

Automation of Examination System

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Abstract: Examination is a core activity of any educational institution. As the university examinations arrives, there exists a lot of work like consolidating the time table of each departments of the college and the seating arrangement to all the students in the college is a critical task. At present in existing system faculty allotment for exam duty as supervisor is done manually and also it does not keeps the track record about the supervisors who have been allocated for previous exam. Allocation of faculty will be done in the excel sheet. And also allocation of thousands of student to particular block is a hectic work and that will be done manually thus it may take lot of time and require man power. Thus, an automated system would solve the above stated problem in just few click work. An automated system can be used through cloud computing technology that facilitates the every college to provide their student and staff information and get the results of allotment. And by this way even University can track the details of allotment with each institute. Cloud computing is defined as a type of computing that relies on sharing computing resources rather than having local servers or personal devices to handle applications. In cloud computing, the word cloud (also phrased as "the cloud") is used as a metaphor for "the Internet" so the phrase cloud computing means "a type of Internet-based computing" where different services — such as servers, storage and applications — are delivered to an organization's computers and devices through the Internet. Cloud computing is comparable to grid computing, a type of computing where unused processing cycles of all computers in a network are harnesses to solve problems too intensive for any stand-alone machine.

Keywords: Cloud Computing, Internet, Examination System, Allocation, computing Internet

1. Introduction

Existing manual process work can be automated using best suited technology. And this automated system could be integrated with cloud so that can be accessed from anywhere. Each institute has to validate themselves to cloud and each institute falling under the same university has to provide their student and staff details to get the allocation of exam duties and blocks.

Cloud computing, or in simpler shorthand just "the cloud", also focuses on maximizing the effectiveness of the shared resources. Cloud resources are usually not only shared by multiple users but are also dynamically reallocated per demand. This can work for allocating resources to users. For example, a cloud computer facility that serves European users during European business hours with a specific application (e.g., email) may reallocate the same resources to serve North American users during North America's business hours with a different application (e.g., a web server). This approach should maximize the use of computing power thus reducing environmental damage as well since less power, air conditioning, rack space, etc. are required for a variety of functions. With cloud computing, multiple users can access a single server to retrieve and update their data without purchasing licenses for different applications.

When we have enough known technology, there is no need of manual processes which can be easily automated using newest techniques. Same way, institute examination allocation of block to students and supervisor is presently a manual process which can be automated. Hence, in its simplest form "student seat allocation & faculty supervision allocation for examination at university level using cloud" is a automated system for all the institutes that fall under the same university to manage the academic examination process. Where computerized system helps to allocate bench

number to students in a particular block and supervisor to the particular block. Also, the system allows the personnel to interchange their supervisor duty, generate report regards the particular date, session and block also the report of absent students for particular exam.

After allocating duties for faculties for all exam dates system is capable of sending alert messages to faculty about their duty and it also has the advantage that the faculty can access their exam duty information in earlier along with their exam duty date and block number.

System is flexible to adapt new changes in structure of new scheme or department without any extra efforts. System that response to user dynamically and secured one which allow only authorized user once they authenticate themselves for the sensitive data. System would also report the absent students on each days exams along with subject codes and its count i.e., total number of students absent for respective subject and those students details like block, USN etc.

By integrating the two of the above discussed aspects at one point results in greater productivity. Thus we can store the application in cloud, interfaces helps for integration and host a common gateway for the accessibility. Where the database of the application having login credentials for the user authentication and authorization. And each college provides the information about their students who are going write exams and the faculty who are to be allocated as supervisor for the examination. also user enters the information details about the exam time table, and the dates on which faculty are not available for exam duty for reasons best known to them.

2. Review of Literature

Web-Scale image look for engines typically use keywords as queries and rely on nearby text to investigate images. They

undergo starting the doubt of query keywords, since it is rigid for users to exactly illustrate the visual satisfied of goal images only by keywords. This is the majority frequent figure of transcript investigate on the net. Most explore engines do their transcript inquiry and recovery using keywords. The keywords based searches they typically provide results from blogs or other conversation boards. The user cannot have a approval with these outcome payable to lack of trusts on blogs etc. low accuracy and elevated remember rate. In early on look for train those accessible disambiguation to search terms. User meaning recognition plays an significant role in the clever semantic search engine.

The method [1], witness's huge notice and a wealth of assure in content-based image recovery as a rising technology. It also a horizontal way for a huge number of new techniques and systems, get various new citizens include. In this piece, we survey almost 300 new hypothetical and experimental charity in the existing decade related to image recovery and regular image clarification. We also discuss significant challenges involved in the difference of existing image recovery techniques to build systems that can be useful in the genuine world. In retrospect of what has been achieved so far, we also work out what the prospect may hold for image recovery study.

Predictable methods [2] of image revival require that metadata is connected with the image, usually known as keywords. Though some content based image retrieval systems utilize together semantic and prehistoric attributes to relation search principle, history has proven that it is tricky to remove linguistic in sequence from a 2D picture. In this observe, activity theory is used as a foundation to express how semantic in sequence can be retrieved from objects recognized in a picture. Via an picture segmentation method.

By The Berkeley Digital Library Project, and merge it with, a high-level accepting of he picture can be established Content-Based Image Retrieval [3] has become one of the popular most research areas. Many diagram attribute representations contain been explored and many systems build. While, these research information found the foundation of satisfied based image recovery, the kindness of the future approaches is incomplete. Specially, these efforts have comparatively overlooked two different characteristics of systems the space between towering level concepts and low level skin texture bias of human compassion of visual content. Which electively takes into account the above two uniqueness in CBIR. During the recovery process, the user's high level query and insight partisanship are captured by dynamically updated weights based on the user's advice. The provisional results over more than 70,000 images show that the future approach greatly reduces the user's effort of composing a doubt and capture the user's in sequence.

Application feedback [4] scheme based on support vector equipment have been generally used in content-based image retrieval. However, the arrangement of based application criticism is frequently abridged when the figure of labeled positive advice sample is little. This is mostly due to three

reasons a classifier is disturbed on a little sized teaching locate, and over suitable happens since the number of characteristic dimensions is much senior than the size of the preparation set. In this document, we expand a device to overcome these troubles. To speak to the first two troubles, we propose an asymmetric container based. For the third problem, we combine the random subspace method and SVM for application feedback, which is named random subspace SVM (RS-SVM). Finally, by AB-SVM and RSSVM, an asymmetric bag and accidental subspace SVM (ABRS-SVM) is build to solve these three problems and further improve the application feedback performance.

3. Proposed System

The goal of cloud computing is to apply traditional supercomputing, or high-performance computing power, normally used by military and research facilities, to perform tens of trillions of computations per second, in consumer-oriented applications such as financial portfolios, to deliver personalized information, to provide data storage or to power large, immersive online computer games.

To do this, cloud computing uses networks of large groups of servers typically running low-cost consumer PC technology with specialized connections to spread data-processing chores across them. This shared IT infrastructure contains large pools of systems that are linked together. Often, virtualization techniques are used to maximize the power of cloud computing.

4. Process

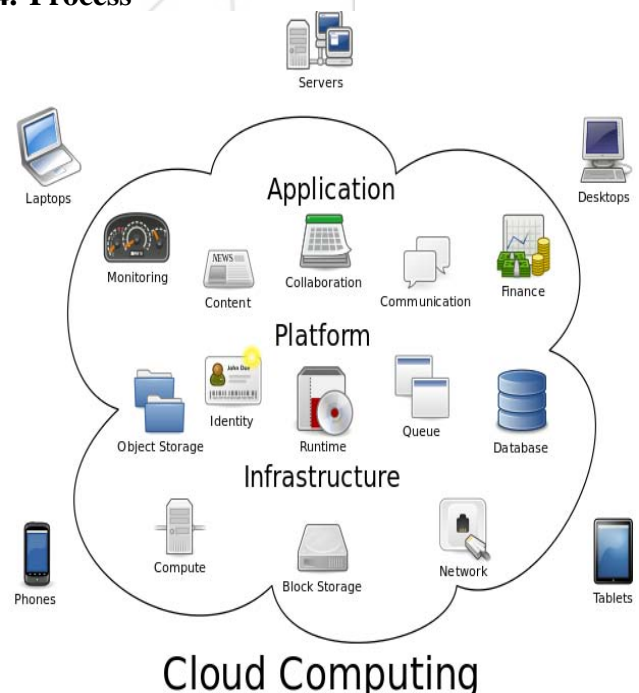


Figure 1: Cloud Computing. [courtesy : Wikipedia.com]

In an automated system of allocation, Institute level user has to login with their user credentials like user name and password to ensure the valid user. Then user provide details about the students and staff, System will allocate the students to bench number of each respective block and supervisor to each block from faculty list. At last user will

download the reports of allocated information and follow the format for examination as per allocated by system.

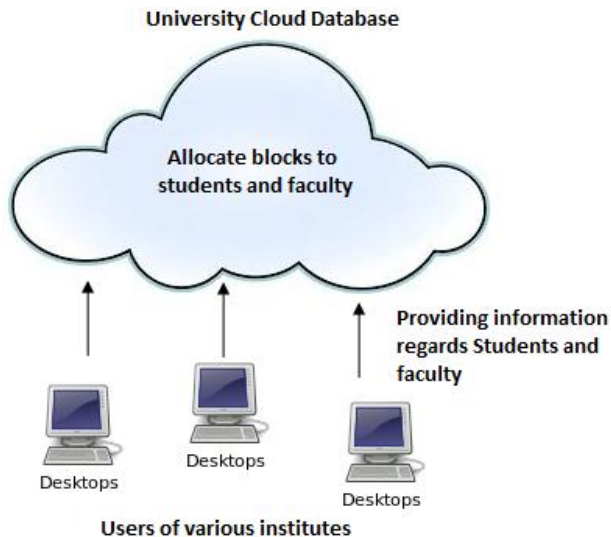


Figure 2: Automated System for Allocation using Cloud

Above system of allocation is useful for allocating students and faculty for any institute. Which can be integrated with cloud to yield more feasible solution from it. So that it is available to every institute which fall under same university. Where automated system is stored at cloud for the accessibility for every institute so that each institute can access the system remotely and get the result with few mouse clicks.

5. Conclusion

The proposed idea greatly reduces the manpower error and time consumption. It benefits the all the institute by reducing the complexity involved in the allocation of exam duty. As all the work of allocation of exam duty is automated and also faculties are allocated automatically. The percentage of doing mistakes will be reduced.

All the details of student information, faculty information, exam time table information, exam duty allocation information are stored in the central database thus one can access the information whenever needed.

References

- [1] OL. Google Android Developers, Android Develop Guide <http://developer.android.com/guide/topics/fundamentals.html>
- [2] **Mohapatra D, Suma S.B.** (2005), "Survey of location based wireless services; Personal Wireless Communications", ICPWC 2005, IEEE International Conference on Digital Object Identifier: 10.1109/ICPWC.2005.1431366, Page(s): 358 – 362
- [3] **Schwinger, W., Grin, C., Prill, B., and Retschitzegger W.** (2005), "A light-weight framework for location-based services", In Lecture Notes in Computer Science (Berlin), Springer, pp. 206_210
- [4] **M. Fengsheng Yang** (2010), "Android Application Development Revelation", China Machine Press
- [5] **J. Dongjiu Geng, Yue Suo, Yu Chen, Jun Wen, Yongqing Lu** (2011), "Remote Access and Control System Based on Android Mobile Phone", vol.2. Journal of Computer Applications, pp. 560-562
- [6] **Amit Kushwaha, Vineet Kushwaha**(2011), "Location Based Services using Android Mobile Operating System", International Journal of Advances in Engineering & Technology, IJAET ISSN: 2231-1963, Vol. 1, Issue 1, pp.14-20
- [7] **Manav Singhal, Anupam Shukla** (2012), "Implementation of Location based Services in Android using GPS and Web Services", International Journal of Computer Science Issues, Vol. 9, Issue 1, pp 237-242
- [8] **Ch. Radhika Rani, A. Praveen Kumar, D. Adarsh, K. Krishna Mohan, K.V.Kiran** (2012), "Location based services in Android", International Journal of Advances in Engineering & Technology, IJAET ISSN: 2231-1963, Vol. 3, Issue 1, pp. 209-220
- [9] **Hassine Mouncla, Nora Touati and Ahmed Mehaoua** (2013), "Cost Efficient Deployment and Reliable Routing Modeling Based Multi-Objective Optimization for Dynamic Wireless Body Sensor Networks Topology", Volume 4, Issue 4
- [10] **X. Liu** (2014), "The Design of Android-Based Video-on-Demand System and its Implementation", Applied Mechanics and Materials, Vols 548-549, pp. 1377-1380
- [11] **M. Wang, H. Xie, W. Gao, N. Sun** (2015), "Design and Implementation of Multimodal SNS Information Integration System", Applied Mechanics and Materials, Vols 719-720, pp. 851-856
- [12] **D.G.Savakar, Anand Ghuli** (2015), "Digital Watermarking A Combined Approach by DWT, Chirp-Z and Fast Walsh-Hadamard Transform", IJCTA, ISSN 2229-6093, Vol. 5 No.6, pp 2006-2010
- [13] **D.G.Savakar, Anand Ghuli** (2015), "Digital Watermarking as a distributed noise by Discrete Wavelet Transformation, Fast Fourier Transformation and Fast Walsh-Hadamard Transform to study the sensitivity between Robustness and Fidelity", IJCA, Issue 1, Volume 5, pp 102-107, ISSN: 2250-1797
- [14] **D.G.Savakar, Anand Ghuli** (2015), "A Comprehensive Survey on Digital Watermarking - Schemes, Techniques and properties for Color Images", IJARCSSE, Issue 3, Volume 5, ISSN: 2277-128X
- [15] **DG Savakar, BS Anami** (2009), Recognition and classification of food grains, fruits and flowers using machine vision, International Journal of Food Engineering
- [16] **BS Anami, DG Savakar, A Makandar, PH Unki** (2005), A neural network model for classification of bulk grain samples based on color and texture, Proceedings of International Conference on Cognition and Recognition
- [17] **BS Anami, DG Savakar** (2009), Improved method for identification and classification of foreign bodies mixed food grains image samples, International Journal of Artificial Intelligence and Machine Learning 9 (1), 1-8
- [18] **BS Anami, DG Savakar, PH Unki, SS Sheelawant** (2006), An artificial neural network model for separation, classification and gradation of bulk grain samples, IEEE First International Conference on Signal and Image Processing

- [19] **BS Anami, DG Savakar, VS Biradar** (2009), Identification of multiple grain image samples from tray, International journal of food science & technology, 2452-2458
- [20] **Dayanand G Savakar** (2012), Recognition and Classification of Similar Looking Food Grain Images using Artificial Neural Networks, Journal of Applied Computer Science and Mathematics
- [21] **DG Savakar** (2012), Identification and Classification of Bulk Fruits Image using Artificial Neural networks, International Journal of Engineering and Innovative Technology
- [22] **BS Anami, DG Savakar** (2010), Influence of Light, Distance and Size on Recognition and Classification of Food Grains' Images, International Journal of Food Engineering
- [23] **BS Anami, DG Savakar** (2009), Effect of Foreign Bodies on Identification and Classification of Bulk Food Grains Image Samples, Journal of Applied Computer Science and Mathematics, 77-83
- [24] **R. Datta, D. Joshi, and J.Z. Wang** (2007), "Image Retrieval: Ideas, Influences, and Trends" ACM Computing Surveys, vol. 40, article 5
- [25] **A.W.M. Smeulders, M. Worring, S. Santini, A. Gupta, and R. Jain** (2000), "Content-Based Image Retrieval," IEEE Trans. Pattern Analysis and Machine Intelligence, vol. 22, no. 12, pp. 1349-1380
- [26] **Y. Rui, T.S. Huang, M. Ortega, and S. Mehrotra** (1998), "Relevance Feedback: A Power Tool for Interactive Content-Based Image Retrieval," IEEE Trans. Circuits and Systems for Video Technology, vol. 8, no. 5, pp. 644-655
- [27] **X.S. Zhou and T.S. Huang** (2003), "Relevance Feedback in Image Retrieval: A Comprehensive Review," Multimedia Systems, vol. 8, pp. 536-544
- [28] **D. Tao, X. Tang, X. Li, and X. Wu** (2006), "Asymmetric Bagging and Random Subspace for Support Vector Machines-Based Relevance Feedback in Image Retrieval," IEEE Trans. Pattern Analysis and Machine Intelligence, vol. 28, no. 7, pp. 1088-1099
- [29] **J. Cui, F. Wen, and X. Tang** (2008), "Real Time Google and Live Image Search Re-Ranking", Proc. 16th ACM Int'l Conf. Multimedia