notifications

Leave Application

Logout

Type:

Status of Leave:

☐ Proposed
 ☐ Availed

Date of Leave:

☐ Full Day
 ☐ Half Day

From:

Date:

To:

☐ First Half
 ☐ Second Half

Reason For Leave:

Workload Sharing:

☐ Yes
 ☐ No

Select Faculty:

Academic Workload:

Work:

Alternate Arrangement:

Departmental Workload:

Work:

Alternate Arrangement:

Submit

VI. Conclusion

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.