

Easy Leave Application

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ARTICLE INFO

Article History:

Accepted: 10 April 2023

Published: 25 April 2023

Publication Issue

Volume 10, Issue 2

March-April-2023

Page Number

588-592

ABSTRACT

A software program known as an "easy leave application" simplifies the management of employee leave requests, approvals, and tracking. By offering a central area for employees to seek leave and for managers to accept or refuse such requests, the system streamlines the leave management process. These days, the application's security is of utmost importance. If the application is accessible online, they will hijack the information and destroy our entire system. We must keep track of our personnel information in our application. Each employee's data ought to be protected. Through our VPN connection, this application is accessible. The purpose of this program is to build an organization's crucial leave application system. Our application may be used from any place inside the business as well as from a specific department because it is hosted on the company's private intranet. This method is widely used to automate the leave acceptance and rejection procedure. Additionally, automated systems are used to credit leave at predetermined intervals. Features of this system include automated leave approval, email notifications, report generators, and others. By using a leave application, less paper is generated and record-keeping is made more effective. Managers may examine employee leave history on the dashboard and create reports for analysis using the technology. Increasing productivity, reducing mistakes, improving accuracy, and improving employee satisfaction are all advantages of utilizing an easy leave management system.

Keywords : VPN (Virtual Private Network), Intranet, and security enhanced and automated.

I. INTRODUCTION

The Easy Vacation Application seeks to speed up the leave management procedure, lessen mistakes and inconsistent results, and free up managers' and workers' time. [1] With a straightforward layout and

easy-to-use features, this program is made with simplicity and ease of use in mind. We think that the Easy Leave Application would be a priceless tool for any business trying to promote employee satisfaction, boost productivity, and enhance leave management. Schedules can be managed, managers can rapidly

examine and approve leave requests, and they can make sure there is enough personnel. [2] By reducing the time spent on administrative chores connected to leave management, this solution enhances employee satisfaction, lowers absenteeism, and boosts productivity. The majority of the software for the Leave Application that is now in use is based on intranet software, which may be used by the entire company or only by a specific department or group. We can automate the granting of leaves and the handling of such requests in this system by using computers. Additionally, crediting leave is frequently automatic. [3] This tool has capabilities like automated leave authorisation, leave cancellation, email notifications, report generators, and so forth. All of the data has been stored in the database in the form of encryption because our program was created using a distributed architecture, which allows for easy data storage. All of the employee data is saved using MySQL as a data storage system. [4] All user interfaces were developed using web technologies, and MySQL structures were employed. Our application's backend is stored in MySQL, which is fairly accessible and provides ample space to retain all of the records. A variety of solutions have previously been provided for

the effective use of the protection and security process standards. The program controls different modules and the way they work, and it does so in accordance with the management team's recommended standards and plans.

II. RELATED WORK

L. A. Adamic and E. Adar (2003). Online neighbours and friends. *Social Networks*, 25(3), pp. 211-230.

In this study, a general consumer review website called Epinions.com's online social trust network's features and creation were examined. This social trust network was found to have a small-world and scale-free structure after its static structure was examined. It also had a high clustering coefficient, a short average path

length, and a power-law degree distribution. The online social network's (OSN) dynamic evolutionary features were also looked at. The findings indicated that the network's scale followed a sigmoidal curve, its average degree was variable and changed into a bell-shaped distribution, its density decreased and then stabilized, and the diffusion of user trust in the network matched the Bass model. Last but not least, both the macro (network as a whole) and micro (individual users) layers of the network's trust building were studied.

Leskovec, J. and Backstrom, L. (February 2011). Random walks under supervision

social networks prediction and connection recommendations. published in the Proceedings of the Fourth International ACM Conference on Web Search and Data Mining (pp. 635644). Networks have a basic issue with predicting the presence of linkages. In the link prediction problem, we are given a snapshot of a network and asked to estimate which interactions between current members are likely to happen soon or which interactions we are missing in the network's current interactions. Even though this issue has been explored in great detail, it is still difficult to successfully combine rich node and edge attribute data with the information from the network topology. We create a method based on controlled random walks that seamlessly integrates node and edge level features with knowledge from the network topology. To do this, we direct a random walk on the graph using these properties. We build a learning assignment that is supervised with the objective of learning a function that gives the network's edges strengths so that a chosen walker is likely to get to the locations to which additional linkages will be formed in the future.

Cosley, D., Huttenlocher, D., Kleinberg, J., and Suri (2008) Similarity and social influence have a positive feedback relationship in online communities.

Understanding the interaction involving similarity and social relationships is a crucial open topic in the study of social networks. Others in a social network are similar with their neighbours for two different reasons: first, they become more like their friends as a result of their social influence; and second, they prefer to make new connections with others who are similar to them, a process sociologists frequently refer to as selection. Both elements are present in regular social processes, although they are in conflict: Social influence can encourage systems to behave consistently, whereas selection can cause systems to become fragmented. Due to the difficulties of separating and quantifying these factors in actual situations, it is crucial to understand the relative effects of these forces. We use data from online communities where social interaction and changes in behaviour over time may be tracked to create approaches for discovering and understanding the interactions between social influence and selection.

In August 2015, Dong, Y., Zhang, J., Tang, J., Chawla, N. V., and Wang, B. The prediction of connections in coupled networks is known as coupled LP. On pages 199–208 of the Proceedings of the 21st ACM SIGKDD International Symposium on Knowledge Exploration and Data Mining. ACM.

In coupled networks, where we have access to both the structural data for one network (the source) and the interactions between this network and another (the target), we explore the problem of link prediction. The issue is quite difficult because we don't know anything about the target network. Additionally, the source and destination networks often contain a variety of nodes and linkages. To address the issue, we propose Coupled LP, a comprehensive architecture. We propose a coupled factor graph model to incorporate the meta-paths extracted from the coupled part of the two

networks for transferring heterogeneous knowledge after using atomic propagation rules to automatically construct implicit links in the target network to address the problem of target network incompleteness. In the context of mobile networks, our goal is to leverage one mobile operator's mobile communication network to deduce the network architecture of its rivals.

III. PROPOSED METHODOLOGY

We create the automated leave mechanism in the suggested system. By employing this approach, we can lessen the amount of paperwork, and we can use this JSP online application to store data using MySQL. It is secure and protected. We can construct two modules for HR and workers, where HR can handle all personnel records and employees can monitor all leave and work status, to allow for an automated leave management system. To secure employee data, we strengthened security. Moreover, accessing the user interface is simple. Advantages: Usefulness - Permission to depart - Transparency - Accurate and precise information - Awareness of the Leave Policy - No mistakes in the manual entering of data

Block diagram:

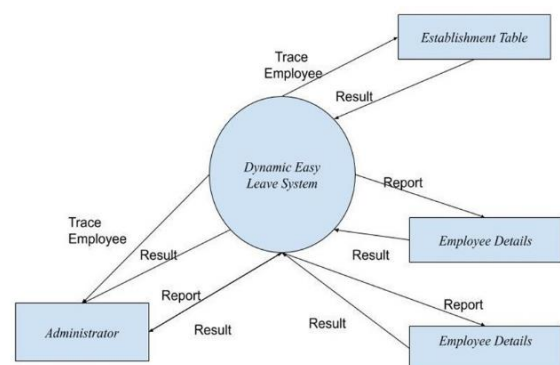


Fig. block diagram of proposed method

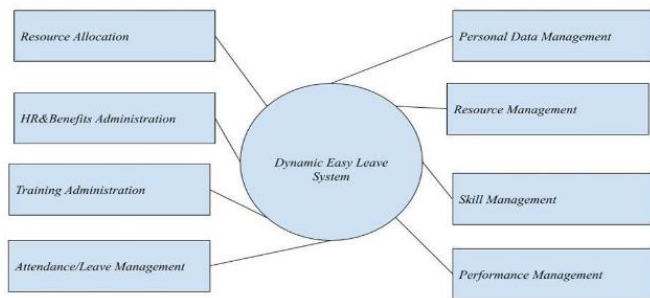
IV. Existing system

They will arrange the information according to the written file formats that we have established for managing leaves of absence. To apply such strategy,

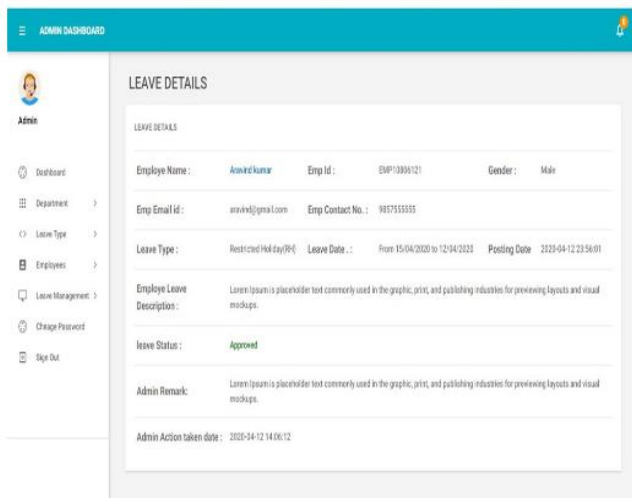
certain staff will be tasked for keeping all worker leave paperwork and records in pen.

Additionally, it is challenging to keep track of every employee and LOP. It takes additional time to keep records for every employee. Disadvantages - Security concerns - Exorbitant - Scalability – Personnel

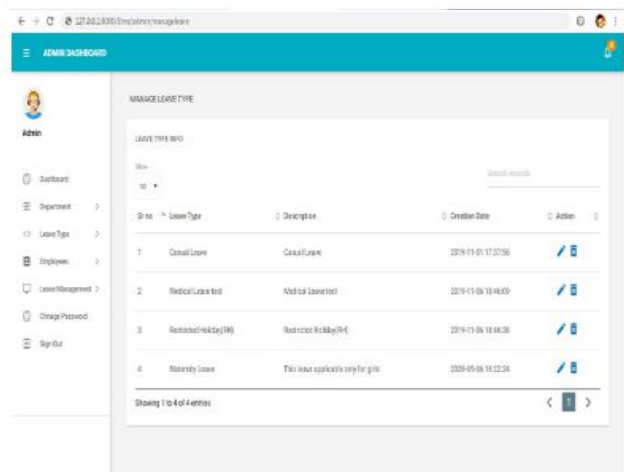
Architecture:



V. RESULTS AND DISCUSSION



The system should update the employee's leave balance in the leave information and give them a confirmation email if the request is authorized. Additionally, the system must to feature a dashboard that enables managers to examine all leave requests, accept or reject them, and get an overview of the leave balance and usage for their team.



Employees can submit leave requests using a user-friendly interface in the manage leave type of the system. Employees can identify the days they will be absent from work as well as the sort of leave they are requesting, such as personal, sick, or vacation time. To give further details to their request, they can also submit notes or comments.

VI.CONCLUSION

Early on, a leave administration platform was built, but we still want a robust secure solution. In order to monitor employee information, we are installing private network access in this. Additionally, it will prevent hacking from outside hackers. That's what it'll do.

The task entails gathering a representative group of academic staff from a variety of engineering degree programs, classifying that data into staff mixes by ranks, and processing the data into staff mixes that are both accessible to and recommended given the number of students enrolled in the engineering program. When deciding whether to grant leave requests, the staff mix by rank and the lecturer-to-student ratio were taken into account. The task was to plan absences such that they would not adversely affect the quality of the services offered by university academic personnel. The plan can be given the degree of detail to indicate the optimum dates for month-to-month leave requests as well, rather than merely the ideal times for yearly leave

requests. This leave of absence management system may also be deployed as a web-based app, which improves its usability.

VII. FUTURE SCOPE

Any company depends on information to function, and employees are ultimately accountable for directing and carrying out daily activities. The PA department organizes the staff and offers training to ensure that workers are capable of performing their duties effectively. To achieve this, it is vital to view people as human resources rather than as expenses to the business. With regard to the present requirements, this is especially true. As part of the project, a database, an application, and technology for data storage and retrieval for the upkeep of HR records through user-friendly interfaces are being developed.

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Cite this article as :

Y. Sai Prakash, B.J.S.V.S. Suraj, Dr. C Gokulnath, S. Keerthana, "Easy Leave Application", *International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT)*, ISSN : 2456-3307, Volume 9, Issue 2, pp.588-592, March-April-2023.