

DIGITIZATION OF INSTITUTIONAL LEAVE MANAGEMENT SYSTEM

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Abstract- The current Leave application process of seeking approval for holidays or permission for college faculties is mostly manual which has more paper works. To address this challenge, there is a need for a digital solution that allows Faculty members to request Leave digitally and obtain approval from the appropriate Head of the Department and Principal.

A thorough explanation of the features of the Leave Management System that are available to Faculty members, in figuring out their Casual Leave, Loss of Pay, Medical Leave, Earned Leave, On Duty, Special On Duty, Vacation Leave, Compensation Holiday, Permissions and various other Leaves. Detailed instructions on how Faculty members can use the system to apply for any kind of Leave, along with a description of the steps involved in the process and how

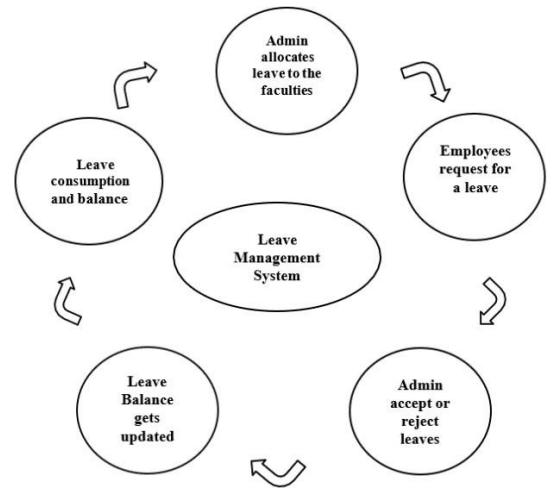
Keywords- Faculty, Leave Management System, Leave Request, Web technologies.

1. INTRODUCTION

The Faculty attendance register is used to keep track of the Casual Leave, Loss of Pay, Medical Leave, Earned Leave, On Duty, Special On Duty, Vacation Leave, Compensation Holiday, Permission and various other Leaves. Faculty members must personally submit their Leave forms to the appropriate Head of Department (HoD), which increase paperwork and making record-keeping process. Each month, the Department office & College Administrative Office obtains information on the Faculty Leave information manually for every Department and uses that manual information to determine Faculty Salary. This is a labor-intensive process with the potential for data loss, mistakes and computation errors. The solution to this problem is the Digitization of the Faculty Leave system using Web based application administration. This system is specifically made to reduce manual labor and compute Department details quickly and effectively.

the Principal and Department Head will validate the request.

The Faculty can alter their classes to accommodate other Faculties, who are available on such days using the Dashboard page. Get automated alerts and reminders about impending activities, approvals, or Leave requests. Email notifications to Faculty members concerning activity pertaining to Leave. Reducing the amount of manual labor required for the Faculty Leave management system is the primary goal of the project. The Faculty Leave, on-duty, and permissions etc... are managed by this Web application. Since the project is entirely built on the administrative end, access is guaranteed only to the admin. The benefits are it is easy to use, quick and simple information retrieval, simple information updating, maintains track of all Leave and on-duty data. A database already contains all of the Faculty's information thereby lessen the mistake for fresh registration and work picks up speed. By minimizing work, this Leave Management solution will help to prevent data entry errors. In addition, it offers error messages when data entry is incomplete, and Faculty members can utilize this system without any training.



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The above discussed Leave Management System can result in an error-free, safe, dependable, and quick management system. It can help Faculty members focus on their activity instead of maintaining manual records. Consequently, it will help Institutions in making better use of their resources.

2. LITERATURE REVIEW

Adamu A in the 2020 FUDMA Journal of Science (FJS). An employee Leave management system is a platform that makes it simple for administrators and staff to request, assign, track, and award Leave within an organization or institution.

(Chugh, 2014). Employees at many institutions are eligible to many types of Leaves, including maternity, study, sick, yearly, unpaid, and research Leaves. The institution's policy has been followed in the taking and recording of these Leaves. In any institution, the administrative department is typically regarded as one of its most valuable resources. The administrative department's responsibility includes maintaining all employee records.

Nameera Choudhary et al., in the 2020, The "Leave Management System for AIKTC" proposed in the International Research of Journal Engineering and Technology (IRJET). The problems with the current manual system have been superseded with the Leave management system. The difficulties these current systems encounter are intended to be removed, and in certain situations, reduced, by this program. Furthermore, the goal of this strategy is to fulfill the company's desire to conduct activities in a stylish and efficient manner. The program aims to minimize as much as possible in order to prevent errors when entering the data.

Rajan Deshmukh, et al., (2022) ,The "Leave Management System" was proposed by in the Journal of Emerging Technologies and Innovative Research (JETIR) . Staff and management of an organization can quickly utilize the web-based tool for employee Leave management. An employee can easily seek and manage their personal Leave with its assistance. Conversely, an institution's administrative department can assign, approve, and oversee all Leave requests with ease. The technology will also let other staff members know who needs to know. This will make it possible for the administrative department to track and manage employee Leave and to give Leave or a note to the subsequent application.

S Selvi, et al (2014) , The "HR e-Leave Tour Management System at RDCIS" at the Sail International Conference on Information Technology (SICIT). It will help the user focus on their various activities instead of worrying about preserving records.

All organizations, regardless of size, face difficulties in handling Faculty, Leave, report, notice, and branch information. Since every Leave management system has

distinct Leave requirements, we design customized worker management systems that meet your social control requirements. This can be used to support your strategic planning efforts and guarantee that your company receives the appropriate amount of information.

Hridit A (2018). suggested the "Employee Leave Management System." Meltlife: An Internship Report (IRM). makes it simple for workers to request and manage their own time off. On the other side, an institution's administrative department can quickly assign, approve, and oversee all Leave requests. The request for approval is automatically reflected in the employee Leave management system and sent to the appropriate senior officer. The employee who requested the Leave will be informed if the superior officers deny it, and if a higher superior officer must approve the Leave request before notifying the employee, that officer will also be informed. If the superior officers approve the Leave request, a reason for doing so must be entered into the system.

3. METHODOLOGY

The project will be implemented utilizing the MySQL server database and PHP programming language. It begins with a login screen that asks for the principal, Faculty, and head of department login credentials. The inefficiencies and difficulties that come with manual Leave management procedures in educational institutions are addressed by the installation of a web-based Faculty Leave management system. Faculty members can seek individual on-duty assignments and Leave requests using the dashboard, including the type of Leave and its duration. The Administrative Module lets administrators personalize Leave requests, including accepting, rejecting, and adding comments. It also gives them a dashboard summary of statistics pertaining to Leaves. Faculty members receive automated notifications regarding the progress of their Leave requests and any updates to Leave policies or procedure.

3.1 FACULTY MODULE

USER REGISTRATION AND LOGIN: The office Admin creates the login credentials and gives to the Faculties. They can login by using their credentials. If needed they can reset the password in valid format according to their needs.

DASHBOARD: A comprehensive dashboard has been created, where the Faculty can easily access the Leave application form, on-duty form, Leave history and calendar. The dashboard is the first page that will be shown to the Faculty members.

PROFILE: Profiles enable users to manage their account information, such as username, email, password, and contact details. Manage notification settings and communication Preferences for Leave-related updates.

LEAVE APPLICATION FORM: Faculty Member can submit Leave request specifying the type of Leave (like Medical Leave, Vacation Leave, Casual Leave etc...). The page is designed so that the Faculties can set the date for the specified Leave.

ON-DUTY FORM: The On-Duty form permits the Faculty members to request On-Duty separately rather than doing with the Leave application form. It specifies the dates and even time for the specific On-Duty.

LEAVE HISTORY: To access a detailed history of past Leave applications, including dates, types of Leave, and approval status. Generate reports or summaries of Leave history for record-keeping or administrative purposes.

CALENDER: Integration with a calendar system to view Leave schedules and plan Leave requests more efficiently. Syncing Leave dates wiersonal or professional calendars for better organization.

3.2 ADMIN MODULE:

DASHBOARD OVERVIEW: A comprehensive

EMAIL: Send automated notifications through Emails to Faculty members regarding the status of their Leave applications, including approvals, rejections, or pending actions. Communicate important updates or announcements related to Leave policies, procedures, or system maintenance.

FEATURES: Manage and store documents related to Leave requests, such as medical certificates, travel itineraries, or supporting documentation. Able to edit the Leave request whenever required and according to the response the Faculty Leave will be edited.

EMPLOYEE DETAILS: Admin has the access to every employee name details Leave histories, pending Leaves etc. from the admin module itself

3.3 REQUIREMENTS

- The Faculty Leave Management system's

three- tier architecture paradigm was chosen for its performance, usability, and capacity to support concurrent development of tier components using several programming languages. The web server and client/server model power the three- tier architecture.

- Java script, Cascading Style Sheets (CSS), and Hyper Text Markup Language (HTML) were used in the creation of the Graphical User

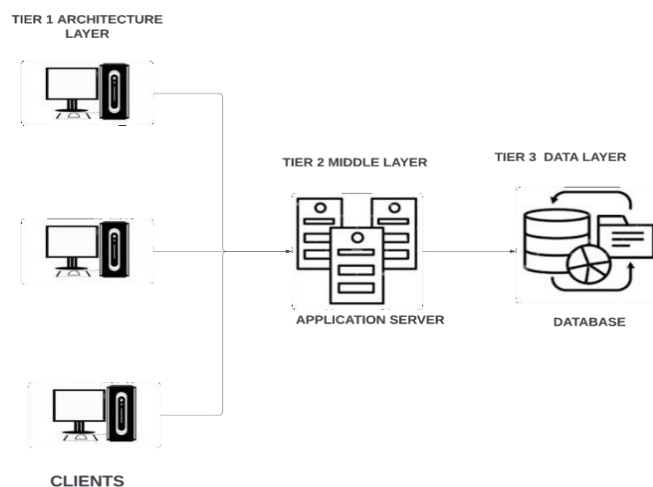
Interface (GUI). Tier one includes all HTML forms and information that are shown in the client browser.

- A web browser that uses Application Program Interface (API) calls to connect with business tier and data deploys the CSS. Web servers and application servers built using the PHP programming language comprise Tier 2, or the intermediate tier. Together with carrying out the real data processing and communicating with the data tier. The third tier, was created with
- MySQL and is made up of classes and methods for transferring and storing data to the database (storage layer).
- To retrieve the data and do other activities in the database, utilize search techniques or queries. The database stores the data passed by the presentation tier and controls all read and write

Figure 2: Three Tier Diagram of the System

3.4 OBJECTIVES

The main object of the project is to reduce the manual work for the Faculty's Leave management system. The application is used to manage the Faculties Leave, On-Duty, Permissions etc... The project is total build at the administrative end and thus only admin is guaranteed to access. Some advantages are User friendly Easy and fast retrieval of information. Easy to update information. Tracks all the information of Leaves and on-duty. All Faculty details are already stored in a database. So reduce the error for new registration. Work becomes speedy.



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4. CONCLUSION

Using this system, managing leave requests online is possible. The purpose of developing the leave management system was to reduce the workload related to the paper-based method of keeping track of attendance.

By moving from paper papers to an electronic platform, colleges can improve administrative performance, streamline leave application processes, and increase teacher satisfaction. Faculty productivity may suffer and academic activities may be disrupted by these inefficiencies. There are several problems with the manual method of managing faculty leave, which depends on attendance records and paperwork: there is an increased administrative burden, a risk of errors, data loss, and delayed salary computations.

A online application with an easy-to-use interface for academics and administrative workers has been developed to address these problems.

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