**E-NOTICE BOARD SYSTEM**

**A**

**Proposal Document**

**By**

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**Submitted To**

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# **EXECUTIVE SUMMARY**

The present world is dynamic. The migration from analog to digital systems is so rapid. Technology is getting to another level day by day. People are busy with their activities and hence time is a factor. Communication still remains the key. Information has to flow, therefore, in many institutions and companies; it has become a challenge to ensure proper communication. The use of paper noticeboards to convey messages is tedious and out-dated.

The major problem identified is that many people, in this case, students do not have time to get heaped in the wall noticeboard to view updates. This is so discouraging and hinders proper communication. Therefore, there is a great need for a better way to communicate.

The objective of this project is to implement an online noticeboard system, being web-based that will facilitate communication between the admin, departmental heads, the staff, and students.

The platform will allow users to announce events and leave messages, for instance, publicize items.

The focal goal of this online display board project is to make information broadcasting considerably easier in a paperless society as the world leans towards interrelating with the online systems. The management can direct announcements to the specific students concerning fee payments, results, resumption dates, any novel happening in campus or festivals, library notifications, room booking, any workshop processes, cautions and prompts just to name but a few.

To sum up, an online notice board usability will be expected to fully facilitate the passing of related posters and decrees, as well as caring about efficiency to the user

# **CHAPTER 1: INTRODUCTION**

## **1.1 Introduction**

Since time immemorial, several institutes particularly academic ones have been regulated to positioning announcements materially up at a notice board. Above and beyond the low audience this system has always realized, the notices grieve from staleness and non-portability. In efforts to solve the glitches, several poster distribution procedures around the world have been tried. This may include automated screens which may unravel the issue but then the latter delinquent: movability upon employing a sample website on which students can post or erase online posters. Others include sending emails, posting notices in WhatsApp groups and even Facebook. Despite the fact that accessing the internet to some point has been expensive, and it's hard to receive feedback from the students, it has proofed to show a little flow of information. This brought up the idea of migrating from a paper wall notice board to an online notice board where students can just log in and view all the updates that are taking place around the institution, and even download some posts.

## **1.2 Problem Statement**

Nowadays, digitization has really increased and many institutions are migrating to wireless technology.

Paperwork is almost vanishing as deforestation also is becoming a snare. Using wallpaper notice boards to convey information is now primitive and Inefficient, regarding the fact that most students have a tight schedule and have no time to go checking new updates in the notice boards. The wall notice board has proofed beyond doubts unfulfilling; there is the insufficient spacing of posts leading to overlapping of notices. This makes it look unorganized and hard to know latest posts that need to be considered with urgency. It's hard for the school administration to know how many students viewed the post, some posts will get stale and discolored without even being viewed. Also, to the students; it's very exhausting to keep checking the notice board for new posts. Many of the students, especially first years do not even know where the notice board is situated. They end up being confused through the university premises as they can't even trace the student's timetable. The notices suffer from staleness and non-portability. The bad weather discolors them and ends up being thorn since they cannot be viewed anywhere with convenience.

Therefore, there is a desperate need to adopt the proposed online notice board system so as to digitize the normal notice board and make it online hence taking care of the limitations that come with the normal notice board.

## **Justification**

This system is going to be one of the most significant application because it will reduce energy and time spent checking the notice board. The system is suitable since it will create a great interface for users to interact with the posts, view notifications and even be able to download some of them. Moreover, t will give the administration insight on how students are responding to their posts.

It will give users messaging capabilities within the system. It will notify users of new posts. It will minimize cost used to print papers and other supplies used for posting to a normal notice board.

## **Objectives**

The online noticeboard will be giving updates concerning the school anytime, anywhere just by a click of a button as long as there is an internet connection. You do not need to travel all the way to the school premises.

The main objectives for this project are:

1. To make the system a distributed system accessible to many devices
2. To Use web development to implement the system
3. To create a user-friendly system for easier interaction
4. To add SMS capabilities to the system, where a student can leave comments concerning the notice.
5. To allow the administration to post notices and set alerts for events
6. To allow the school administration to receive feedback concerning their post
7. To allow students to view posts in preference to departments
8. To allow a user to download some posts.

## **Methodology**

Information concerning the system was gathered from the prospective users of the system. Data was collected by the use of direct observation of the current operations and interviews. Data has been collected from different users of the system and the information proves the need for an online noticeboard. From the findings, it occurred that everything pointed to the same challenge outdated channel of information dissemination.

## **Conclusion**

The online noticeboard is desperately needed in the Egerton University to ensure a smooth mode of communication between the administration and the students. From the results obtained, it is arguably evident that the system will be significant in increasing the access of information by the students as well as promoting the reduction of costs incurred during the printing of paper or posts.

# **CHAPTER 2: LITERATURE REVIEW**

## **2.1 Introduction**

Similar and relevant systems to the proposed system have been previously developed. It thus sufficed to analyze and evaluate their weaknesses and strengths so as to identify their capabilities and come up with a better system that suppresses the shortcomings of those earlier systems. The literature review would also help to give an interlude on how to develop a system that will serve users in a more efficient way.

## **2.2 Literature Review**

**Case studies:**

#### **Case I: Notice Board Pro**

McArdle developed a web-based application which he named noticeboard pro. This application allows users to post items of theirs for the purpose of advertising. These same users can also view other items posted by other users. The users of the system use the web-based noticeboard to publish and advertise such items as motors for sale, apartments to let, household items for sale among other properties. The users have two alternatives for viewing the advertised goods; they can choose to view all the advertised goods on the noticeboard or better still, choose to view goods displayed in particular categories such as household goods, electronics and so on. A user has to create an account and sign in before they are able to create or advertise an item (Shukla, Hedaoo, Chandak, Prakashe & Raipurkar, 2017, August).

#### **Case II: Virtual Notice Board**

Gurav, & Jagtap (2015), developed a virtual noticeboard using visual basic. This application focussed on a computerized system that could store information or notices of the chief, officials and the staff members of any enterprise. The members of the organization and the officials must create a valid account after which they can be able to create notices, edit them and update the notices. A user can select a notice and view it in the form of a data table.

#### **Case III: Electronic Bulletin Board**

Mansikkaniemi developed an electronic bulletin board whose target was to link the family members using their wireless gadgets. The devices of these members were to access a shared database that could bring forth a bulletin with notices created by any member of the family (Rajkumar, Phani, Sreerangam & Rohit, 2018).

#### **Case IV: HootBoard**

This is a bulletin board that links community websites such as those of organizations, universities, schools, neighborhood and government websites. This bulletin board boosts the creation of awareness of events, discussions, and documents as classifieds (Agbeyangi, Odiete & Olatinwo, 2017).

## **2.3 Conclusion**

From the assessment of the current state and initial systems, a good grasp of what is already known about the topic and how extensively the topic has been researched emerges. The review of work done by others helped in the identification of key questions about the project which needed further research. The literature review has assisted in the determination of methodologies that were used in the past for the same or similar project. This has been useful in modeling approaches that can further develop this system. New ideas have been identified as a result of the review of the existing systems and this promises that a more advanced and functional system will be developed.

# **CHAPTER 3: PROJECT OVERVIEW**

## **3.1 Introduction**

In the past, similar systems have been developed. The existing systems have been analyzed and their weaknesses identified in order to come up with a better system that serves users more efficiently.

## **3.2 Proposed Solution**

The E-Noticeboard system will be a web application which is expected to facilitate the dissemination of information from the school administration to the students and even the staff through an online platform. The users will have an account. The administration will post notices and the students will be expected to log in and view the posts and filter them based on different categories and departments. This will allow the users to access the notices remotely without having to travel to the usual physical noticeboards. It will also help to keep track the records for the notices. Information loss due to vagaries of nature, wear and tear usually experienced on the current physical noticeboard will also varnish. This system is expected to be helpful for all type of users. So, the admin will post both personalized and general notifications as well as erase notification when deemed necessary.

## **3.3** **Project Scope**

The system will have different modules which will have to be user-friendly to allow users to navigate easily and access what they want. The modules will be:

1. Registration module- This will ensure that all users have verified accounts to foster security.
2. Login module- All users will have to log in so as to access information.
3. View posts- The module will allow students and the staff to filter and view posts according to different categories
4. Post module- It will be on the side of the administration to allow them to post and upload files so that the target people can view.

## **3.4 Resources**

The resources needed to make this project successful are classified into hardware and software. These resources should be readily available so that the project can be completed in time.

**Software**

Text editor preferably Sublime text: This is a text editor used for programming multiple languages. It is preferred for its extensive functionality which includes color coding.

Django: This is a python framework that is used for web-based applications development. It comes bundled with a local server used for testing the system locally while in development. It also contains the SQLite database for testing before deployment.

Web Browser preferably chrome: A software that will be used to run the system because it will be web-based.

**Hardware**

A computer or a laptop- The device will be used for programming and development.

Ethernet cable/WIFI- These will be used for internet connection, which will be very necessary for research and aid development.

Smartphone- The gadget will be used to test the compatibility of the system to handheld devices.

## **3.5 Preliminary Results and Evaluations**

The system is anticipated to work perfectly. There should be no errors while interacting with the system both by the students, staff and the administration. The system must be able to keep logs, user-friendly and exhibit security.

## **3.6 Conclusion**

The proposed system will definitely be useful to the Egerton university fraternity especially the students. The system will have impeccable functionalities that promise to be beneficial. Through the convenience of a costless web-based bulletin board, users can retrieve the notices swiftly not only while within the campus, but also anyplace they could be and at whichever time.

# **CHAPTER FOUR**

## **4.1 Introduction**

Normally, a project must have a schedule that outlines how each module will be accomplished. A time frame must be drawn to show how deliverables will be completed and a budget to guide on how the resources and expenses will be met. This chapter, therefore, outlines the schedule and budget for this proposed system.

## **4.2 Project Schedule/Work plan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Task | Duration in weeks | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Project identification |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proposal writing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proposal presentation and acceptance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Data collection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Data analysis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| System design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Coding |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Project testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Project presentation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## **4.3 Budget**

|  |  |
| --- | --- |
| **Expense** | **Amount** |
| Internet | Kshs.1200 |
| Software download and Activation | Kshs.700 |
| System Documentation | Kshs.400 |
| Stationery | Kshs.200 |
| Miscellaneous | Kshs.350 |
| **Total** | **Kshs.2850** |

## **4.4 Conclusion**

It is highly believed that the proposed system will be completed, with fully functional features within the specified time-frame. The modules and deliverables will also be done within the indicated time. The expenses will be within the budget and the budget will highly be observed to ensure unnecessary expenses are not incurred.

## **Final Conclusion**

To sum up, the existing approach to information dissemination is a manual wall noticeboard. I have confirmed much weaknesses and unreliability. Hence, the proposed system will be worthwhile in digitizing information passing since the noticeboard will be easily accessible.

# **References**

Agbeyangi, A. O., Odiete, J. O., & Olatinwo, O. (2017). SMS-based automated e-notice board using mobile technology. *Int. J. Electron. Inf. Eng*, *7*(2), 53-60.

Gurav, R. K., & Jagtap, R. (2015). Wireless digital notice board using GSM technology. *International Research Journal of Engineering and Technology (IRJET)*, *2*(09), 2395-0056.

Rajkumar, T., Phani, S. S., Sreerangam, M., & Rohit, K. S. M. K. (2018). SMALL AND LONG RANGE WIRELESS ELECTRONIC NOTICE BOARD USING BLUETOOTH, GSM AND IOT. *International Journal of Pure and Applied Mathematics*, *118*(20), 689-694.

Shukla, A., Hedaoo, D., Chandak, M. B., Prakashe, V., & Raipurkar, A. (2017, August). A novel approach: Cloud-based real-time electronic notice board. In *2017 International Conference On Smart Technologies For Smart Nation (SmartTechCon)* (pp. 1416-1423). IEEE.