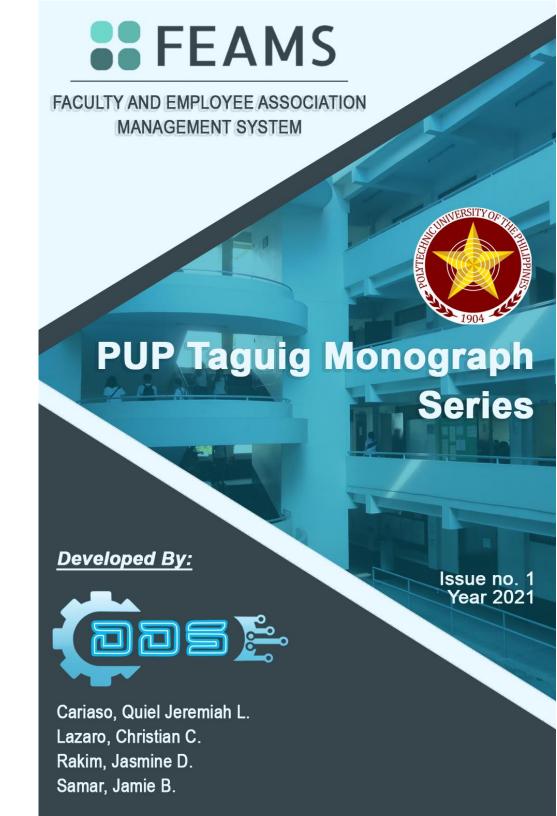


Published by the Polytechnic University of the Philippines
Taguig Branch
Printed by:Univerity Printing Press
Year 2021



THE AUTHORS

LAZARO, CHRISTIAN C.

Project Leader and Lead Programmer lazarochan03@gmail.com

CARIASO, QUIEL JEREMIAH L.

System Analyst quieljeremiahcariaso04@gmail.com

RAKIM, JASMINE D.

Document Analyst rakimjasmine@gmail.com

SAMAR, JAMIE B.

System Designer

Samar.Jamie@gmail.com

ABSTRACT

The Faculty and Employee Association Management System (FEAMS) introduces to the association of Polytechnic University of the Philippines – Taguig Branch to manage, monitor, retrieve and update its system. It is developed as a collaborative strategy to ensure the effectiveness and efficiency of multi-objective functions that aims to supports the associations vision and goals. These give the member of association access to information regarding events and activity announcement, the eligibility in casting vote in election, participate in discussion, upload and download certain file/document needed and to constitution amendment.

Engagement is an active state that is influenced by interaction or lack thereof (Leece, 2011). With the advancement in information technology, the virtual world becomes the storehouse of the information. This exposes organizations to a lot of new resources and opens and keep up with the world's digitalization momentum.

INTRODUCTION

Online social platforms that is used for collaboration is fast becoming a permanent feature of the modern workplace especially during this uncertain time of global pandemic where we made a lot of changes to our best practices. While many employees start to do some work remotely, many companies and organizations are still trying to adjust to this paradigm shift.

Working from home means more distractions, fewer ways to interact naturally with fellow employees, and more social isolation — all of which can lead to less productivity. To overcome these challenges, employers should explore new ways to manage to collaborate and enable more ways for employees to connect with each other. As we are all at home, keeping ourselves online is set to be the new standard approach of interaction that help to sustain collaboration and staying committed to our designated roles. The cost-effective technology allowing employees to work together anywhere, at any time using any internet-enabled device has made everyone not only work faster but also easier. In exploring ways and resources for knowledge and understanding of the new environment we often get confused as it might invade our personal privacy. How do we know the appropriate platforms for specific function? Is it efficient, can boost productivity and even reliable to use?

Associations provide support and advice to faculty and employees to help them better understand their rights and obligations in the workplace. The social, environmental development process and decision-making power of employee shall also be considered to build healthy workplace to each other. There are three major reasons that associations hold value. They are: Networking, Standardization, Personal and Professional Development (Wilkins. 2020).

The Faculty and Employee Association is an association in Polytechnic University of the Philippines – Taguig Branch located at General Santos Avenue in Taguig and it is headed by Dr. Marissa B. Ferrer as the Branch Director, along with the branch officials. Quality and relevant education. These are the key words and the main objective for the establishment of the said university. Government and University officials envisioned the university to become the fundamental wellspring of commercial and industrial managers and employers that will fill in the job vacancies in the area, particularly now that the region is fast becoming an industrial zone that can employ thousands of workers. The social, environmental development process and decision-making power of employee shall also be considered by the association to build healthy workplace to each other.

METHODOLOGY

The Agile Software Development Life Cycle or also known as Agile SDLC Model is the method that the researchers used to create and develop the foundation.

Figure 1. Agile Methodology



Requirements Phase

Within This First phase, the members collected pieces of data or information regarding the problem of the research project. This includes the scope of the system, goals and objectives of the system, The requirements and the specifications in building the software needed in the organization particularly, in file management and other rules for the system. We also determine the activities and work required in order to finalize the system.

Planning Phase

This phase is one of the most crucial in the life cycle of the system, the pre-project planning or concept phase. The reason is that this phase will serve as the basis of the entire process and it includes the sustainability of the project after it's completion. It is where the projects are viewed and prioritized. Within this phase, objectives, assigned work and positions for the group members are made and timeline, initial environment and requirements are to be discussed. Certain procedures such as looking for potential tools to utilize in the system development, what software life cycle method is right for the system, then also the programming languages to be used are identified as well.

Design Phase

Required in this phase is the knowledge from planning phase to be discussed and structured. This is the third phase of SDLC, Which is where the group regulates the process flow when building the application. This is where the logical structure and design of the system is developed. Within this phase, the team members will create diagrams that are required to identify the functions required for the transaction within the system. Included here also is the planning of the database structure, especially the simplified or the normalized one. The architecture of the system is also identified here, which is the client-server architecture.

Develop Phase

This is the fourth phase of the SDLC. This is also the longest phase since the discussed objectives and plans are finally executed, quality assurance is also included here. Within this phase, The actual execution of the logical design is utilized and is iplemented into the system. Within this phase is where the actual coding is being done then right after the implementation of all the current planned designs of the system, the Quality Assurance Tester will

provide test cases to see if the functionalities are working smoothly. The other testing phase is the alpha testing, which is where the testing is done by other group members or users. The final testing phase is the user acceptance testing which is where all of the users involved within the system are able to utilize the system based on what transactions they can do.

Release Phase

The fifth phase of SDLC. Wherein the system is all ready for the client to use. The fixing or revisions of some errors or defects spotted during the testing phase is done if there are some, also, the end users will be trained in using the system. Within this phase is where the software will finally be deployed and will be usable for the end users.

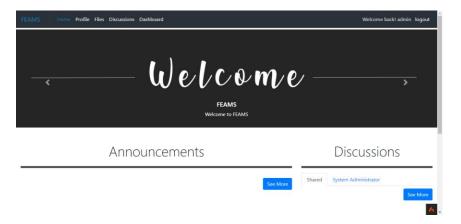
Track and Monitor Phase

Within this phase, right after deploying the system, the system will be properly monitored if there are still some problems that may pop up and needs to be mantained from time to time. At first, the amain objective is to keep the system productive and useful after it's been deployed to the intended users.

RESULT AND DICUSSION

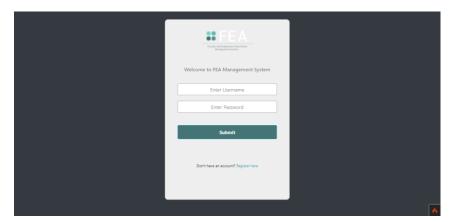
Shown below are the screenshots of the Faculty and Employee Association Management System (FEAMS).

Figure 2. System Home Page



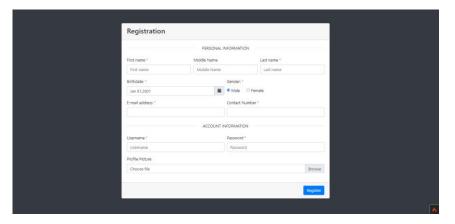
System Home Page - This will be the first page that the users will encounter upon visiting the site. It contains a slide which shows the banners of different events, the announcements and then the discussions. On the upper right corner shows the Login Button which redirects you to the Login Form.

Figure 3. Login Form



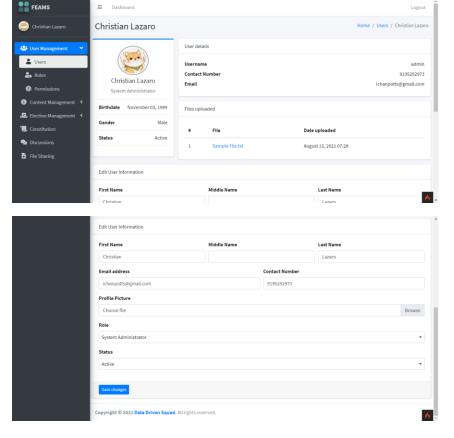
Login Form — This is where the registered users input their credentials in order to log in the site. It also contains the User Registration button where a user can create an account if they haven't yet.

Figure 4. Registration Form



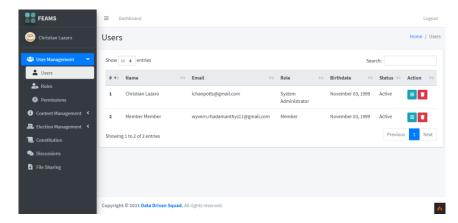
Registration Form – In oreder for the user to create their accounts, they must fill out the required fields within the form. A verification code will then be sent to the user's email to activate their account.

Figure 5&6. User Information

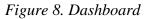


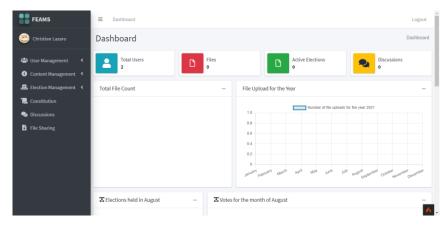
User Information – Shown here are the basic information of the current user. This can be edited if the user wants to change a certain field.

Figure 7. User List



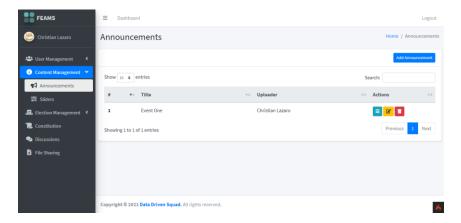
User List - Shown here are all the users registered in the system.





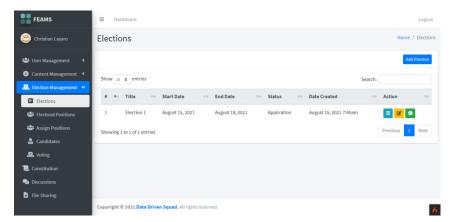
Dashboard - This is where the users will be directed to upon logging in to the site. It contains a visual display of all their data.

Figure 9. Announcements



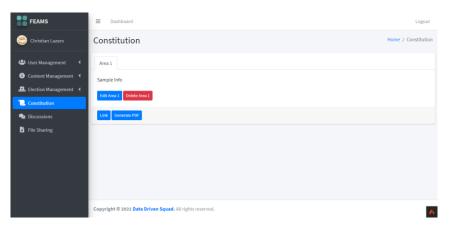
Announcements - The user can create their announcements here for important news or events.

Figure 10. Elections Page



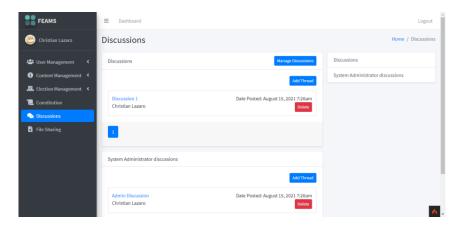
Elections Page – Elections can be created here

Figure 11. Constitutions



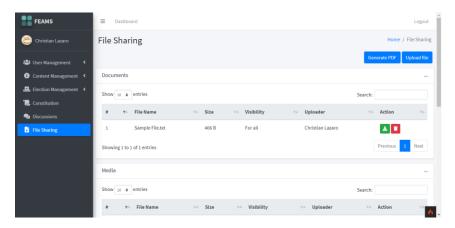
Constitutions – The admin can post or upload rules and regulations related to the elections

Figure 12. Discussions



Discussions – Forums wherein different members within the system can discuss certain topics, concerns and other important matters.

Figure 13. File Sharing



File Sharing – Users can upload and Share their files here. It can also be used to back up your files.

Results

The following figures show the results of the findings of the study after testing the system. In the alpha testing, the survey used was based on the ISO 25010 and the rating is based on the Likert scale which is mentioned before, that ranges from one (1) to five (5). The Likert Scale used is shown below.

Numerical Rating	Interpretation		
1.0-1.49	Strongly Disagree		
1.5-2.49	Disagree		
2.5-3.49	Neutral		
3.5-4.49	Agree		
4.5-5.00	Strongly Agree		

CONCLUSION

In conclusion, online collaboration and interaction has set to be the new-normal way of socializing as we face the COVID-19 pandemic, the use of different platforms who gained much popularity due to its potential in enhancing the interaction process and approach has compromised not only the time spent but also the spread of different information. We propose a didactical approach of online collaboration, called Faculty and Employee Associtation Management System (FEAMS). FEAMS offers a unique collaboration platform in which the employee can collaborate, using just a web browser, both while being in the comfort of their homes. We design the overall FEAMS collaboration platform to be fast, responsive and scalable, and keep the user interface easy and simple to meet user demand and satisfaction.

Often, the manual process and transaction before results in errors resulting to more complicated problems which we want to avoid especially regarding to inaccurate reports and transactions, inefficient retrieval of records.

RECOMMENDATION

To be able to address the problem and give solution therefor, the researcher proposed a system that will be able to replace the time-consuming process for administrators in leadership tracking, compiling and reporting on faculty and employee. It is also made to engage and made a connectivity promises of employees to the association they belong. Faculty and Employee Association Management System (FEAMS) will provide services to help associations save time, stick to best practices, and meet internal requirements and/or external regulations. It will be also made to be more secured by enhancing the security protocols of the system to protect the association's details and users credentials.