ANDROID BASED E-CIRCULAR NOTIFICATION SYSTEM

[1] T.Divya, [2] Dr.K.Ravi Kumar

[1] Research scholar, [2] Assistant Professor and Head
Department of Computer Science,
Tamil University, Thanjavur, Tamil Nadu, India

Abstract: This concepts aim to replace the traditional circular system. Now no need to maintain numbers of account for sharing information, exchange of all college related news, now it will be accessible anywhere anytime just on a single click on your android device. This have tried to analyse the existing systems which are currently used by the schools for sending notifications and other information which is manual, time consuming and it requires man power. Subsequently to prevail over such these exertion process are departing to put forward this web-based android purpose to get hold of notification, notices and detailed information. . Now-a-days the information to staffs regarding their meeting with principal through printout papers or individual call or message, but these techniques is very much hectic time inefficient and lengthy. Hence this application provides a solution through a simple interface for maintenance of information. This submission give a widespread answer to check the a variety of works that are approved out by a academy for supervision it. It helps staffs to get detailed information regarding to their ward such as result, important notices, event details, information about teachers etc. using the android application.

Index Terms - **Web-based android application, Man power, Traditional circular system.**

I. INTRODUCTION

Now a day's a lot of persons are have android mobile. Generally, phones were innovated for calling purpose but now days we use it more for social activity such as whatsapp, face book, hike etc. consequently knowledge come presumptuous to us plus it is our responsibility to use it for our significant reason. Following these thought we developed this system. The management of accurate and up-to-date information regarding circular information is difficult and time consuming task for the colleges. Now-a-days the information to staffs regarding their meeting with principal through printout papers or individual call or msg, but these techniques are very much hectic time inefficient and lengthy. Hence this application provides a solution through a simple interface for protection of in order. This submission supply a comprehensive explanation to observe the an assortment of machinery that are carried out by a college for managing it. It helps staffs to get detailed information regarding to their ward such as result, important notices, event details, information about teachers etc. using the android application. Conventional observe board require lots of pen, broadsheet work and in addition surplus of papers. Generally colleges use traditional paper based notice board, so in order to overcome the drawbacks of this traditional notice board, here we developed an Android Based Application. The college notification system applies to faculty and students. This android based application aims to notify students and faculty. The consumer can get the notice from side to side E Circular from anywhere in the academy site. This paper implement E-Circular program which can run on any computer system either by local area network or wired or wireless network. Observe board are chiefly second-hand in colleges and in other organizations to communicate the communication. Students are required to approach the traditional notice board every day, whereas E-notice board allow student plus sense to view notice where on earth they are. at the there no need to uphold number of financial records for sharing information and all college related news, now it will be easy to get to anywhere anytime now on a solitary click on your android machine. Now fit "App" on your android machine and you is able to right of entry all notice of your academy in an simple and well-organized way. Admin adds notification manager. Notification manager sends notifications related to scholarship, admission, exams, staff meeting, holidays, events, timetable, achievements and other notices to faculty and students which will be first verified by the admin. Sense and student get their connected notice and be able to be view by them. It achieves high and quick organizes between instructor, faculty and students. It put aside time, attempt by between Android applications to the instructive folder of the academia by newest technology. To design and develop an android application through which students get notifications anywhere, anytime regarding any information, activities and various events related to their college. The proposed system can be used for accessing notices on android devices, students need not visit the notice board every time, and they get notifications regarding any information related to their college. Existing system is fully manual. Occasion expenditure is additional for penetrating the in sequence. Maintaining of data is very difficult.

II. PROBLEM DESCRIPTION

The development is not just moment overriding excluding in addition wasteful. This customary system require a blue-collar work of marks notification, enchanting printouts, ephemeral all branch. It use a assortment of broadsheet vocation. The necessitate

of just beginning such category of system is to get to the bottom of daily life predicament of announcement, notice administration. Breathing structure is fully handbook. Time spending is more for thorough the in sequence. Continue of figures is very easier said than through. Students could do with to tailback up at the observe floorboard. Very soon fix "E-Circular App" on your automaton piece of equipment and you can right of entry all notice of your academy. We have embryonic for staff easy to swap over the in sequence. This scheme include major movement entities: add notices which are handling by management. The management can add, delete, and update them at the same time on the online scheme. These can then be sight by the every one staffs. Educator can obtain their gathering and additional extra notice as of principal and HOD's on its automaton machine. The aim of the future scheme is to cut from side to side the chaos and workload, by innovating the present scheme. The planned system notifies all and every scholar and faculty with the application on his android phone, about any notices related to college events, including the other notices. It eliminates the alive issue where the scholar has to move towards the notice board daily and it also eliminate the ballpoint and paper effort of the teacher. In the future scheme, student gets their connected announcement where they are with no visit the become conscious of plank. The difficulty of out old-fashioned notice is solving in the planned scheme where scholar get their notices right away. Out old-fashioned notifications can also be view anytime along with the present notifications. This move towards can thus lessen the attempt of the students and save their occasion, which could perhaps be second-hand in a prolific mode.

III. PROPOSED ALGORITHM

Secure Hash Function (SHA)

Ancestors of SHA encompass of four SHA algorithms; SHA-0, SHA-1, SHA-2, and SHA-3. Although as of similar ancestors, readily available are structurally dissimilar.

- The innovative description is SHA-0, a 160-bit hash meaning, was in print by the nationwide establishment of principles and knowledge in 1993. It had a small number of weaknesses and did not turn into very well-liked. Presently in 1995, SHA-1 was calculated to right supposed weakness of SHA-0.
- SHA-1 is the for the most part far and wide used of the breathing SHA confusion purpose. It is working in some extensively used submission and protocol counting safe Socket Layer (SSL) safety.
- In 2005, a means was establish for exposure crash for SHA-1 inside sensible time border creation long-term employability of SHA-1 uncertain.
- A SHA-2 relation has four additional SHA alternatives, SHA-224, SHA-256, SHA-384, and SHA-512 depending awake on figure of bit in their confusion worth. No winning attack contains yet be account on SHA-2 confusion purpose.
- Although SHA-2 is a physically powerful confusion purpose. Although considerably dissimilar, its basic plan is motionless go after plan of SHA-1. Therefore, NIST call for novel spirited hash purpose designs.
- In October 2012, the NIST choose the Keccak algorithm as the novel SHA-3 criterion. Keccak proffer a lot of reimbursement, such as well-organized presentation and high-quality confrontation for attack.
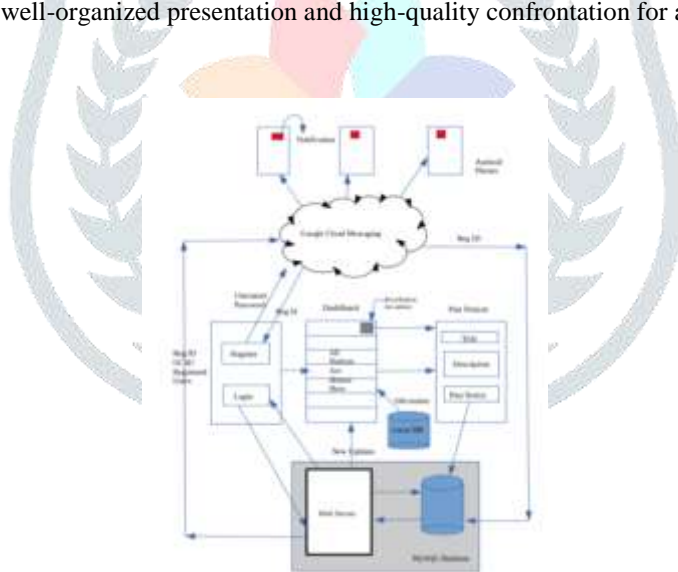
IV. SYSTEM DESIGN

Figure 1: System Architecture

System structural design is the theoretical mock-up that defines the arrangement, performance, and more view of an organism. A scheme structural design knows how to consist of scheme mechanism and the sub-systems urbanized, that determination service jointly to put into practice the generally classification.

Registering a User: The first pace in this submission is to obtain the user's record to together GCM attendant and to isolate Web Server. For this, user will make available all the required particulars and depress the record key. The relate for determination first go to Google make unclear Messaging attendant. GCM attendant will present the catalogue id for that piece of equipment. Subsequent to that, all the in order along with listing id is store up on Web Server and the client gets registered.

User Login: After index, the client is sanctioned to log in. Username and code word after validate at consumer wall, is send to attendant side to substantiation. After substantiation rejoinder is send by the server to user, and then client gets logged in.

Viewing the Notices: At the first occasion, at what time you are by means of this submission for the first occasion, it determination get all the notice as of server. In every one the previous case, all preceding notices are fetch from applications possess file stored within client mobile. It after that checks for novel notice from the attendant if readily available are novel notice on the attendant, it determination obtain all persons note.

Searching a Notice: The consumer is clever to look for the become conscious of in list sight depending on the name of the become conscious of. It help consumer to get the wanted become aware of right absent.

Deleting a Notice: If the consumer does not desire some notice, he/she be able to erase it as of their receiver. Readily obtainable determination be no result on server admission.

Posting a Notice: If a user is a management, he is clever to position the become aware of. In order to position the notice, he has three options. One alternative is so as to; he can position an easy book become aware of. One more option allows him to send a number of add-on image with the become aware of. In this, he has two options. Either he is able to choose the picture as of the balcony or he is able to clack an image on the spot by camera. Following that, push the post key to position the become aware of.

Notification Buzz: As almost immediately as the management position a take in, the handwriting will sprint with which ask for is ended by GCM attendant to Web attendant for every the registered IDs. After triumph all the register IDs, notification is send to everyone the user register with this request. Notification has a jingle plus shaking that runs when there is a notification inward by the consumer as of GCM attendant.

Reset Password: This request also has the service to reset the code word. If single user has beyond his code word, he/she can relax the code word by charitable his username or email address. The client will be known a sheet in which he is clever to set his novel code word. Beyond code word will be efficient with the novel one on the attendant.

V. SYSTEM IMPLEMENTATION

Client End

Faculty Module - Faculty have to login with login qualifications send by the announcement director from end to end e-mail. If username and code word is suitable faculty go into into the home folio. Faculty sight their connected announcement. It has an alternative to enquiry about the become aware of to the announcement boss where they imprison get reply for their queries.

Student Module - Student have to login with login qualifications sent by the announcement boss through e-mail. If username and password is suitable scholar enters keen on the home folio. Student sight their connected announcement such as erudition, admittance, vacation, proceedings, agenda, scholar accomplishment, examination and other announcement. It has an alternative to enquiry about the become aware of to the announcement director where they imprison get answer for their enquiry.

Server End

Admin Module - management has to login with username and code word, if username and code word is suitable management go into into the home folio. Announcement director sends become aware of to scholar and faculty which determination be first established by the management. Management have the approval of sight all list student and he be able to confirm the all the announcement Details. Management act as an approval of request.

Notification Manager - component announcement boss has to login with username and code word, if username and code word is valid announcement director go into into the home folio. Announcement boss adds faculty and students. His send announcement connected to learning, admittance, vacation, proceedings, schedule, scholar attainment, examination and previous notifications. He as well view and answer the query send by the student.

Functionalities

The aspire of the future scheme is to cut from side to side the disorder and workload, by innovating the present scheme. The future scheme notifies every and each student and faculty with the request on his android handset, in relation to some become aware of connected to academy events, counting the previous see. It eliminates the alive issue anywhere the scholar has to move towards the become aware of plank daily and it also eliminate the pen and paper work of the coach. In the future scheme, student get their connected announcement where they are with no visit the observe panel. The dilemma of out old-fashioned notice is solving in the future organization where student get their observe right away. Absent old-fashioned announcement container too be view anytime the length of with the present announcement. This move in the direction of can thus decrease the attempt of the students and put aside their occasion, which might perhaps be second-hand in a creative way.
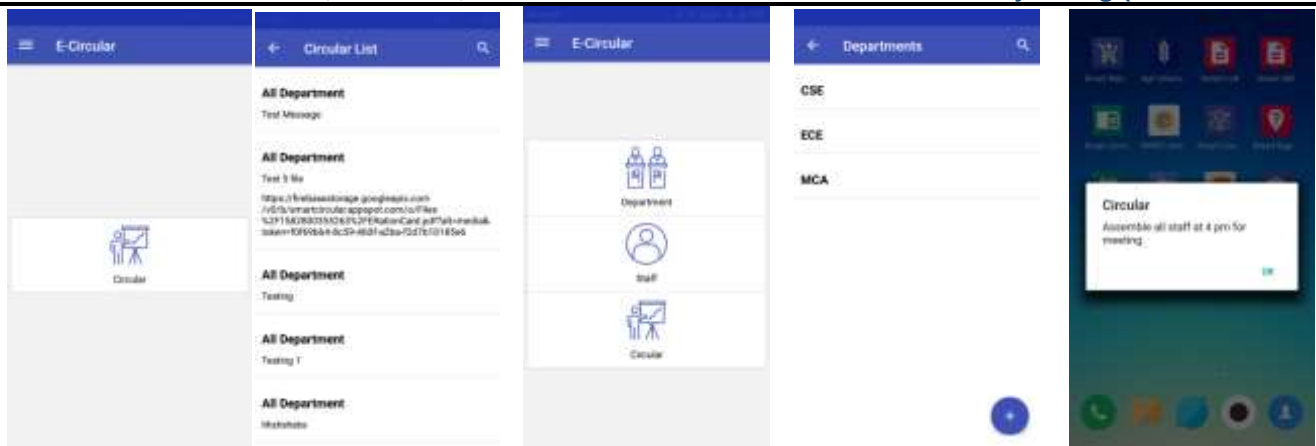
E-Circular

This weekly put into practice E-Circular program which can sprint on any processor scheme also by local area system or tense or wireless system. Become alert of panel are principally second-hand in schools, colleges and in other group to express the communication. Scholar is necessary to move towards the usual notice board each day, while E-notice plank allow student and sense to view notice where they are. at the present no require to uphold numeral of financial records for contribution in order and all university connected information, now it determination be easy to get to wherever anytime just on top of a single clack on your android machine. Just fit "App" on your android machine and you is able to right of entry all notice of your academy in a simple and well-organized way. Management adds announcement director. Announcement director sends announcement connected to erudition, admittance, examination, staff gathering, vacation, proceedings, schedule, achievement and previous notice to faculty and students which determination be primary established by the management. Faculty and students obtain their connected notice plus be able to be view by them. It achieves high and rapid organize flanked by teacher, faculty and scholar. It saves instance, attempt by between Android applications to the instructive file of the academia using newest technology. To plan and expand an android application through which students get notifications anywhere, anytime regarding any information, activities and various events connected to their school. The future arrangement be able to be second-hand for access notice on android plans, students require not visit the become aware of plank each time, and they get notification concerning any in order related to their academy. Breathing system is completely physical. Time use is more for penetrating the in order. Maintain of information is very hard. Students require queuing up at the become conscious of plank.

VI. RESULT ANALYSIS

The projected scheme is evaluate by the format and its appearance with the linked E-Circular.

1. The E-Circular android request working at the same time with the file implemented with Fire Base file. This app has two major machinery which are front-end and back-end scheme.
2. Front-end: The in order display section involve the dashboard as border, oblique in java and XML by Android manor as an IDE (Integrated Development Environment).
3. Back-end: A web attendant and the file which is used to amass the user login qualifications animatedly, the proceedings and notification additional.

VII. CONCLUSION AND FUTURE WORK

Consequently the procedure productively execute uphold information of explanation for contribution in order, swap over of all academy connected news, at the present it determination be easy to get to wherever anytime now on a solitary clack on your android machine. We contain try to analyse the alive systems which are at present second-hand by the school for distribution announcement and other in order which is labour-intensive, occasion overwhelming and it require man authority. So to conquer such these trouble we are departing to suggest this web-based android submission to get announcement, notice and full information. In this way Staff conference related become aware of and student get try-out, class online. In this development in after that unit we can put into practice subsequent thought: To get rid of or decrease the person communication so as to keep away from mistake in the database. It is currently put into practice notification scheme for students as well as teachers. Student can get notice on its own android machine and educator can get their meeting and additional extra notice as of HOD to Principal on its android apparatus. An android request called academy announcement structure to provide school related become aware of in a straight line on your android devices. These requests present a simple, suitable and well-organized online announcement scheme; thus it reduces the attempt of the student and teacher. This college announcement scheme is a answer to all the trouble related to paper base conventional notice.

VIII. REFERENCES

1. Lizeth Ghandi, Catarina Silva, Tatiana Gualotuna "Mobile application development process – a practical experience" Information Systems and Technologies (CISTI), 2017 12th Iberian Conference.
2. Luis Cruz, Rui Abreu "Performance Based Guidelines for Energy Efficient Mobile Applications" Mobile Software Engineering and Systems (MOBILESoft), IEEE/ACM fourth International Conference 2017.
3. Zuzana Vantova, Jan Paralic, Vladimir Gaspar "Mobile Application for Creating Presence Lists" Applied MachineIntelligence and Informatics (SAMI), IEEE International Symposium 2017.
4. "Efficient File Sharing System Using XMPP (Let's Share) "IEEE International Conference on Recent Trends in Electronics, Information and Communication Technology (RTEICT) 2016.
5. Tsai-Yeh Tung, Laurent Lin, D.T. Lee "Pandora Messaging: An Enhanced Self-Message-Destructing Secure Instant Messaging Architecture for Mobile Devices" International Conference on Advanced Information Networking and Applications Workshops 2012.
6. Tae Oh, Bill Stackpole, Emily Cummins, Carlos Gonzalez, Rahul Ramchandran, Shinyoung Lim "Best Security Practices for android, Blackberry and iOS" Emerging Technologies for Smartphones and Internet of things IEEE workshop 2012.
7. http://technologiesindia.com/college-management-software.html
8. D.Vimala, A.Sindhu, S.K.Manikandan, "Developing An Android Application For College Management System", International Journal of Future Innovative Science and Engineering Research (IJFISER), Volume - 2, Issue – II, ISSN (Online): 2454- 1966.
9. Pallavi Mohadikar, Nasrin Mulani, Afnan Shaikh, Rachana Sable "College Parent Interaction Using Android Application" International Journal of Computer Science and Network 2015
10. Purvi Sankhe, Hardik Punmiya, Vatsal Prasad, Raj Shrivastav "Android Application for College Managemnet System 2014.
11. K. Vivek Thangam, T. Shyam Kumar,V.Yogesh kumar and S.Prabhu, "Android Application For College Management System (M-Insproplus)", International Journal of Modern Trends in Engineering and Research (IJMTER),Volume 04, Issue 2, [February– 2017] ISSN (Online):2349–9745; ISSN (Print):2393-8161.
12. A.J.Kadam1, Aradhana Singh2, Komal Jagtap3, Srujana Tankala4, "Mobile Web Based Android Application for College Management Sysytem", International Journal Of Engineering And Computer Science ISSN: 23197242 Volume 6 Issue 2 Feb. 2017, Page No. 20206-20209.
13. Deng, L., Sun, J., Turner, D., & Prince, B. (2008). Usage of SMS. Motivation for using Short Messaging Service .
14. Song, W., Kim, J. Y., Schulzrine, H., Boni, P., & Armstrong, M. (2008). Using SMS. Using IM and SMS for Emergency Text Communication.
15. Developer's Home. (2005). Retrieved October 20, 2009, from Developer's Home: http://www.developershome.com/sms/
16. Hord, J. (2008). Retrieved October 15, 2009, from How Stuff Works: http://communication.howstuffworks.com/sms.htm
17. Ng, O. (2008). Ozeki Informatics. Ltd. Retrieved November 1, 2009, from Ozeki NG SMS Gateway: http://www.ozekisms.com/index.php?owpn=585
18. SMS Solutions.net. (2007). Retrieved October 25, 2009, from SMS Solutions.net: http://www.smssolutions.net/hardware/gsmgprs1/
19. TechFAQ. (2008). Retrieved October 16, 2009, from techFAQ: http://www.tech-faq.com/sms.shtml
20. Dennis, A., Wixom, B. H., & Tegarden, D. (2005). System Analysis and Design with UML Version 2.0 (2nd ed.). Hoboken: Wiley & Sons, Inc.