

DIGITALIZED HOSTEL LEAVE MANAGEMENT SYSTEM

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ABSTRACT

The main objective of the proposed Leave Management system is to decrease the paper work to the maximum and easier record maintenance by having a separate system for leaves maintenance. This system basically deals with the record of leaves taken by students staying in hostels of an organization. This system also helps to reduce the formalities for applying leave and time delay faced by students for the approval of leave. Hostel Leave management project is a web based system which can be accessed by all students of a particular university. This system is automated system for managing leave of students and approval of leaves. Every student is provided with unique user id and password for login to the system and send request for leave whereas in our project their login is being connected with Student Information System (SIS). Wardens will look after the request and they may accept or reject, seeing the students parents approval and the students attendance details in case of working days. Before approving the leave different department people will look after the request through this system and take decisions. This system will update the process of leave management system inside the hostel by saving time and resources. This help the students to view their own leave balance, leave status, view past leave history and also helps wardens to review and approve leave applications. This Leave Management system is very useful for any hostel of any organization where there may be more number of people (students). It is a single click process. The Hostel Leave Management system also aims at linking academic and hostel activities, leave details to a unique Student Information System of a particular organization.

INTRODUCTION

The project mainly aims at making the parents well informed about their wards or students hostel leave activities and outing. The system mandatorily informs the parents about their students weekend holidays in prior and if accepted by parents alone it is been processed further to the concerned faculty or faculty. In our Hostel Leave Management System we use a messaging system (voice calls) i.e., every parent of each and every student staying in hostels is informed about his weekend holiday details and asked for confirmation. The parents decision is been processed to the Hostel Leave Management System and is only visible to the warden, when the student applies for leave using his unique user ID and password it is also processed to the Hostel Leave Management System.

In the Hostel Leave Management System warden has powers to both approve the leave request and also to reject leave in case for a valid reason. The warden only approves the students leave request if accepted by the parents and if not he simply rejects it. In the Hostel Leave Management System the student is notified whether his leave request is been accepted or rejected

for that weekend once the warden clicks there. If accepted an digitalized leave Approval Form containing the individuals Name, Register Number, Department Name, Wardens Name, Room Number, Leave starting date and time, Leave ending date and time, Reason for leave, Approval status, Place going to visit. If not just a rejection notification is sent to the concerned student by their wardens. Once the student goes to the main gate he can show his/her id cards and leave the university. As the parents are informed in prior the probability of student security is increased and parents know their wards leave details and arrival. Once known to parents the students will not be able to go anywhere without informing.

EXISTING SYSTEM

In the current Leave Management system, students have to suffer lots of problems and formalities for the approval of their leave during emergency situations and during their weekend holidays. In the current Leave Management system student specially hostellers have to maintain a leave card for the record of leave and once missed they have to pay fine



amounts to get their new cards, all the activities in this system are done manually and which results student to face hardships. As everything is done manually there is high probability of error and loss of data in the current system being used. Workload is more as maximum work is done by humans. The security of students is not up to the level in the current modern world the current Leave Management System so it can be easily cheated. The data of students once lost cannot be obtained as it is not digitalized.

The current Leave Management System is more time consuming both for checking and updating. In the current Leave Management System once a data entered incorrectly by human can end in overall confusion in the data. In the current Leave Management maintaining data needs physical space. In the current Leave Management System the same data is written down and copied more than once in different levels of the current system. In the current Leave Management System the response time for data is too long. . In the current Leave Management System the wardens are not available to respond 24*7 as they may have their own works to maintain like lunch or they may work only part time. the current Leave Management System it may take time for an new warden to adapt to the system and I training also some cases In the current Leave Management System during any natural disaster the system can break down and data can be lost for sure. In the current Leave Management System usage of paper work is high which leads to cutting down of more trees obviously not good for a environment. In the current Leave Management System the data can be accessed by anybody easily which is a serious security threat. In the current Leave Management System accuracy is not certain and stable in all cases. In the current Leave Management System information passing is to slow. In the current Leave Management System data lose is possible in some cases. In the current Leave Management System data can be leaked and may be used by another individual as there is no certain login method.

PROPOSED SYSTEM

The current Leave Management system aims at solving and reducing all the flaws of the current system to the maximum and digitalizing it. In the current Leave Management system, students will not suffer problems and formalities for the approval of their leave during emergency situations and during their weekend holidays as we have digitalized it and everything is a single touch process.

In the current Leave Management every paper work done is made as Intranet based service. In the current Leave Management system student specially hostellers will not maintain any leave card for the record of leave and once missed they will not have to pay fine amounts to get their new cards , all the activities in the proposed system are done automatically so ,there is nothing to worry . As everything is digitalized the probability for error and loss of data in the current system being used is reduced to the maximum level. Workload is less as maximum work is done by the pre-programmed software.

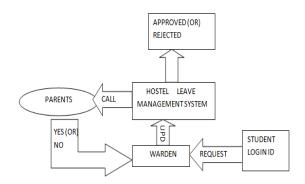
In the current Leave Management the cost is fixed once installed. The security of students is updated to the current modern world and the current Leave Management System cannot be easily cheated. The data of students once lost can be obtained as it is kept backup in Cloud servers. The current Leave Management System is less time consuming both for checking and updating. In the current Leave Management System data cannot be entered incorrectly and if entered incorrectly can be easily corrected. In the current Leave Management maintaining data do not need any physical space. In the current Leave Management System the same data is not written down and copied more than once in different levels of the current system as we have implemented a same system all over the process. In the current Leave Management System the response time for data is too short with a good Data service. In the current Leave Management System the wardens are available to respond 24*7 as they respond only with a single click. In the current Leave Management System it do not need anytime for a new warden to adapt to the system and no training is also needed only basic computer knowledge is required.

In the current Leave Management System during any natural disaster the system will not break down and data that is lost can be got back. In the current Leave Management System usage of paper work is minimized which leads to more trees obviously good for a healthy environment. In the current Leave Management System the data cannot be accessed easily by anybody easily as everybody is given a separate login id to access their own data so there is no data threat. In the current Leave Management System accuracy is certain and stable in all cases once installed with a perfect working system according to the organizational requirements. In the current Leave Management System information is too fast and accurate. In the current Leave Management System data lose is not possible. In the current Leave Management System data cannot be leaked and is not possible to be used by another individual as there is



certain login id and a well organized automated system.

WORK FLOW:



CONCLUSION

Leave Management System is very useful for college to maintain the leave records of the students and staffs. This system not only maintains the leave details of the staff, it also maintains the leave applications of the staff and students. The higher authorities may accept or reject the leave applications requested by the staff. Thus this system maintains the excess amount of job done by college to maintain the leaves. Emergencies are often the reason communication network to reach vulnerable populations is created.

The proposed system will reduce all security flaws and reduce human errors to the most.

It also helps to maintain leave records and also track students leave details .And mainly aims at reducing stress for both students and warden community.

REFERENCES

- 1.Deep Learning Model for real- time image compression in Internet of Underwater Things(IoUT), Journal of Real-time Image Processing ,2019 (First Online):DOI 10.1007/s11554-019-00879-
- 2. A Glove based approach to recognize Indian Sign Languages", International Journal of Recent Technology and Engineering (IJRTE) Volume-7, Issue-6, March 2019, pp.1419-1425.

- 3. Conceptual Semantic Model for Web Document Clustering Using Term Frequency", EAI Endorsed Transactions on Energy Web and Information Technologies, Volume 5, Issue 20,2018,pp.1-4.
- 4. Hybrid Soft Computing Approach for Prediction of Cancer in Colon Using Microarray Gene Data", Current Signal Transduction Therapy Vol.11 (2),pp71-75,June 2016.
- 5. Enhancing Security in Mobile Devices through Multimodal biometrics", Middle-East Journal of Scientific Research 23 (8), pp. 1598-1603, Jun 2016
- 6. Smart Phone Application For Automatic Public Transportation Though Providing Intelligent Bus Status Information To The Users" International Journal of Applied Engineering Research (IJAER), Vol 59, pp.163-167, Jun -2015,
- 7. Karnan, Marcus, Muthuramalingam Akila, and Nishara Krishnaraj. "Biometric personal authentication using keystroke dynamics: A review." Applied soft computing 11.2 (2011): 1565-1573.
- 8. Karnan, Marcus, and N. Krishnaraj. "Bio password—keystroke dynamic approach to secure mobile devices." 2010 IEEE International Conference on Computational Intelligence and Computing Research. IEEE, 2010.
- 9. Karnan, M., and N. Krishnaraj. "A model to secure mobile devices using keystroke dynamics through soft computing techniques." International Journal of Soft Computing and Engineering (IJSCE) ISSN (2012): 2231-2307.
- 10. Ezhilarasu, P., and N. Krishnaraj. "Triple Substring Based Classification for Nondeterministic Finite Automata." IJAER 10.59 (2015): 177-82.
- 11. Ezhilarasu, P., et al. "Single substring based classification for nondeterministic finite automata." International Journal on Applications in Information and Communication Engineering 1.10 (2015): 29-31.
- 12. Ezhilarasu, P., et al. "A Novel Approach to Classify Nondeterministic Finite Automata Based on More than Two Loops and its Position." SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE) 1.10 (2014): 46-49



- 13. Ezhilarasu, P., and N. Krishnaraj. "Double Substring based Classification for Nondeterministic Finite Automata." Indian Journal Of Science And Technology 8 (2015): 26.
- 14. Ezhilarasu, P., N. Krishnaraj, and Suresh V. Babu. "Applications of finite automata in text search-a review." International Journal of Science, Engineering and Computer Technology 5.5 (2015): 116.
- 15. Ezhilarasu, P., et al. "A Novel Approach to Design the Finite Automata to Accept the Palindrome with the Three Input Characters." Indian Journal of Science and Technology 8.28 (2015).
- 16. Ezhilarasu, P., and N. Krishnaraj. "Applications of Finite Automata in Lexical Analysis and as a Ticket Vending Machine—A Review." Int. J. Comput. Sci. Eng. Technol 6.05 (2015): 267-270.
- 17. Ezhilarasu, P., N. Krishnaraj, and B. Dhiyanesh. "Arithmetic Coding for Lossless Data Compression—A Review." International Journal of Computer Science Trends and Technology 3.3 (2015).
- 18. Krishnaraj, N., and Mr R. Vinothkumar. "Heart disease prediction using ga and MLBPN." Heart Disease 2.4 (2014).
- 19. Krishnaraj, N., and Mr R. Vinothkumar. "Business intelligence: decision making through soft computing algorithms." Int. J. Trend Res. Dev 2 (2014): 1-4.
- 20. Krishnaraj, N. "Securing Cloud From DDoS Attacks Using Intrusion Detection System In Virtual Machine." (2010).
- 21. Famila, S., Jawahar, A., Sariga, A., & Shankar, K. (2019). Improved artificial bee colony optimization based clustering algorithm for SMART sensor environments. Peer-to-Peer Networking and Applications, 1-9.
- 22. N. Krishnaraj, Mohamed Elhoseny, M. Thenmozhi, Mahmoud M. Selim, K. Shankar, "Deep learning model for real-time image compression in Internet of Underwater Things (IoUT)", Journal of Real-Time Image Processing, May 2019. In Press. https://doi.org/10.1007/s11554-019-00879-6
- 23. Shankar, K. (2017). Prediction of most risk factors in hepatitis disease using apriori algorithm. Research Journal of Pharmaceutical Biological and Chemical Sciences, 8(5), 477-484.

- 24. Shankar, K., Lakshmanaprabu, S. K., Gupta, D., Khanna, A., & de Albuquerque, V. H. C. (2018). Adaptive optimal multi key based encryption for digital image security. Concurrency and Computation: Practice and Experience, e5122.
- 25. Elhoseny, M., & Shankar, K. (2019). Reliable data transmission model for mobile ad hoc network using signcryption technique. IEEE Transactions on Reliability.
- 26. Muslihudin, M., Wanti, R., Hardono, N., Shankar, K., Ilayaraja, M., Maseleno, A., ... & Mukodimah, S. (2018). Prediction of layer chicken disease using fuzzy analytical hierarchy process. Int. J. Eng. Technol.(UAE), 7(2.26), 90-94.
- 27. Uthayakumar, J., Metawa, N., Shankar, K., & Lakshmanaprabu, S. K. (2018). Intelligent hybrid model for financial crisis prediction using machine learning techniques. Information Systems and e-Business Management, 1-29.
- 28. Senthil Ragavan, V. K., Elhoseny, M., & Shankar, K. (2019). An enhanced whale optimization algorithm for vehicular communication networks. International Journal of Communication Systems.
- 29. Murugan, B. S., Elhoseny, M., Shankar, K., & Uthayakumar, J. (2019). Region-based scalable smart system for anomaly detection in pedestrian walkways. Computers & Electrical Engineering, 75, 146-160.
- 30. Lakshmanaprabu, S. K., Shankar, K., Ilayaraja, M., Nasir, A. W., Vijayakumar, V., & Chilamkurti, N. (2019). Random forest for big data classification in the internet of things using optimal features. International Journal of Machine Learning and Cybernetics, 1-10.
- 31. Elhoseny, M., & Shankar, K. (2019). Optimal bilateral filter and convolutional neural network based denoising method of medical image measurements. Measurement, 143, 125-135
- 32. Dutta, A. K., Elhoseny, M., Dahiya, V., & Shankar, K. (2019). An efficient hierarchical clustering protocol for multihop Internet of vehicles communication. Transactions on Emerging Telecommunications Technologies, e3690.



- 33. Elhoseny, M., & Shankar, K. (2020). Energy Efficient Optimal Routing for Communication in VANETs via Clustering Model. In Emerging Technologies for Connected Internet of Vehicles and Intelligent Transportation System Networks (pp. 1-14). Springer, Cham.
- 34. Shankar, K., Lakshmanaprabu, S. K., Khanna, A., Tanwar, S., Rodrigues, J. J., & Roy, N. R. (2019). Alzheimer detection using Group Grey Wolf Optimization based features with convolutional classifier. Computers & Electrical Engineering, 77, 230-243.