AN ONLINE MULTIMEDIA SYSTEM FOR INTEGRATED SOUTHERN TAGALOG ASSOCIATION OF INFORMATION TECHNOLOGY EDUCATION (ISITE)

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ABSTRACT

In recent years, many web-based organizations have evolved. One of these organizations is ISITE, which was developed in this study. It aimed to create an Online Multimedia System designed for ISITE.

The online Multimedia System was developed to help IT educators and students who want to become part and members of ISITE particularly in Region IV-A. To the members, this Online Multimedia System will help aquaint themselves in the activities done by the organization and to enable them to apply for online membership. This Online Multimedia System will also be a means of giving updates to members and non-members of the organization.

Keywords: *Integrated Southern Tagalog Association of Information Technology Education; Multimedia System; Online Multimedia System; Organization Webpage*

1.0 INTRODUCTION

The improvement of the Internet is a standout amongst the most critical changes in the 21st century. The Internet is a moderately new specialized gadget that gives individuals access to data from anyplace on the planet, through a PC, modem, console or portable [4].

Marketing has various tools for product promotions and one of them is a website of the organization which is also one of the proof of authenticity of the company's existence. Websites are also known as one of the platform where customers and company interact directly or indirectly [16].

Innovation has made to effectively interconnect with each other. A focused field that empowers introduction to shoppers around the world,. The sensational recommendations for any business considering the Internet has potential for presentation as a promotional vehicle. The notoriety of Internet destinations, where clients may examine their emotions about organizations and items, it permits an expanded investigation of all angles in business [23].

With different promotional strategies available today, the officers of the Integrated Southern Tagalog Association of Information Technology Education (iSITE) prefer to use the Internet, specifically Facebook to promote the organization. iSITE (Region IV-A) was established as a local chapter on September 22, 2015 to become a medium for reaching IT educators in Southern Tagalog Region particularly CALABARZON area. This organization helps promote quality and excellence in IT education in the Philippines. The organization has individual and institutional members, who are IT educators and practitioners.

The need to further reach out interested students, IT educators and practitioners, prompted the researchers to develop an online multimedia system in order to help the organization in information dissemination and recruitment of members.

The system will have several links: HOME, News and Events, About Us and Members. The system will also enable the users to register so as to become a member, and will be approved by the administrator.

1.1 Objectives of the Study

The study attempted to attain the following objectives:

1. To develop an online multimedia system for iSITE using XAMPP, PHP and MySQL in the development of the Multimedia System.

2. To provide an additional promotional tool to disseminate information and reach out IT students, educators and practitioners.

3. To create an online multimedia system that can easily interact with students, professor, and schools

2.0 LITERATURE REVIEW

Website Development

Sites have huge energy to make early introductions. A large number of us progressively depend on the Internet for data about scholarly projects, individuals, and foundations including some imminent and current understudies and representatives [15].

The Internet and the World Wide Web have become an important part of our world. In approximately a decade, the Web has grown from a theoretical concept to a daily part of our lives. Furthermost for-profit companies, non-profit organizations and schools and universities either currently have websites or plan to create them. More information is being made available on the web every single day. The number of web users has grown tremendously. The web has truly become an important tool in all levels of the society [14].

Trends in Web Application Development

A Web application is an application that is summoned with a Web program over the Internet. The Internet has turned into a stage of decision for an expansive number of perpetually refined and propelled Web applications since it wound up plainly open to the general population and particularly in 1995 when the World Wide Web put a usable face on the Internet. The Web has advanced from being a store of pages utilized basically to access static, for the most part logical, data to an intense stage for application improvement and arrangement in only one decade. New Web advances, dialects, and approaches make it conceivable to make dynamic applications that speak to an alternate model of participation and coordinated effort among huge quantities of clients. The improvement of web application has rushed to receive programming designing methods of part introduction and standard segments. Tests like, pursuit, syndication, and labeling have turned out to be standard parts of another age of synergistic

applications and procedures [11].

As mentioned by Kohan, B. (2015), sites are web applications which are dynamic in nature and utilizations server-side programming to permit a decent association between the client frame at the front end, and the database at the back-end. It incorporates applications which are not restricted to the accompanying: Online Banking, Online Reservations, web based business or Shopping Applications, Online Training, Online Polls, Blogs, Online Forums, Social media locales, Location based administrations, and Content Management Systems. In view of their capacity to give multiuser interface; incorporated support and updates; thin customer coordination; disseminated preparing; multilingual programming; and cross stage interoperability utilizing either the Internet, Intranet or Extranet innovations; web applications are generally liked to their disconnected partners. Most application engineers are changing over their legacy applications to the Web stage since Web applications have turned out to be extremely prominent in the product showcase. Henceforth, today, Web bolstered for all intents and purposes a wide range of uses. These applications extend from little scale administrations to huge scale venture programming.

Early web executions are just in view of the low level apparatuses that don't bolster abnormal state deliberation for sharing and reuse. It is hard to make structures that upheld the reuse of various existing parts in view of absence of fitting reflections. As per Athula Ginige (2014), the development of web application in the late 90s, Web (programming) engineers understood the requirement for modularization of worries to oblige enormous and complex applications. Thus, advances like Document Object Model (DOM) and Extensible Markup Language (XML) which cares question arranged standards, (for example, modularization, epitome and deliberation) were created. This crossed over any barrier amongst higher and bring down level usage Today unalike systems and devices have been created with extraordinary help of protest situated idea for web application improvement (Gellersen, H. and Gaedke, M. 1999).

MULTIMEDIA DEFINED

The utilization of a few media to exhibit data is called sight and sound. It might incorporate content, designs, activity, pictures, video, and sound. Teachers and different experts have been utilizing interactive media for a considerable length of time. For instance, it isn't exceptional for instructors to help a unit on Ancient Civilizations with computerized video and sound from the Internet or DVDs, alongside pictures, content, and antiques. In years past, instructors may have bolstered a similar unit with paper outlines and charts, bound reference books, and simple video, film strips, or slides. The present innovations, will enable instructors and students to coordinate, join, and cooperate with media a long ways past what was already conceivable.

"Hyper" conditions, similar to hypertext, hyperlinks, and hypermedia, have added to the multifaceted nature and advancement of sight and sound's significance of giving electronic, nonlinear ways to deal with traveling through an assortment of data. These situations enable clients and makers to customize the conveyance, markup, and association of the substance [3]. Hypertext encourages connection amongst perusers and messages by sorting out and connecting data. This can make affiliations, definitions, illustrations, and different connections between the content sections (Rouet, Levon, Dillion, and Spiro, 1996) ; (Salmeron and Garcia, 2012) ; (Vandendorpe, 2009). Hyperlinks interface message in the undertaking to outer records or sites. Hypermedia includes video, illustrations, or sound documents to hypertext. Consolidating these components brings about more noteworthy perception, review, and surmising (Chambers et al. 2008 ; Fabio and (Antonietti, 2012) ; (Jones 2009) ; Wilson, 2008). These multimodal ways to deal with training viably oblige understudies with assorted learning and intellectual styles (De La Paz and Hernandez-Ramos, 2013) ; (Fabio and Antonietti, 2012) ; (Kay and Knack, 2009) ; (Spence, 2009) ; (Wieman, Perkins, and Adams, 2008). Also, hypermedia applications are more qualified to transmitting learning that isn't effortlessly passed on through print or verbal clarifications (Dikshit, Garg, and Panda, 2013) ; (Stelzer, Gladding, Mestre, and Brookes, 2009) ; (Urban-Woldron, 2009).

3.0 METHODS

3.1 Research Method

In this capstone project, the researchers utilized the Web Development Life Cycle to ensure project consistency and completeness. WDLC consists of several phases namely:

1. Analysis- This is the most essential stage. The scientists will take at the general motivation behind the site and how it will

communicate to the clients. The analysts additionally met the president of iSITE for a few information sources that will be incorporated into the site

2. Specification Building- All of the elements found in analysis stage are included in the preliminary specification document. The researchers will collaborate on the appearance of the website. The site navigation, dynamic parts and general lay out were also planned.
3. Design and Development- The researches will begin constructing the site after the detail is acknowledged and the proposition is closed down.
4. Content Writing- Site is Essential at this Phase. The substance put together by the customer is added to the site pages and changed to give better outcome on web indexes. An exhaustive keep an eye on the syntactic and spelling is likewise done at this stage.
5. Coding- After the substance has been included, the engineer should then include the usefulness and highlights that are important.
6. Testing- To ensure that there are no issue for the customer, a total testing design ought to be accumulated and completed. This ought to likewise incorporate the live testing to ensure that every one of the connections are working.
7. Social Media Optimization- After the site is live, website improvement begins. URL is submitted to web search tools, the catchphrases are broke down, a sitemap is made and so on. Website design enhancement is a progressing procedure since web search tools dependably change their necessities and systems. Web-based social networking like tweeter and Facebook ought to likewise be utilized to guarantee that the webpage can rate high. The data sources are the data on the customers' rival and locales with content.
8. Maintenance and Updating- It's noteworthy that sites ought to be every now and then refreshed to keep them fascinating and new. The analysts gave an administrator part to the alteration and support of the site.

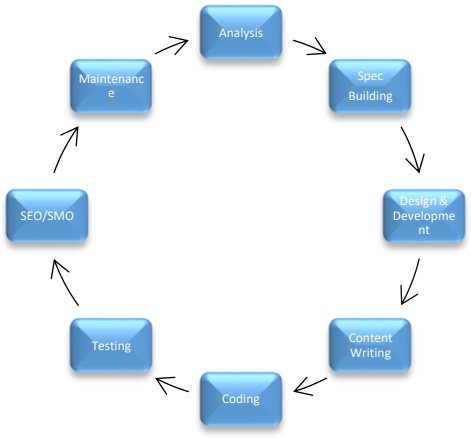


Fig 1: Web Development Life Cycle

3.2 Research Design

WEB CONTENT MANAGEMENT SYSTEM

The importance of CMS has been transforming after some time. Basically, it is a holder to gather and store some sort or sorts of computerized resources - reports, pictures, recordings, and whatever a library or other establishment has in advanced frame. Web CMSs are a particular kind of CMS. They are utilized by associations as a system for regulating open confronting sites and, less every now and then, for intranets as well as extranets. The greater part of the web CMSs share a typical element. The reason for existing is to make it simple for a little gathering of substance makers to distribute content utilizing a predictable look and feel, without having to know how to compose code or alter HTML [6].

MySQL

A database is regularly put away in at least one related documents. It is a requested gathering of information that are organized as tables, where cross references among tables are conceivable. Such relations among the tables on a database is the thing that we called a social database.

Cases of social database frameworks are MySQL, Oracle, the Microsoft SQL server, and IBM DB2. Such frameworks incorporates the projects utilized for overseeing social databases. The errands of a social database framework are the safe stockpiling of information, as well as occupations, for example, the handling of charges for questioning, dissecting, and arranging existing information and for putting away new information. This handling ought to have the capacity to occur on a solitary PC, as well as finished a system too. We should frequently talk about a database server rather than a database framework.

PHP

PHP: Hypertext Preprocessor is a widely used, general-purpose scripting language that was initially designed for web development to produce dynamic and interactive web pages. Imbedding a PHP code into the HTML source document which is then interpreted by a web server with a PHP processor module generates the web page

document [34]. It is a general-purpose scripting language that is especially suited to the server-side web development where PHP generally runs on a web server. To create dynamic web page content, any PHP code in a requested file is executed by the PHP runtime. Aside from this, it can also be used for client-side GUI applications and command-line scripting. PHP can be deployed on most web servers, operating systems and platforms, and can be used with many relational database management systems. Its use is available free of charge, under the PHP License [35]; and the PHP Group provides the broad source code for

users to build, customize, modify and extend for their own use. PHP supports the imperative, procedural, object oriented, and the reflective programming paradigms.

XAMPP

XAMPP is a light Apache appropriation in a solitary bundle, containing the most well-known web advancement innovations. It is the perfect device for understudies creating and testing applications in PHP and MySQL because of its substance, little size, and versatility. XAMPP is accessible as a free download in two unequivocal bundles: full and lite. The full bundle download gives an extensive variety of advancement devices and vital innovations. As the name XAMPP lite suggests, the light form is a littler bundle containing Apache HTTP Server, PHP, phpMyAdmin, Open ssl, MySQL and SQL.

4.0 DISCUSSIONS

4.1 FLOWCHART

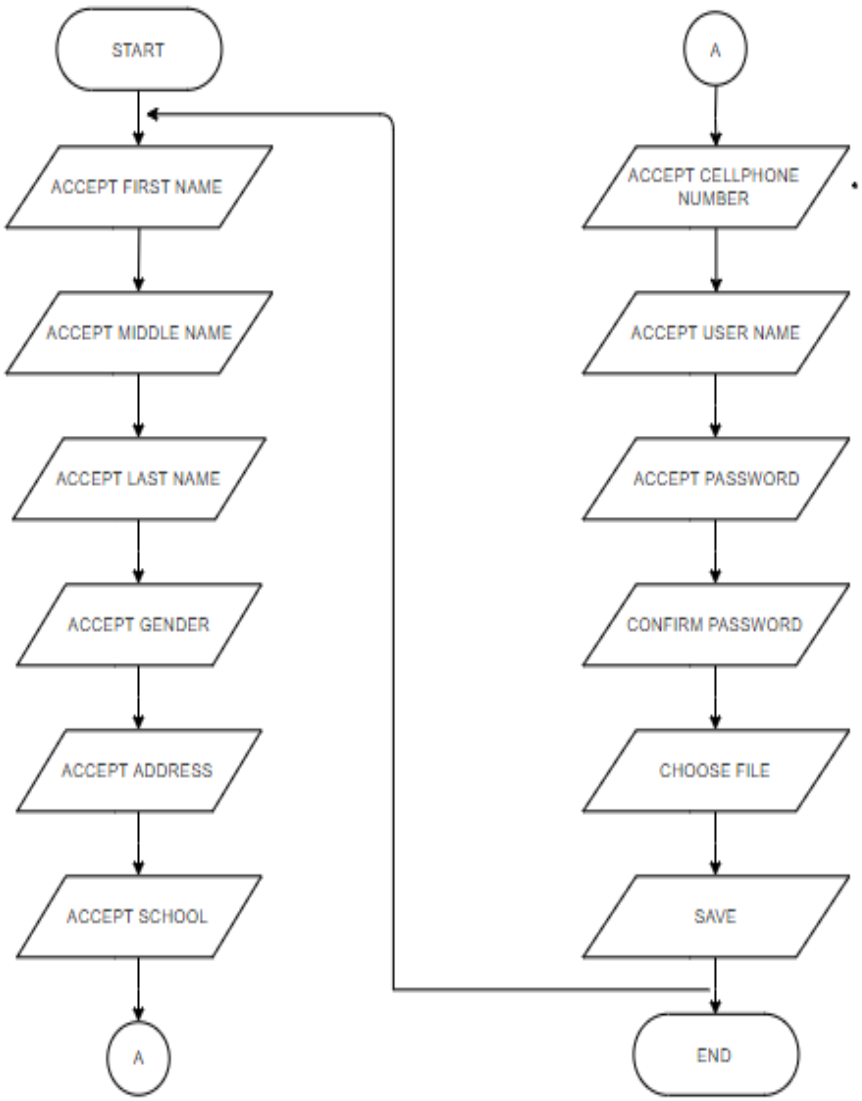


FIGURE 2:

SIGNUP PAGE

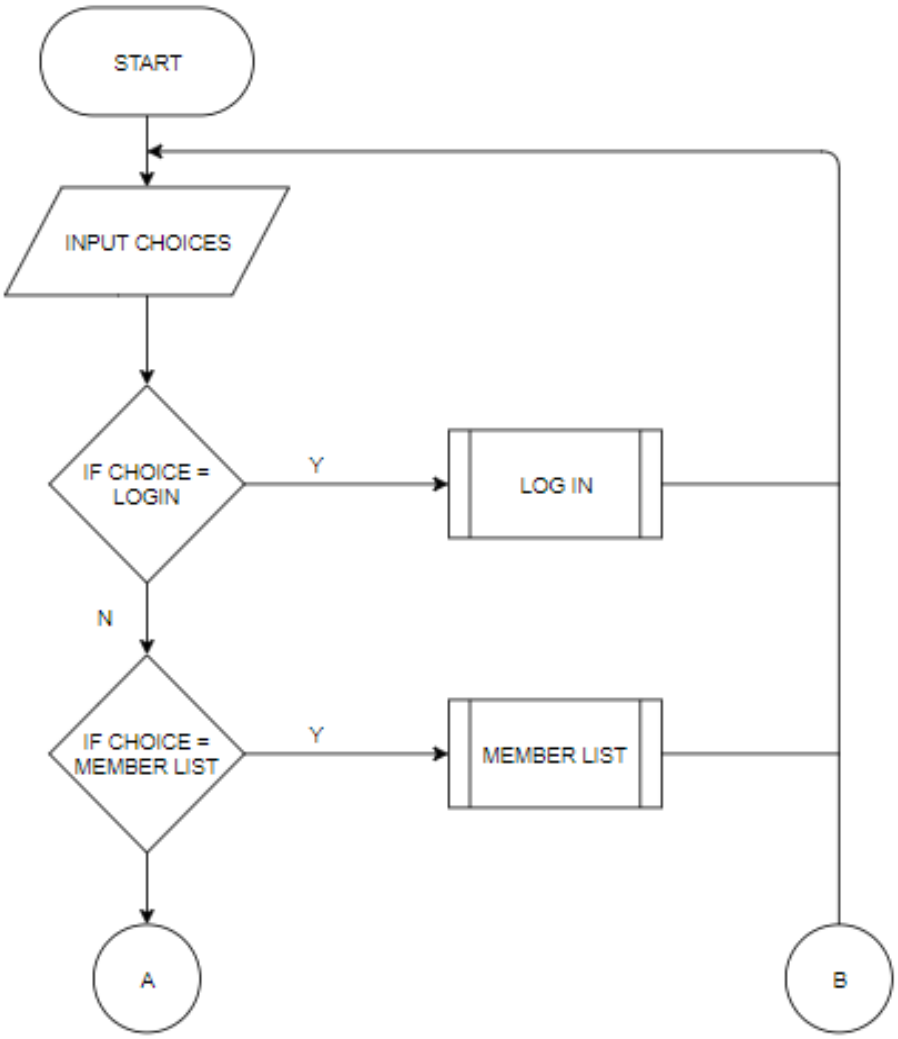


FIGURE 3:

HOMEPAGE (ADMIN)

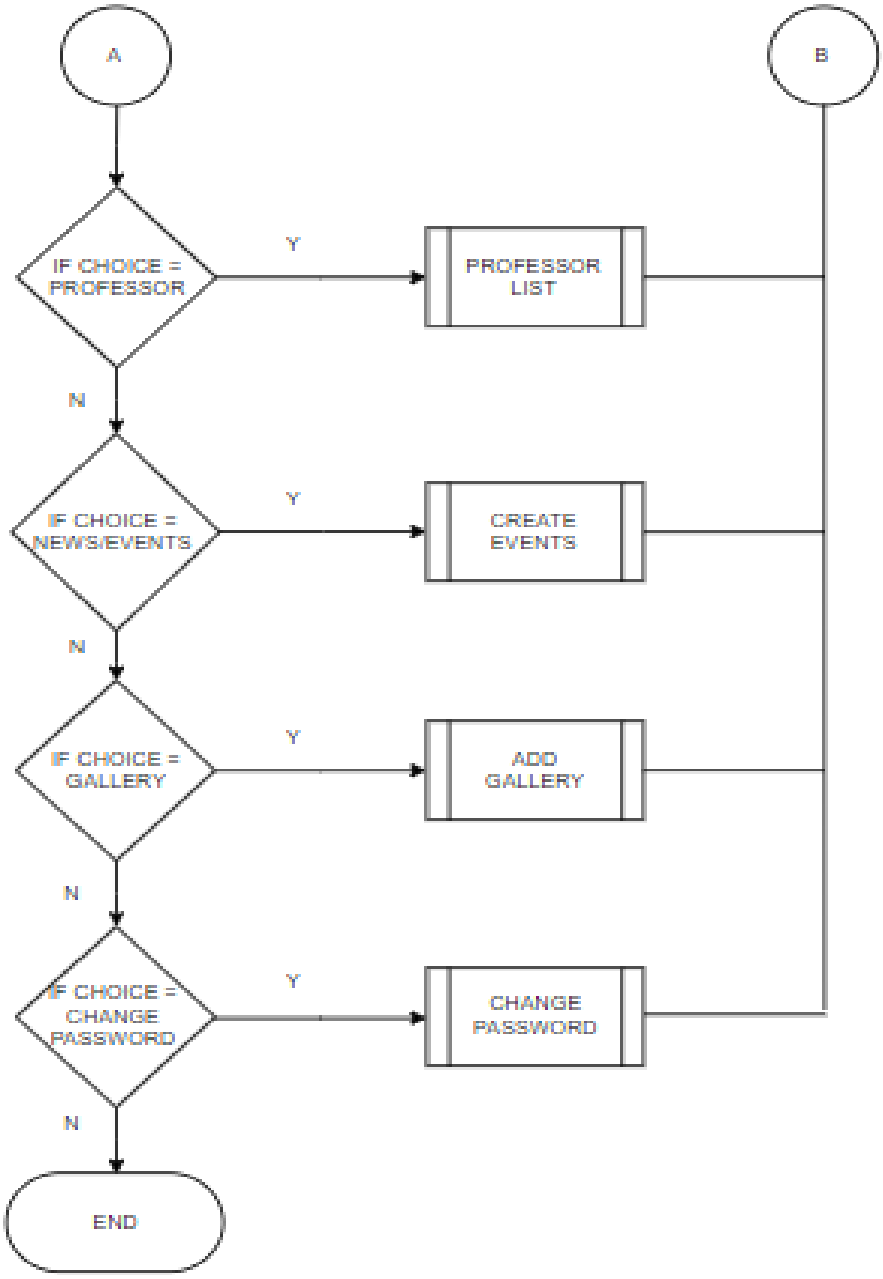


FIGURE 4:

HOMEPAGE (ADMIN)

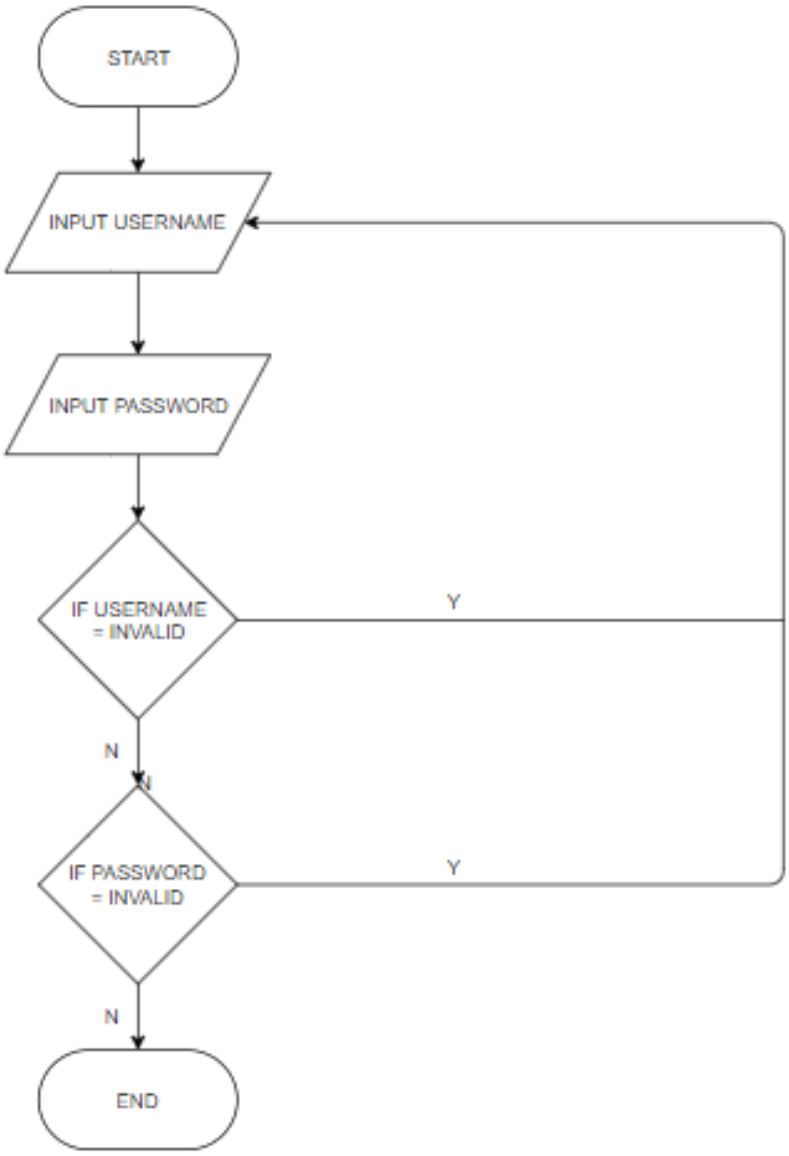


FIGURE 5:

LOGIN (ADMIN)

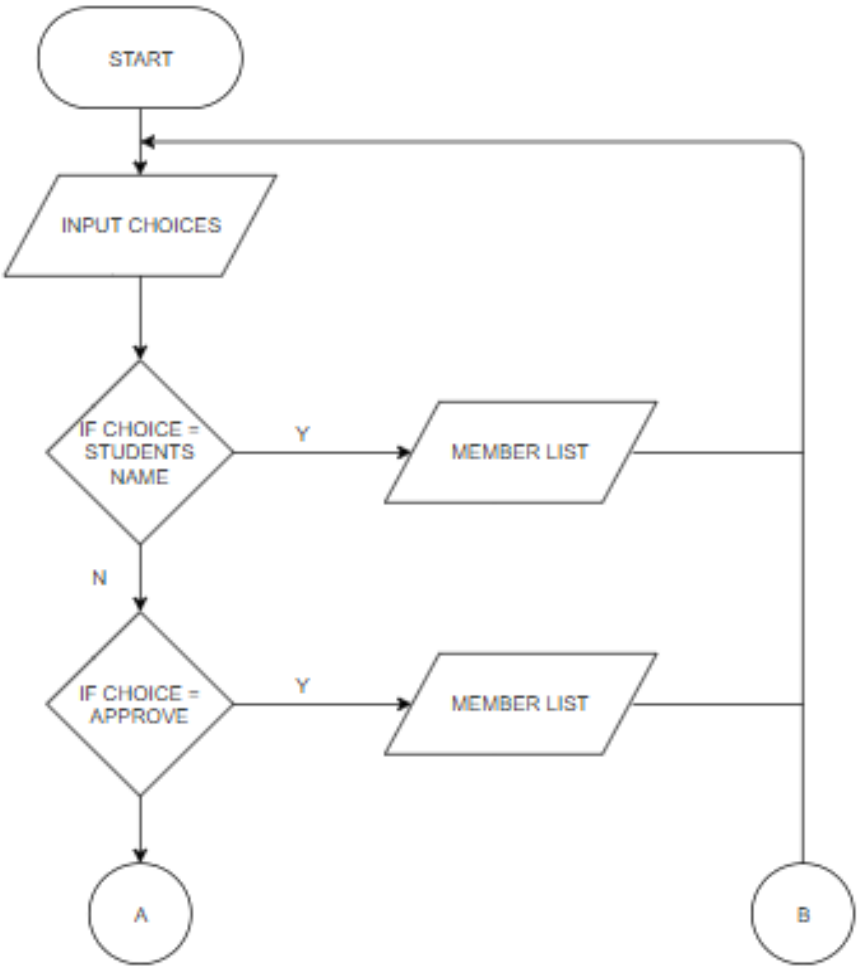


FIGURE 6:

MEMBER LIST (ADMIN)

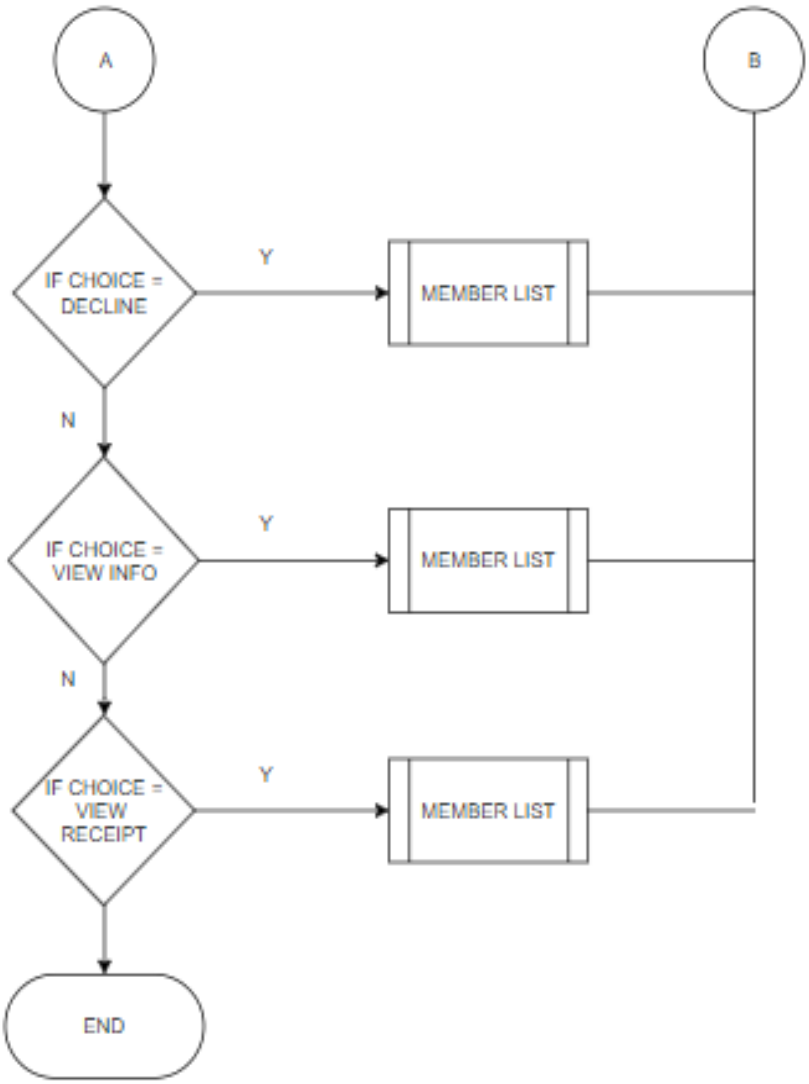


FIGURE 7:

MEMBER LIST (ADMIN)

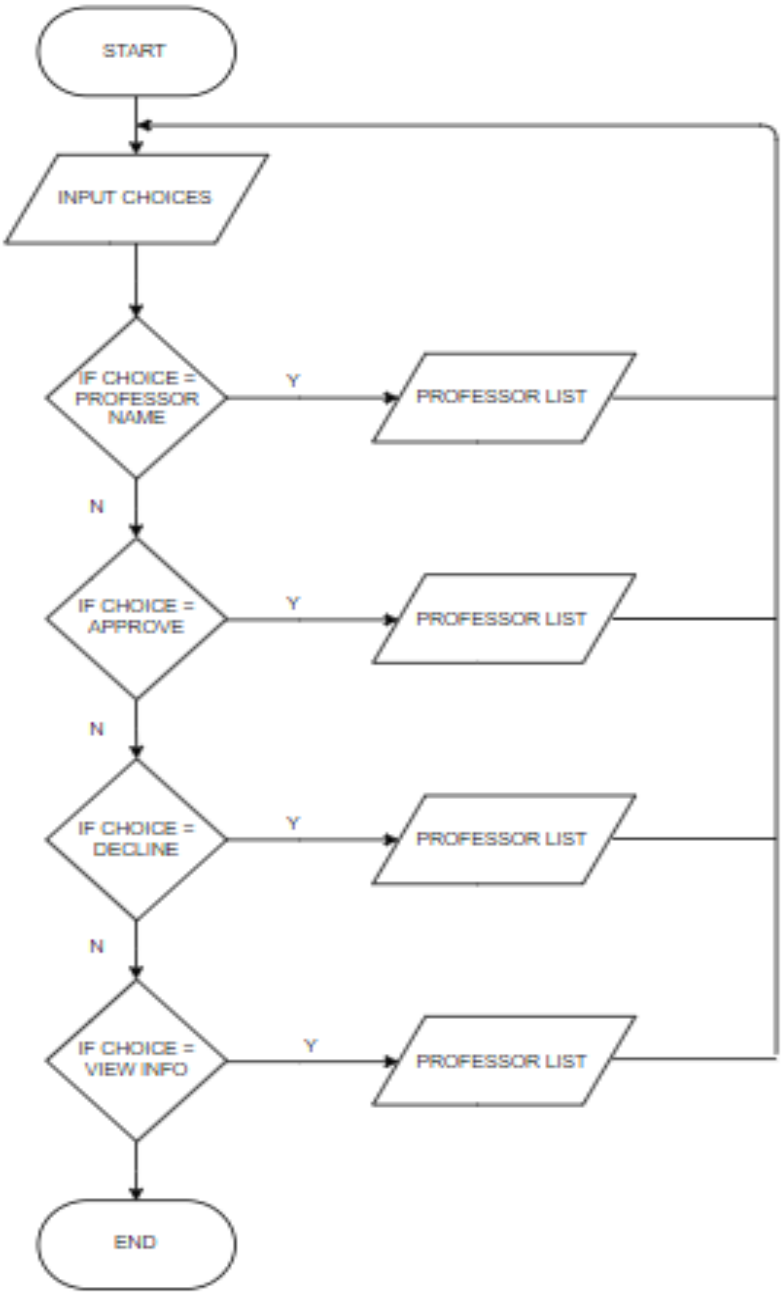


FIGURE 8:

PROFESSOR LIST (ADMIN)

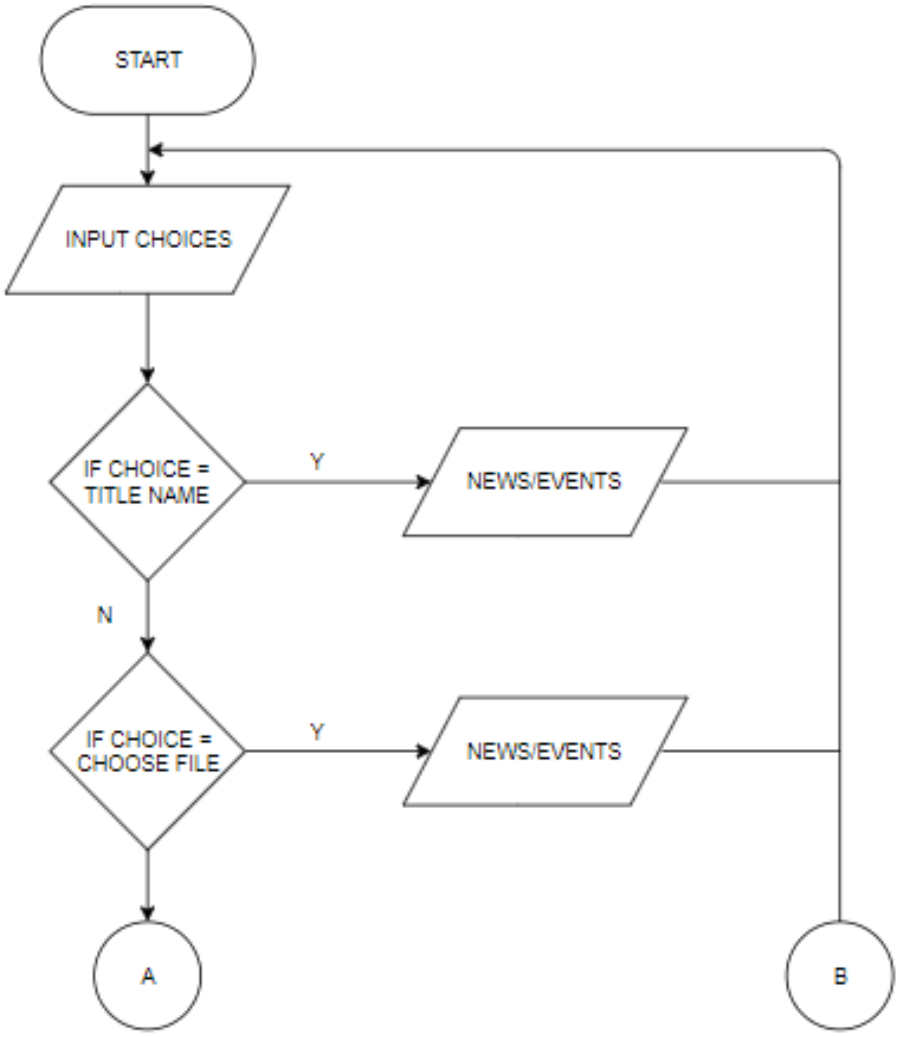


FIGURE 9:

NEWS & EVENTS (ADMIN)

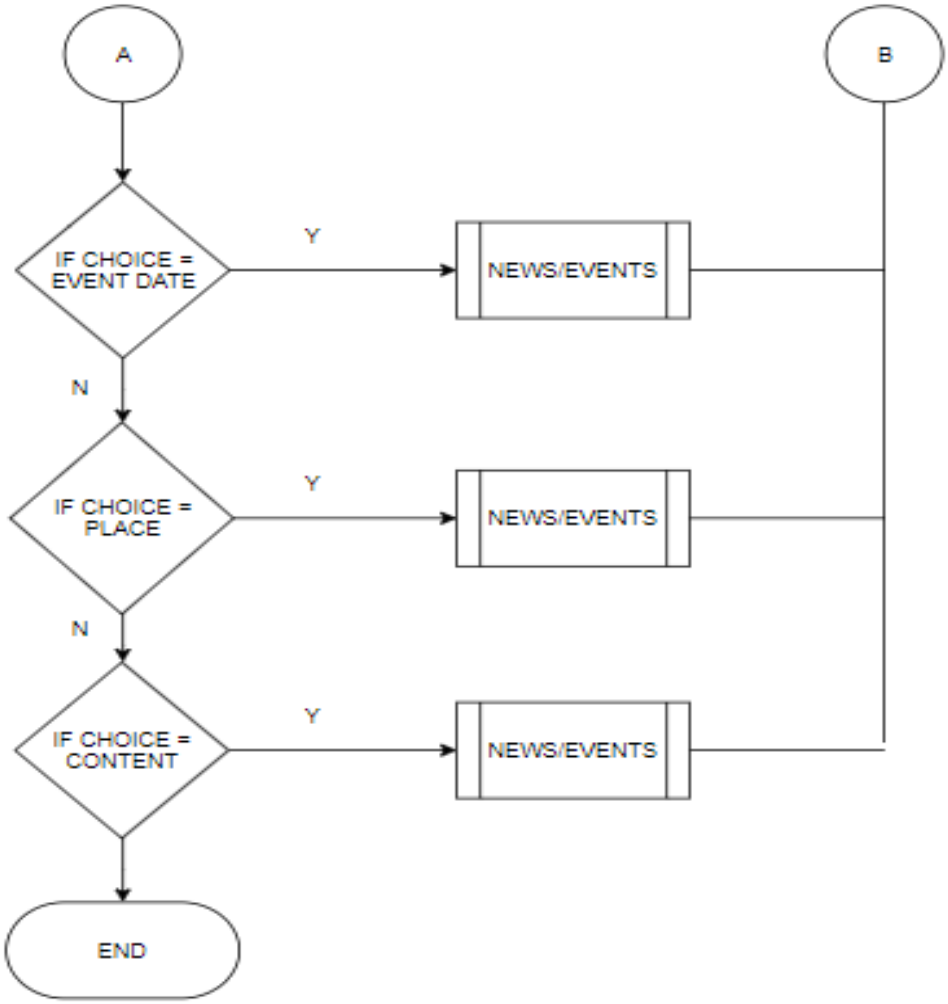


FIGURE 10:

NEWS & EVENTS (ADMIN)

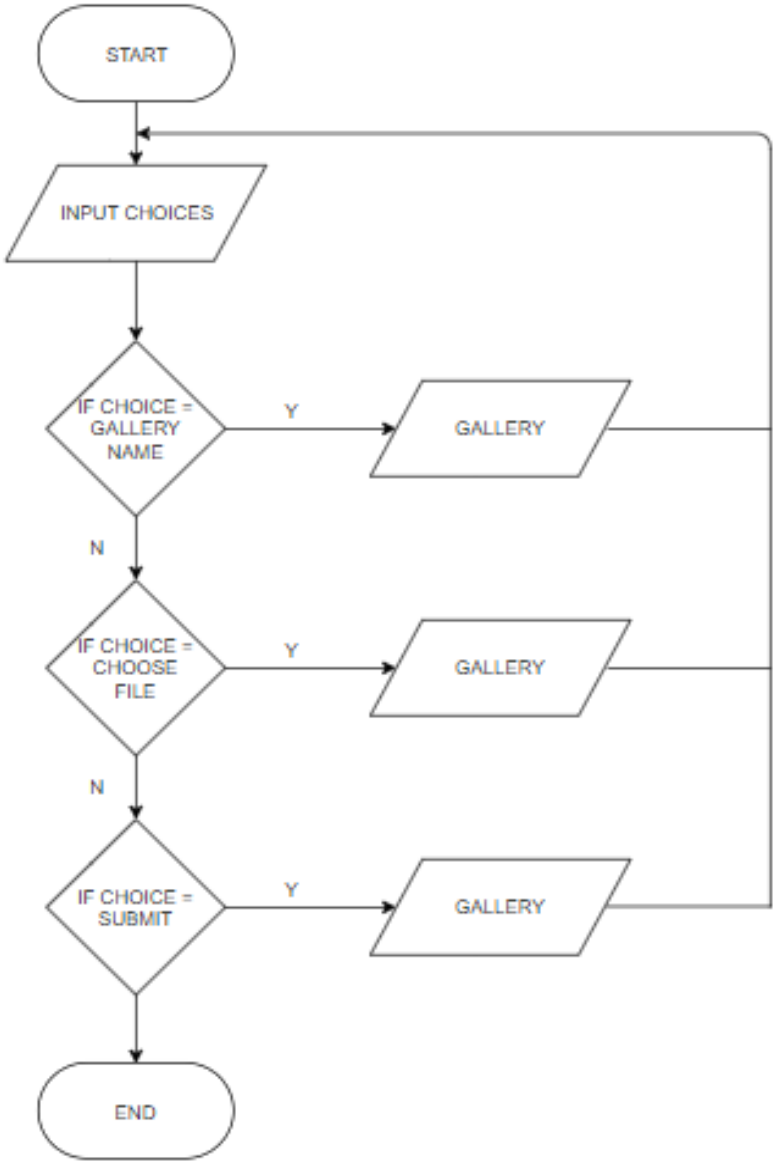


FIGURE 11:

GALLERY (ADMIN)

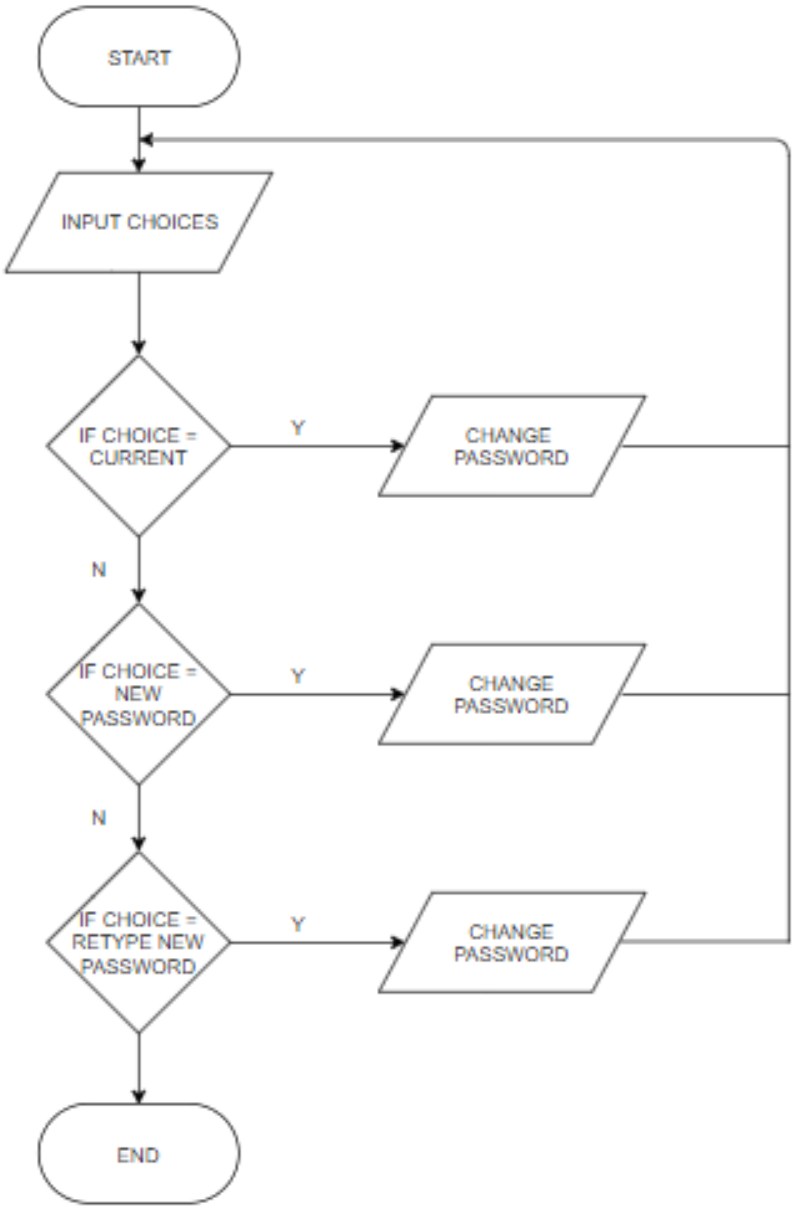


FIGURE 12:

CHANGE PASSWORD (ADMIN)

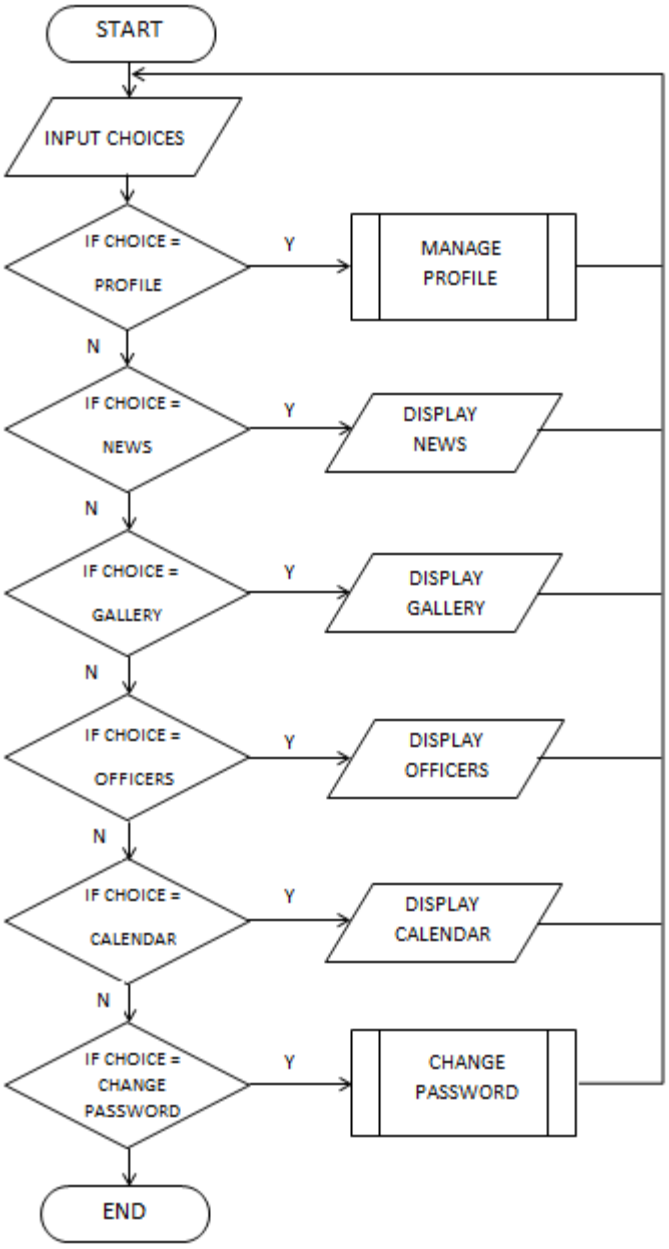


FIGURE 13:

HOMEPAGE (STUDENT)

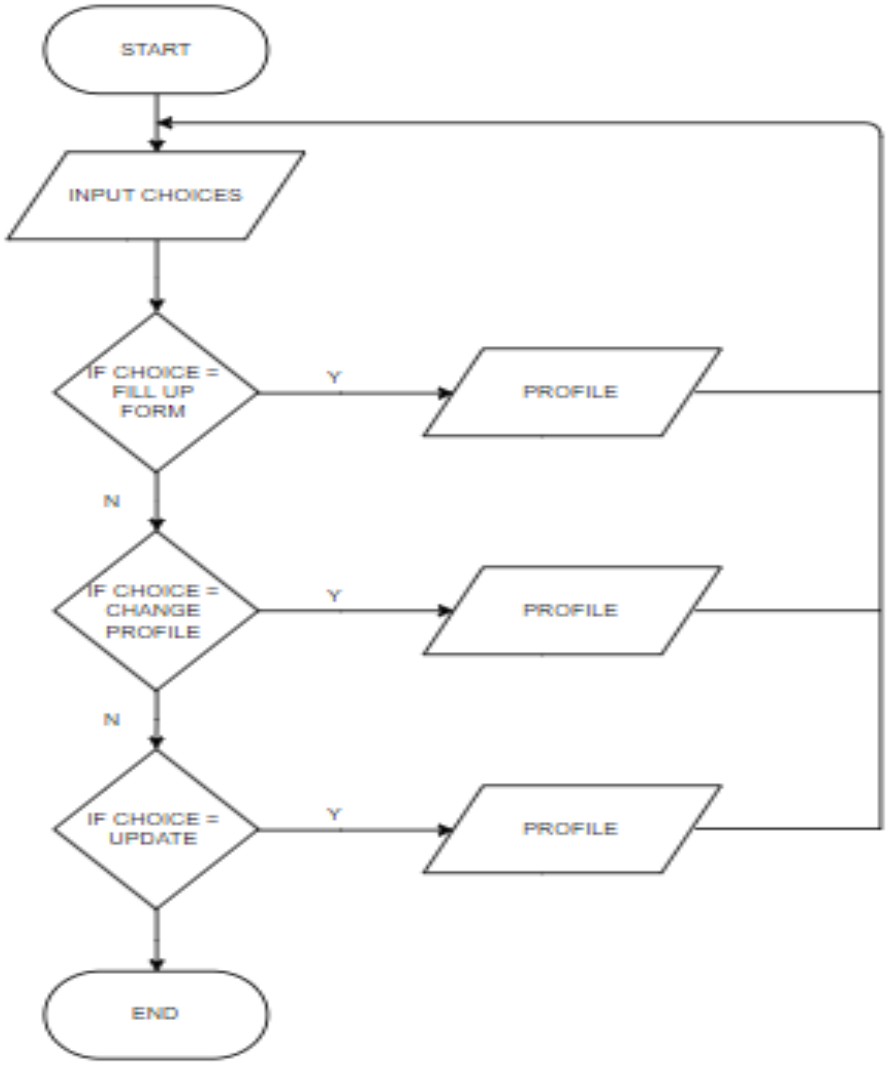


FIGURE 14:

PROFILE (STUDENT)

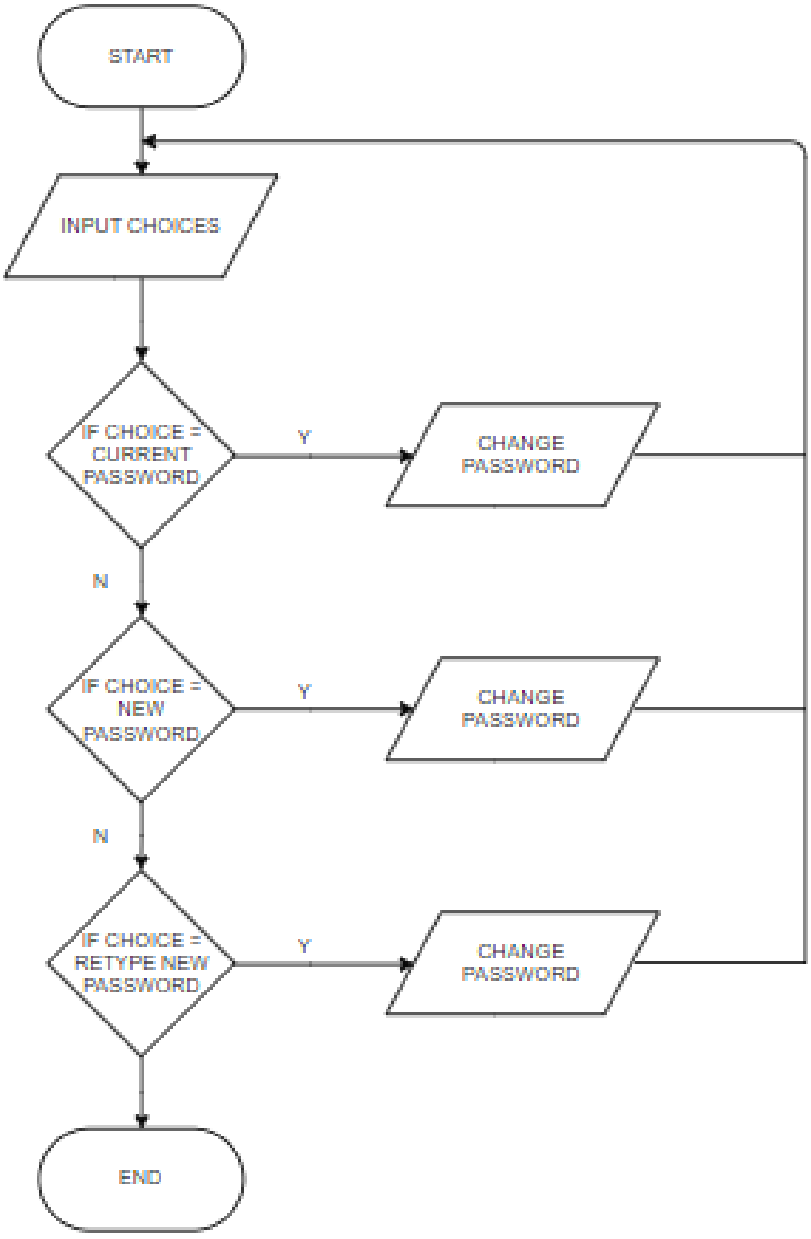


FIGURE 15:

CHANGE PASSWORD (STUDENT)

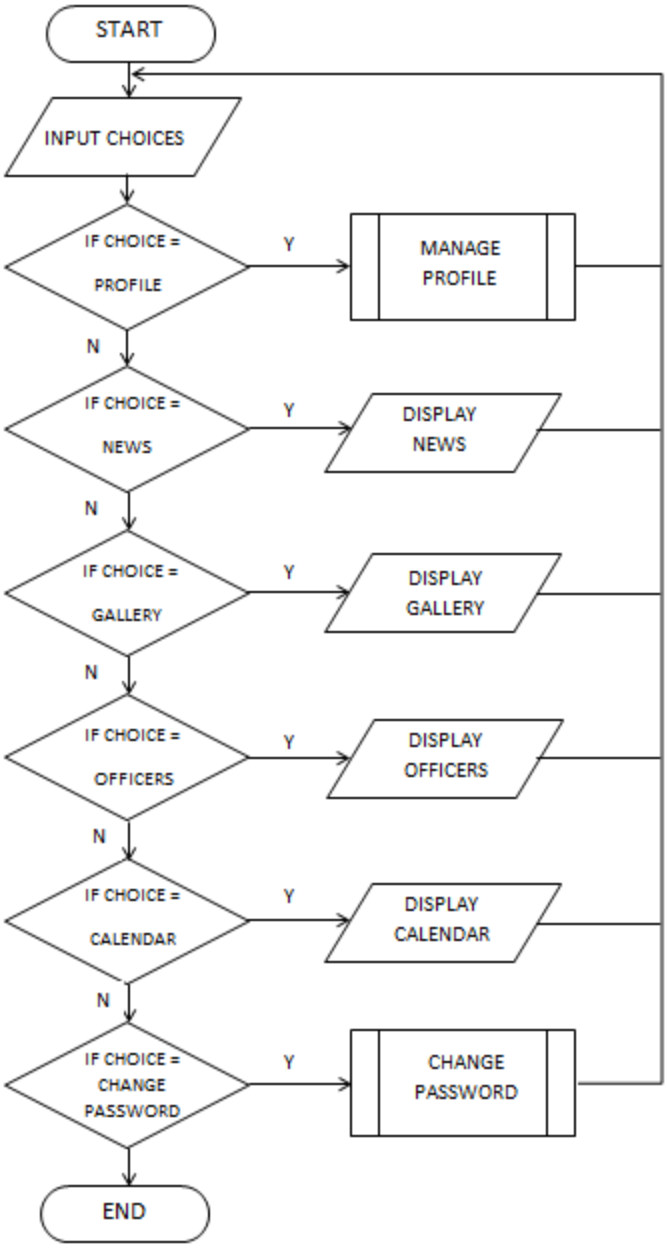


FIGURE 16:

HOMEPAGE (PROFESSOR)

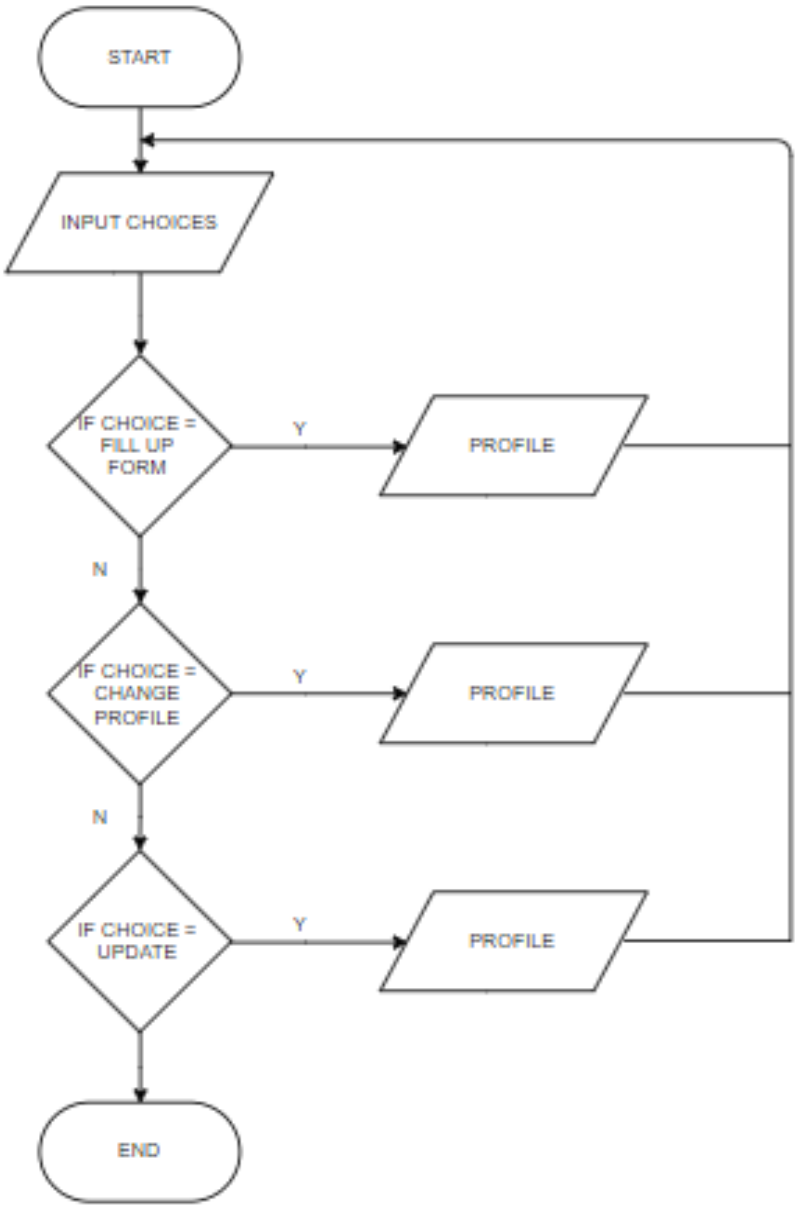


FIGURE 17:

PROFILE (PROFESSOR)

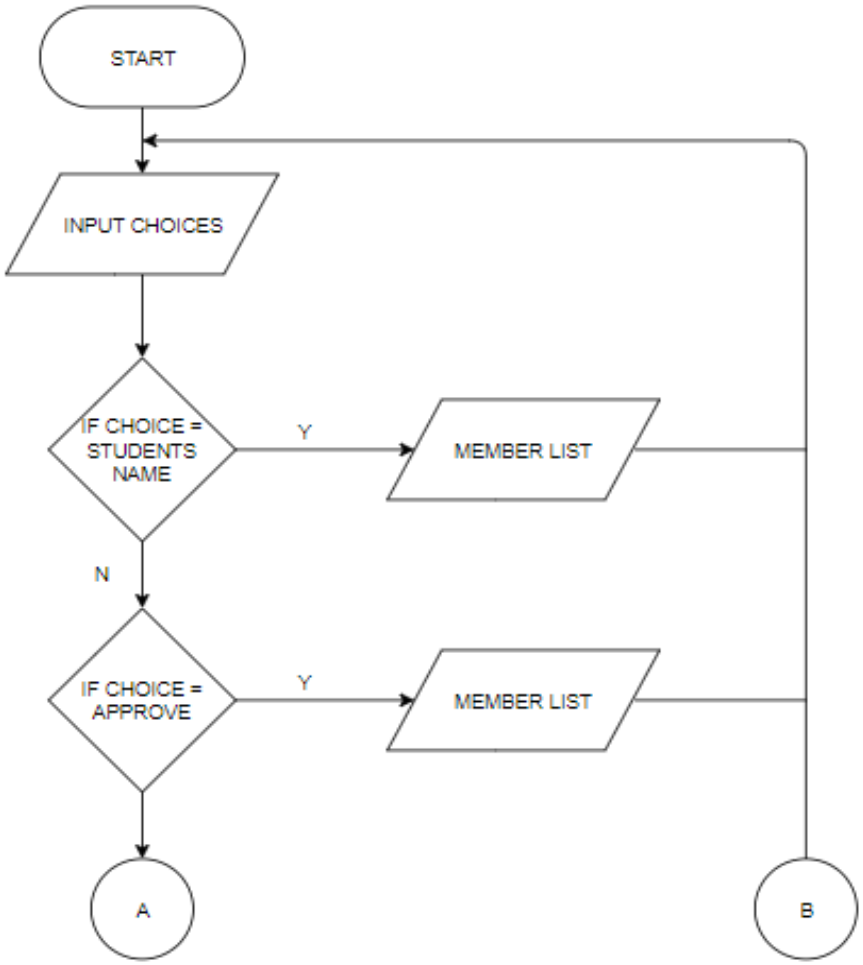


FIGURE 18:

MEMBER LIST (PROFESSOR)

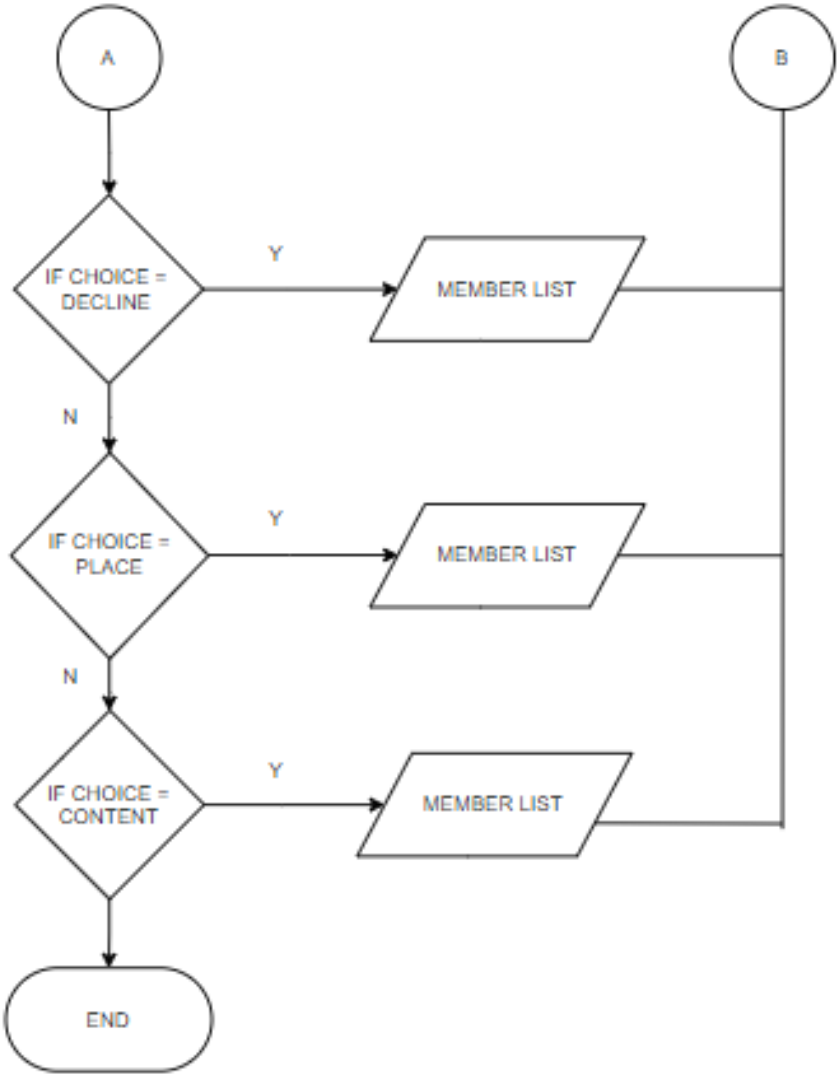


FIGURE 19:

MEMBER LIST (PROFESSOR)

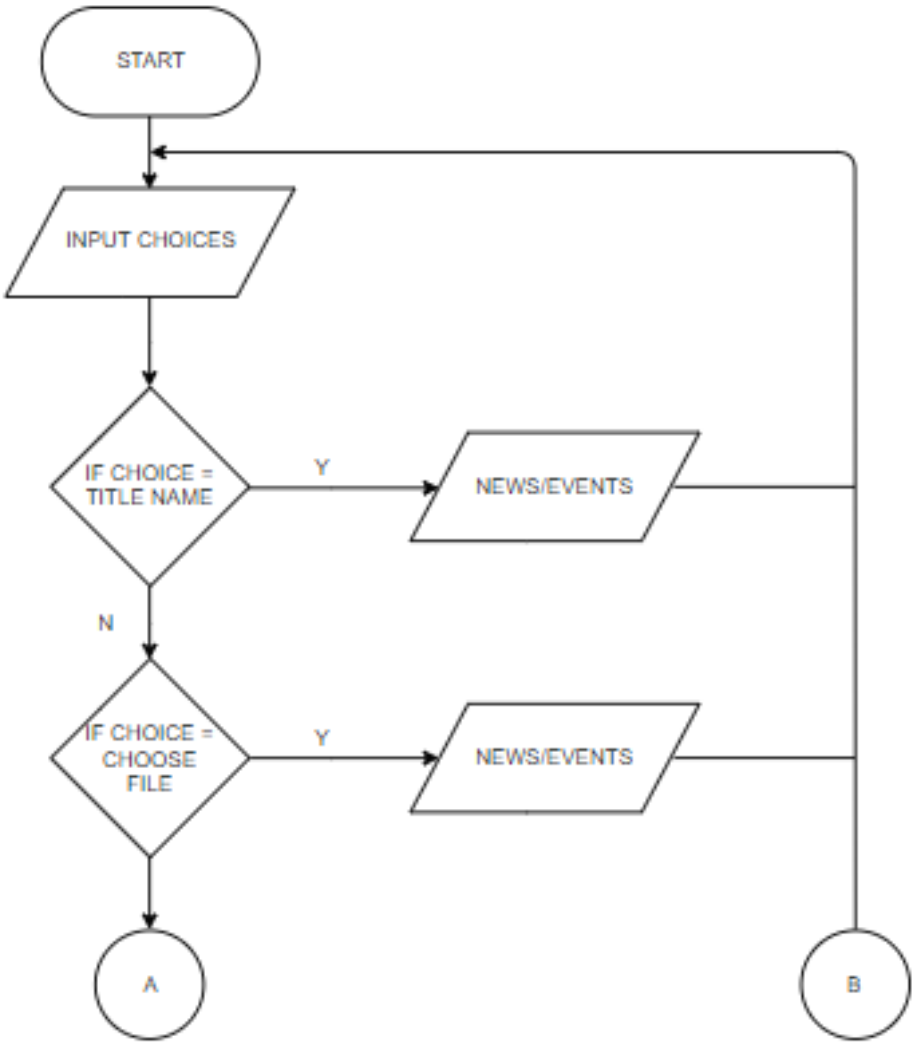


FIGURE 20:

CREATE EVENTS (PROFESSOR)

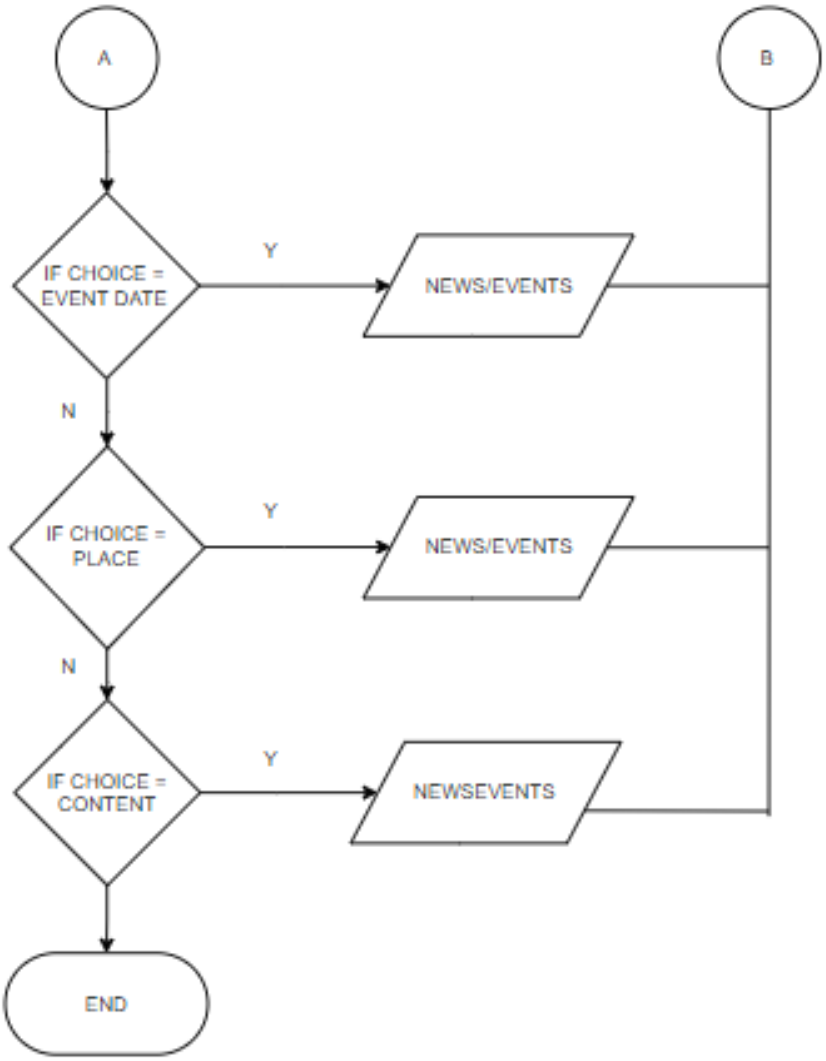


FIGURE 21:

CREATE EVENTS (PROFESSOR)

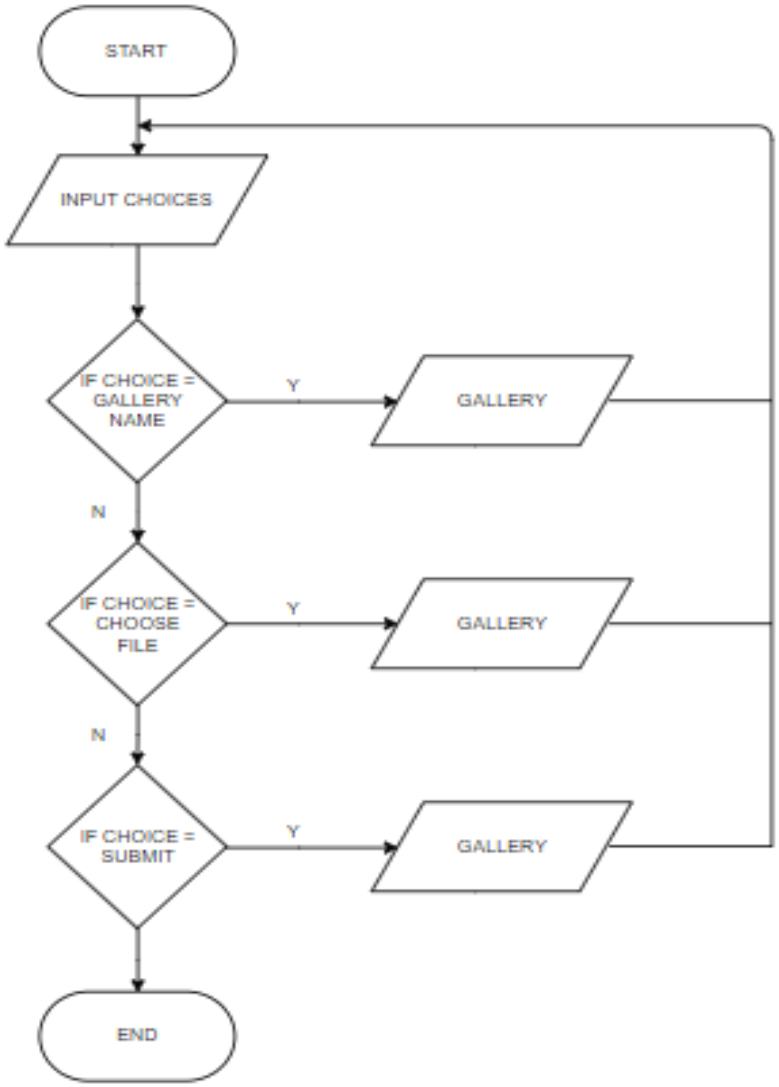


FIGURE 22:

GALLERY (PROFESSOR)

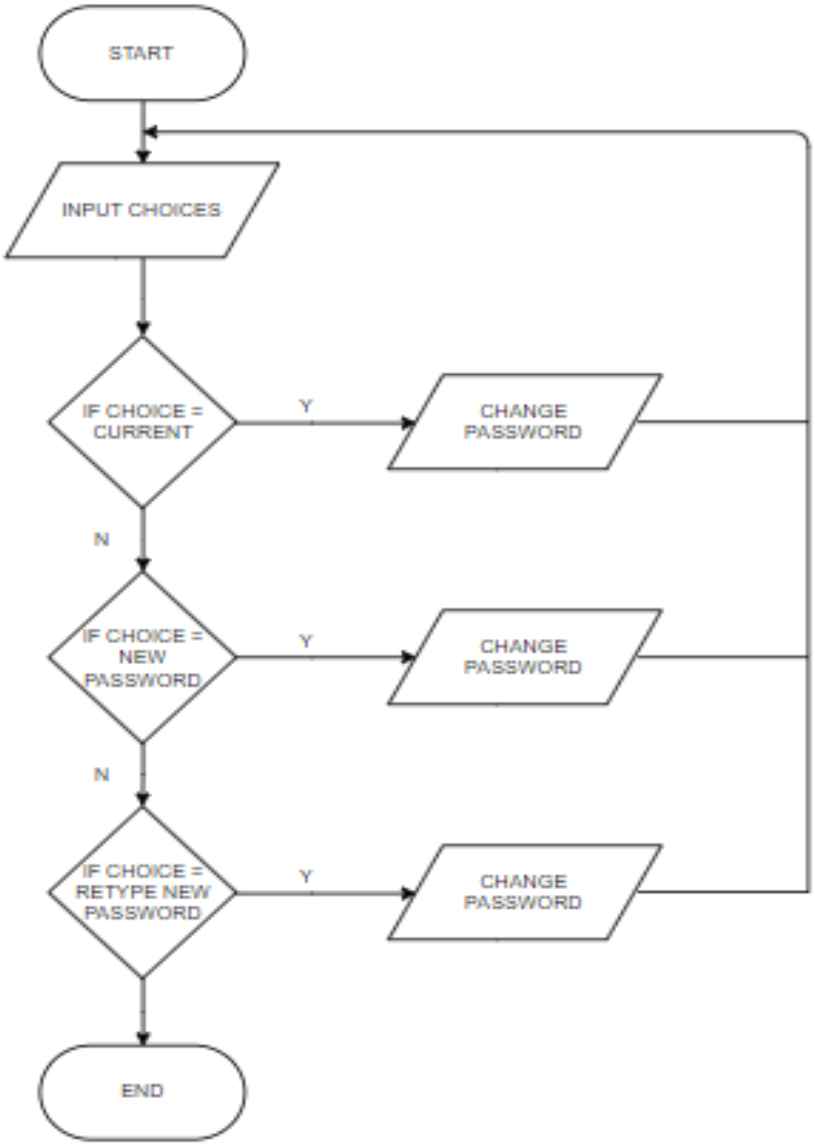


FIGURE 23:

CHANGE PASSWORD (PROFESSOR)

4.2 SCREENSHOTS

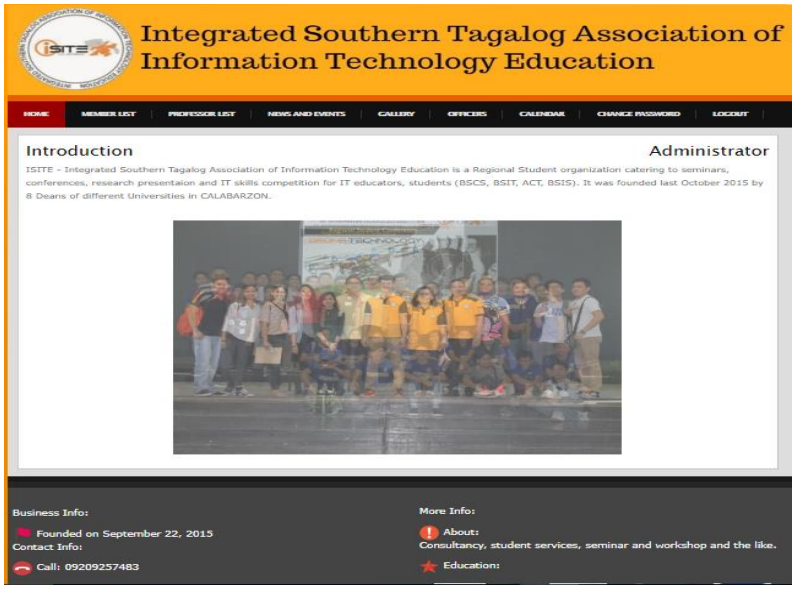
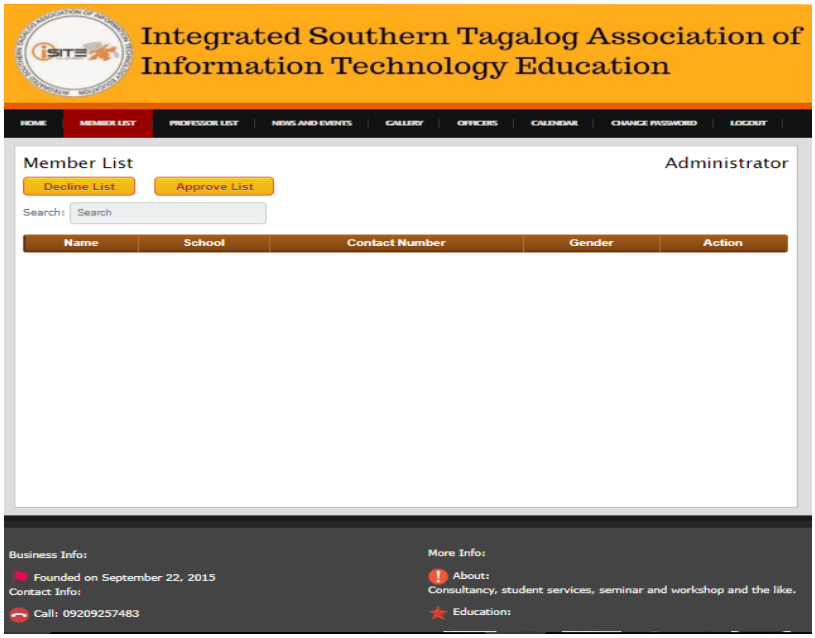


FIGURE 24: HOMEPAGE (ADMIN)

It shows an introduction about ISITE. The admin can also control all his / her responsibilities online organization.



`FIGURE 25: MEMBER LIST (ADMIN)

The administrator can approve or decline all those who registered on the multimedia system for ISITE

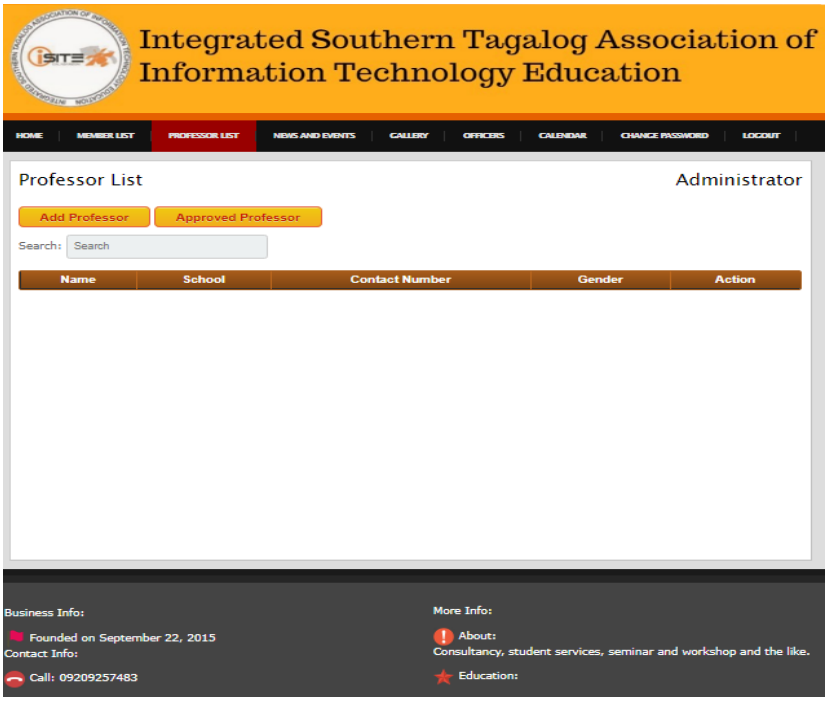


FIGURE 26: PROFESSOR LIST (ADMIN)

The administrator can also approve and add professor in the professor list menu.

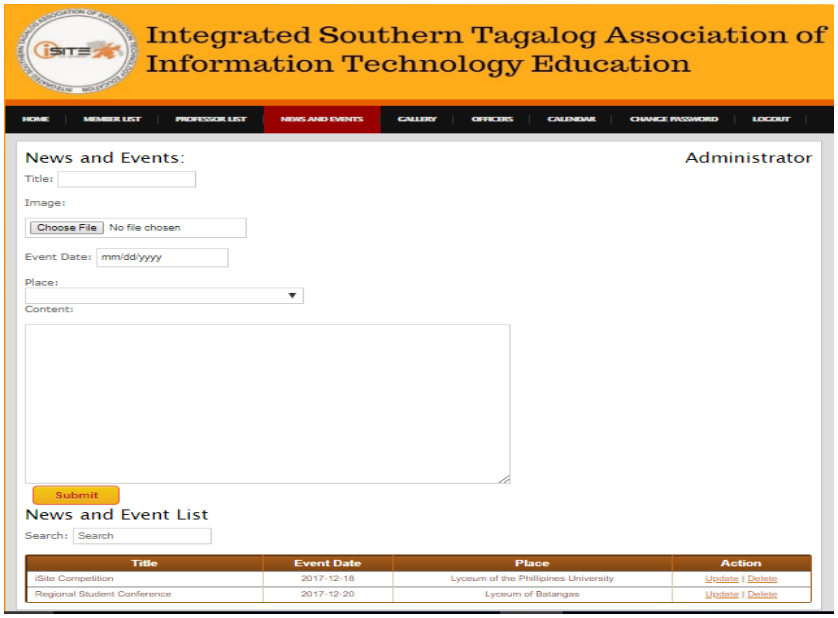


FIGURE 27: NEWS AND EVENTS (ADMIN)

The administrator can create an news and events, so that the members are updated in the upcoming events of the organization. The admin can also update and delete the news and events.

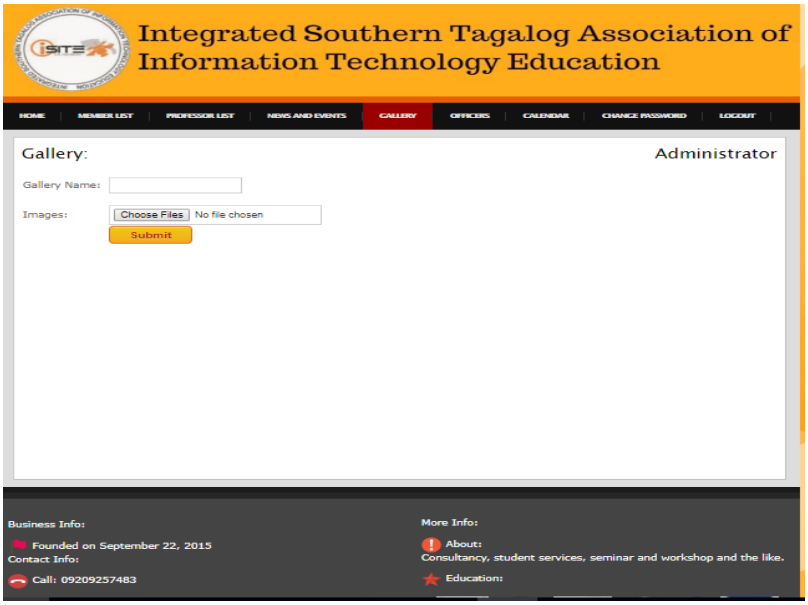


FIGURE 28: GALLERY (ADMIN)

The admin can add photos taken by the organization during events.

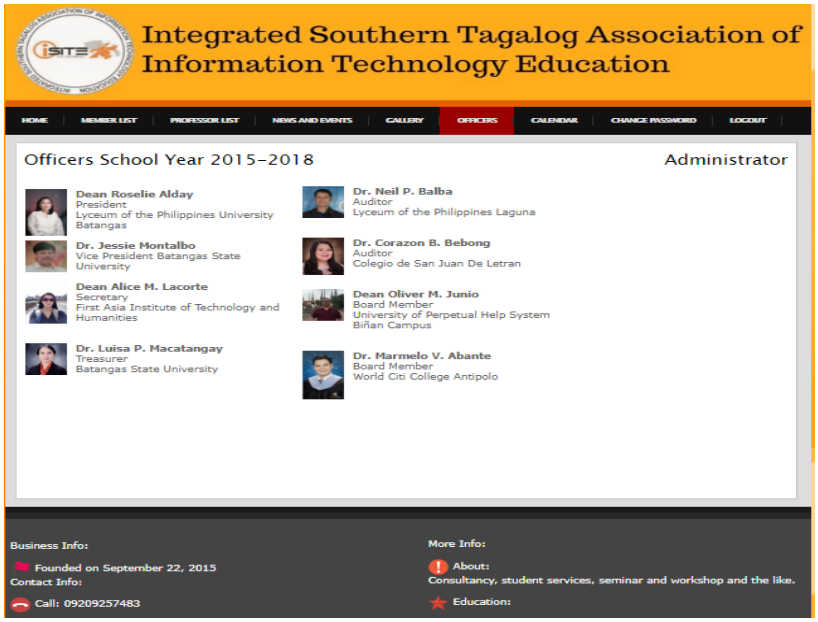


Figure 29: OFFICERS (ADMIN)

The admin can view or edit the officers of the organization.

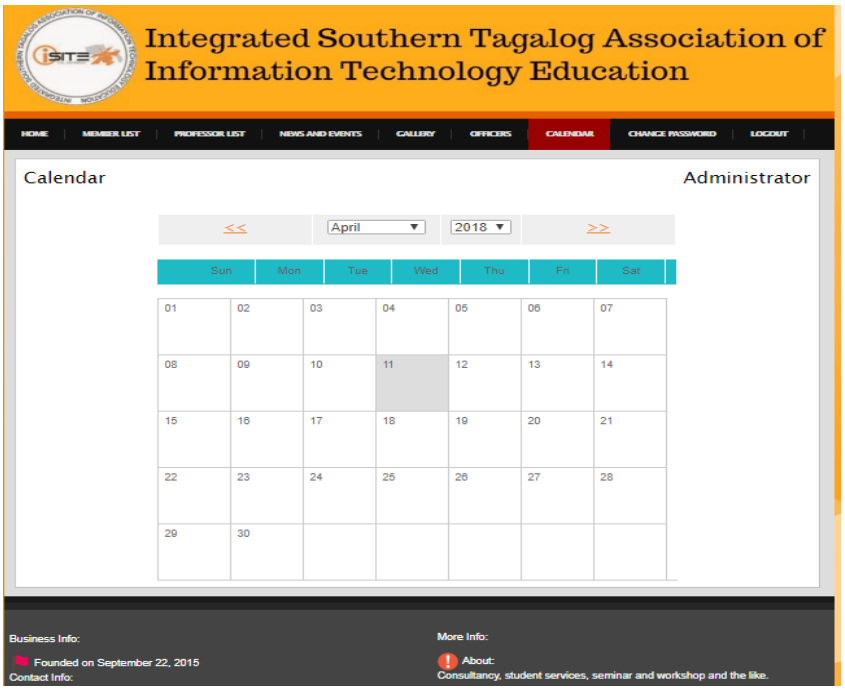


FIGURE 30: CALENDAR (ADMIN)

The admin can create events on the calendar. The admin will create the date which is attached in the calendar.

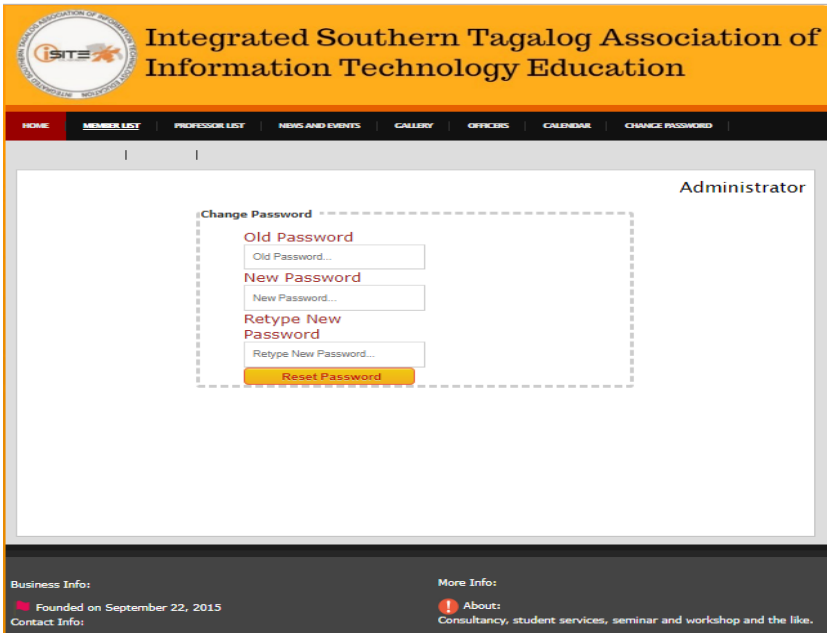


Figure 31: CHANGE PASSWORD (ADMIN)

The administrator can change his/ her password to make the system secured.

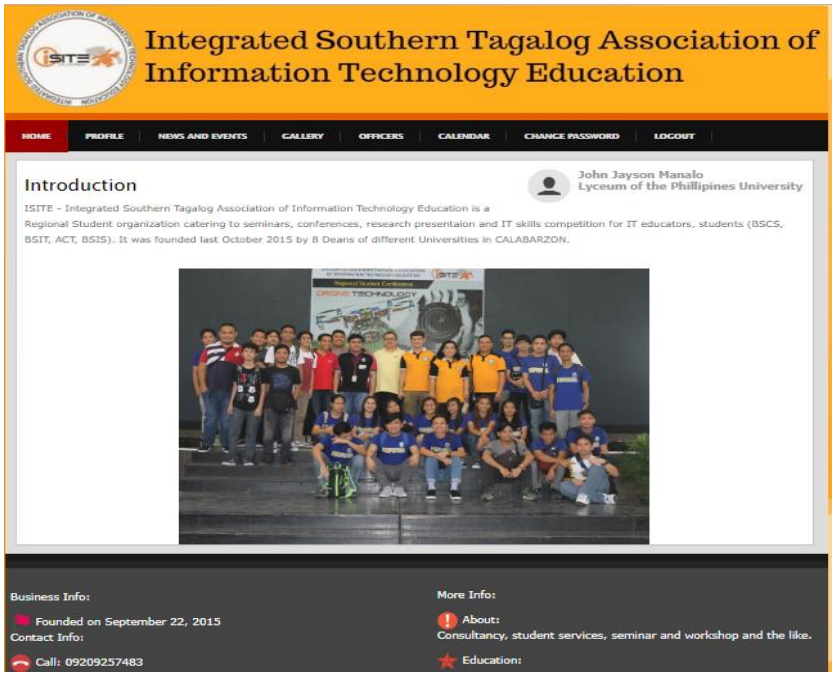


FIGURE 32: HOMEPAGE (STUDENT)

The introduction of ISITE includes a homepage for students where they can manage their own profile.

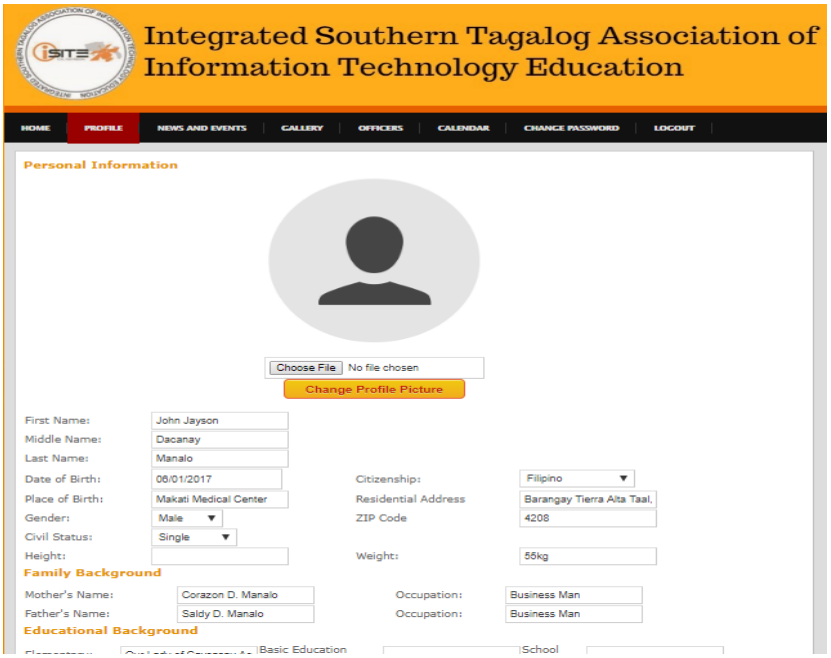


FIGURE 33: PROFILE (STUDENT)

The student can edit his / her profile picture and also all about his / her background

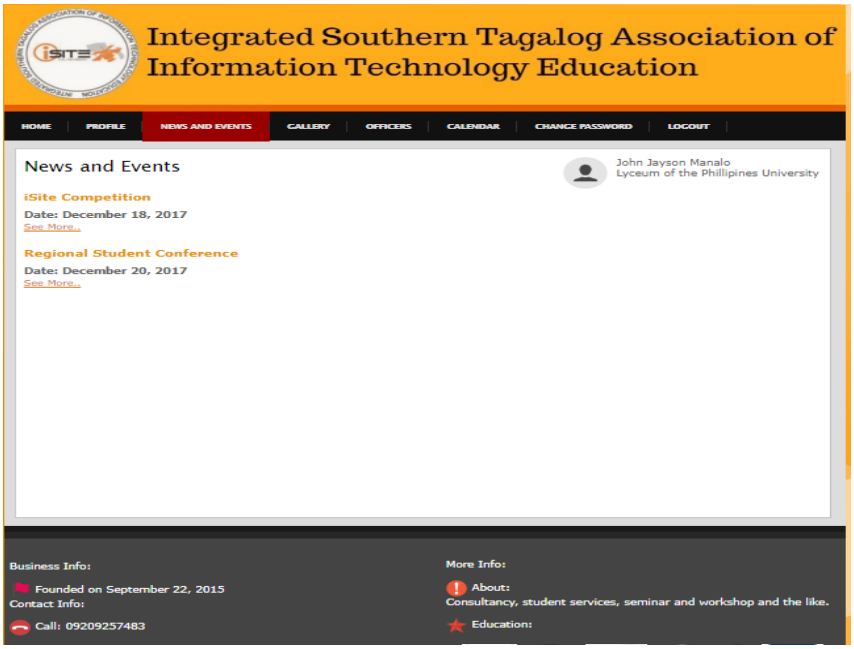


FIGURE 34: NEWS / EVENTS (STUDENT)

The student can view all the upcoming events of the organization. The system has also an online attendance in the news / events for the student.

FIGURE 35: GALLERY (STUDENT)

The student can view all the photos that were taken during events. All photos are attached in the multimedia system in the menu gallery.

FIGURE 36: OFFICERS (STUDENT)

The student can view all the officers of ISITE.

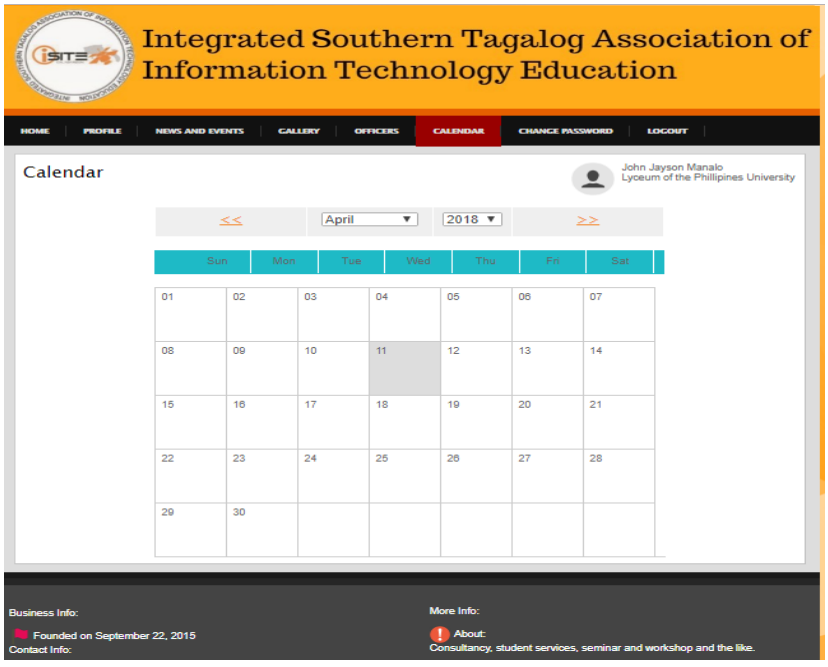


FIGURE 37: CALENDAR (STUDENT)

The student can also view all the events in the calendar.

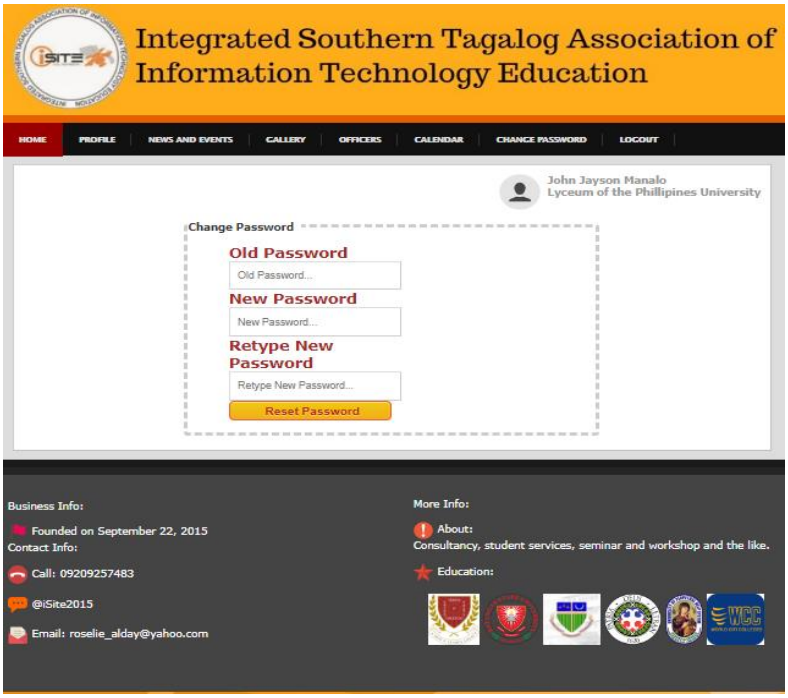


FIGURE 38: CHANGE PASSWORD (STUDENT)

The student can change his / her password to make the account secure.

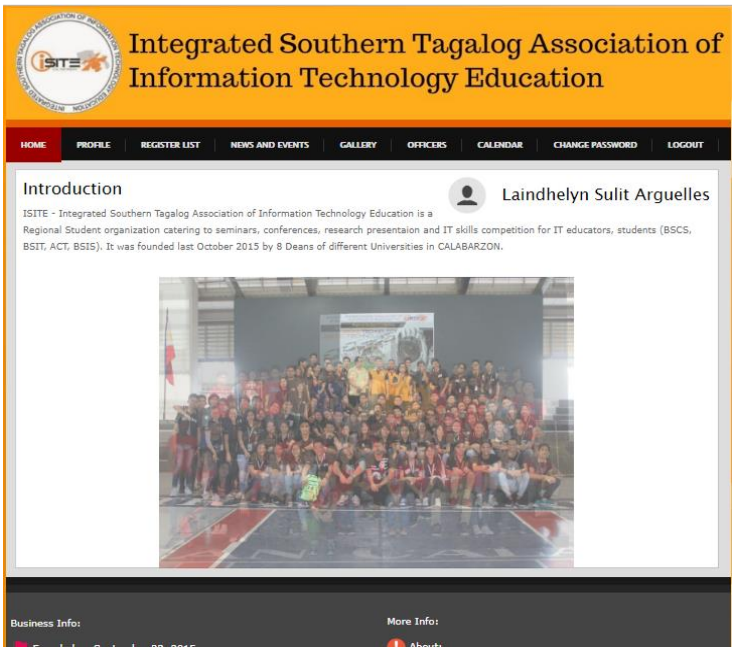


FIGURE 39: HOME (PROFESSOR)

The professor can also do the job of the administrator, like creating an news and events etc..

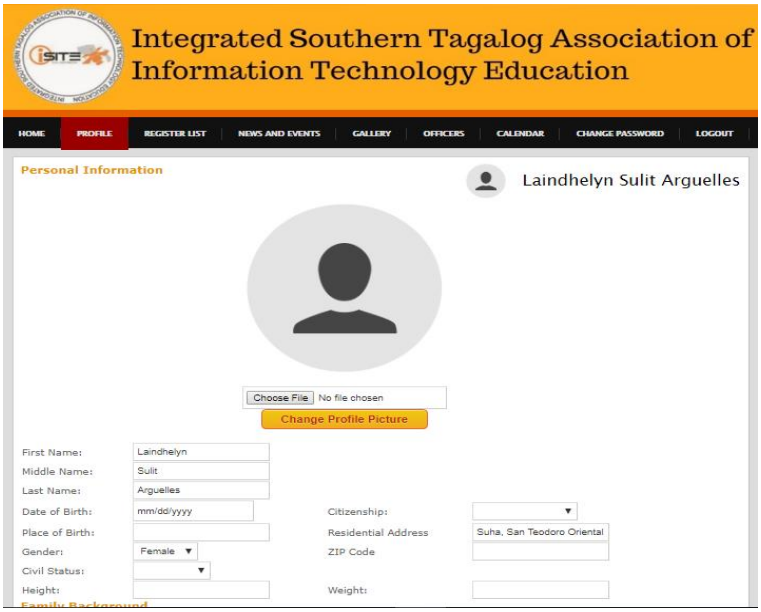


FIGURE 40: PROFILE (PROFESSOR)

The professor can edit his or her profile, or bio data.

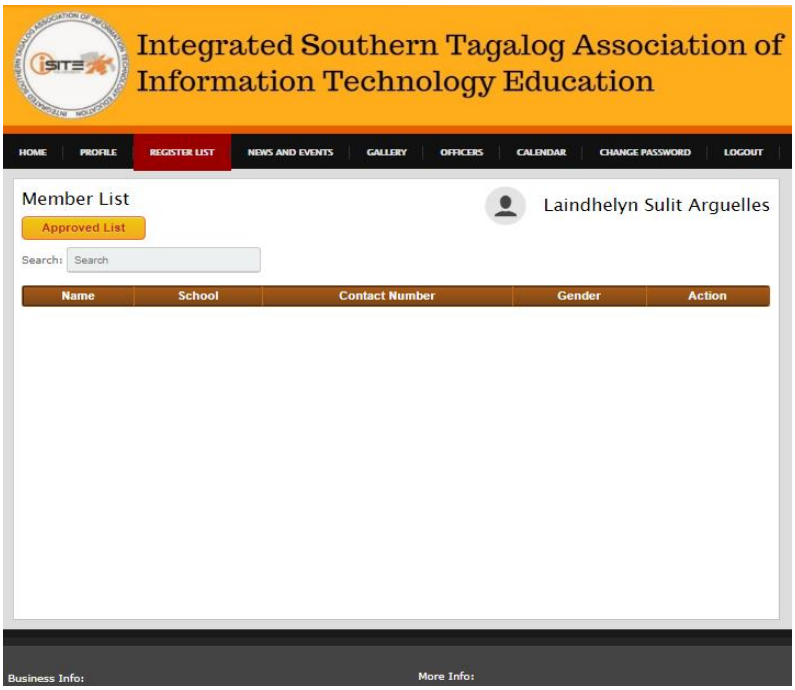


FIGURE 41: MEMBER LIST (PROFESSOR)

The professor can approve and decline students in the Organization like an administrator.

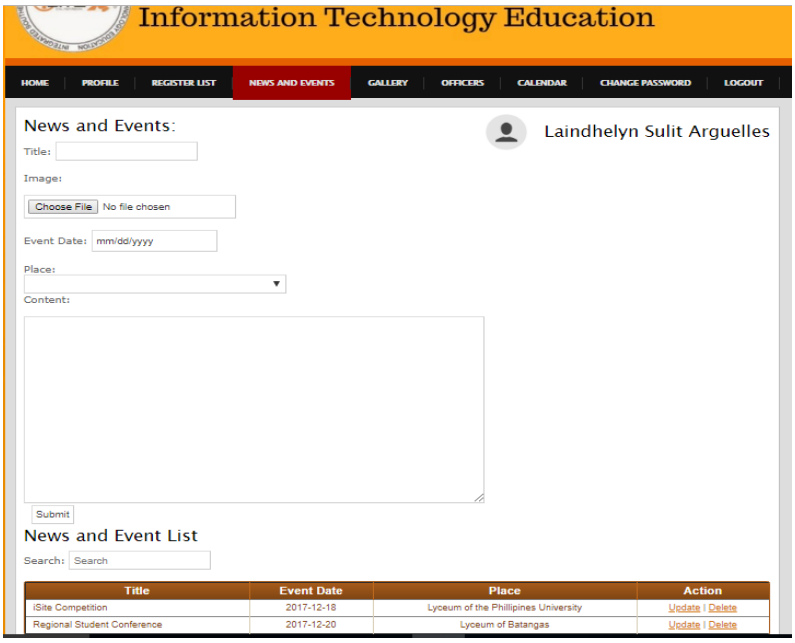


FIGURE 42: NEW AND EVENTS (PROFESSOR)

The professor can also create news and events and can update and delete the news and events like the administrator.

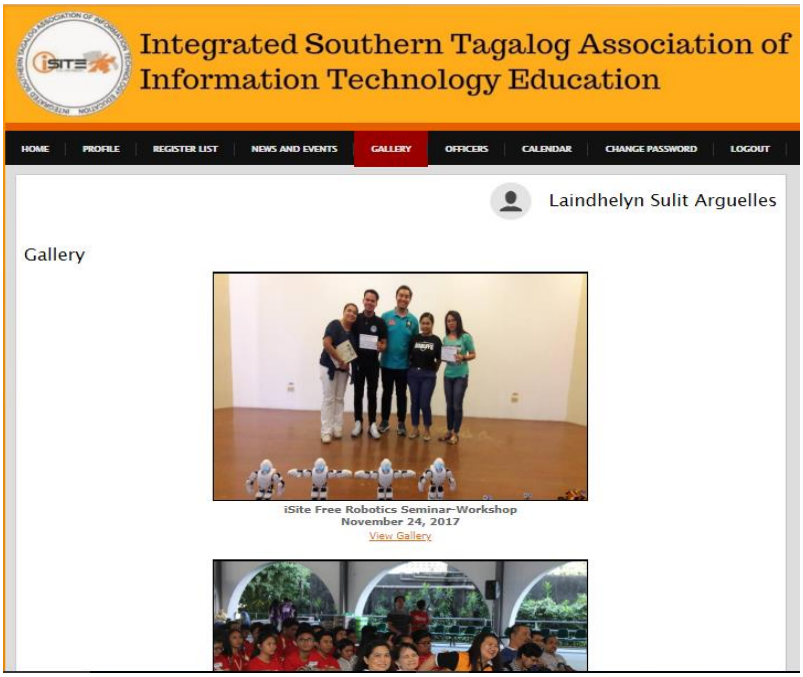


FIGURE 43: GALLERY (PROFESSOR)

The professor can view the photos on the gallery that has been taken during an event.

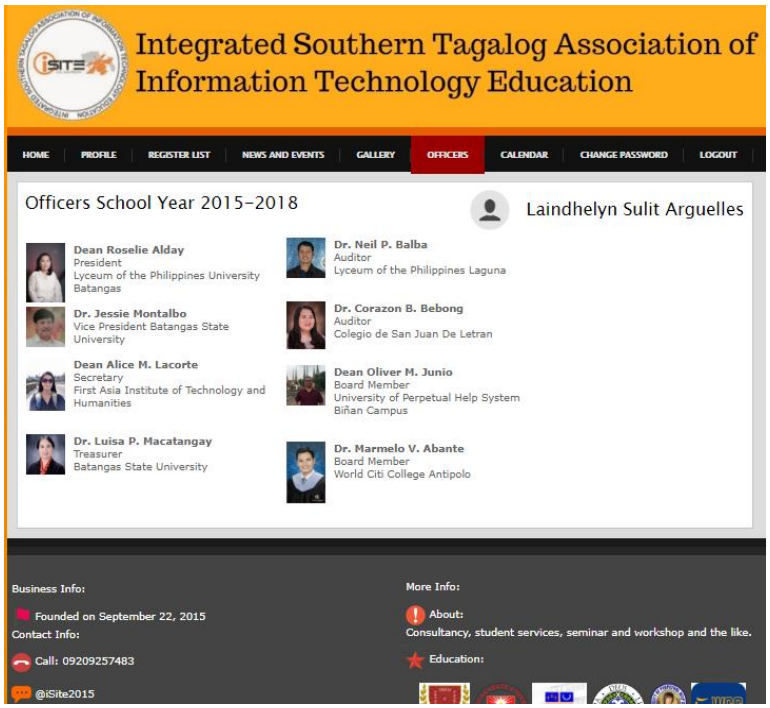


FIGURE 44: OFFICERS (PROFESSOR)

The professor can see the officers for school year 2015-2018.

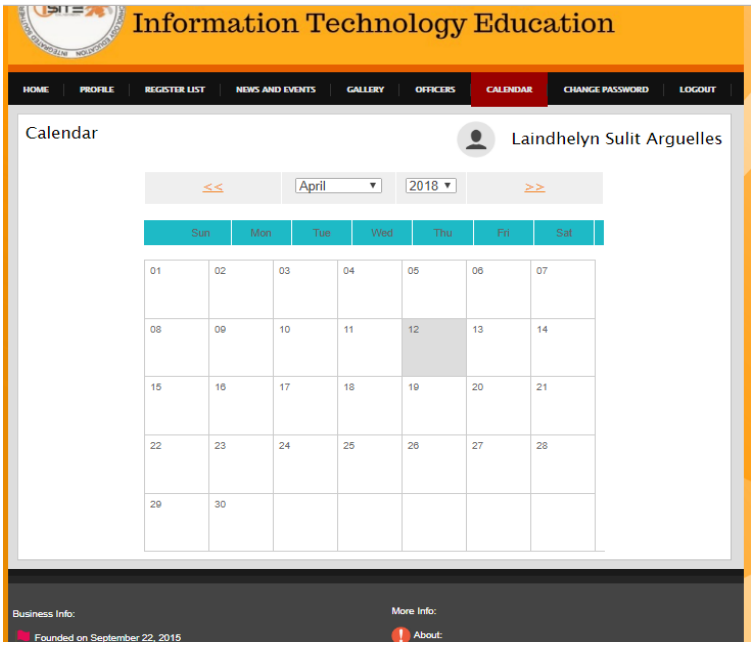


FIGURE 45: CALENDAR (PROFESSOR)

The professor can see when will be the news and events posted by the administrator.

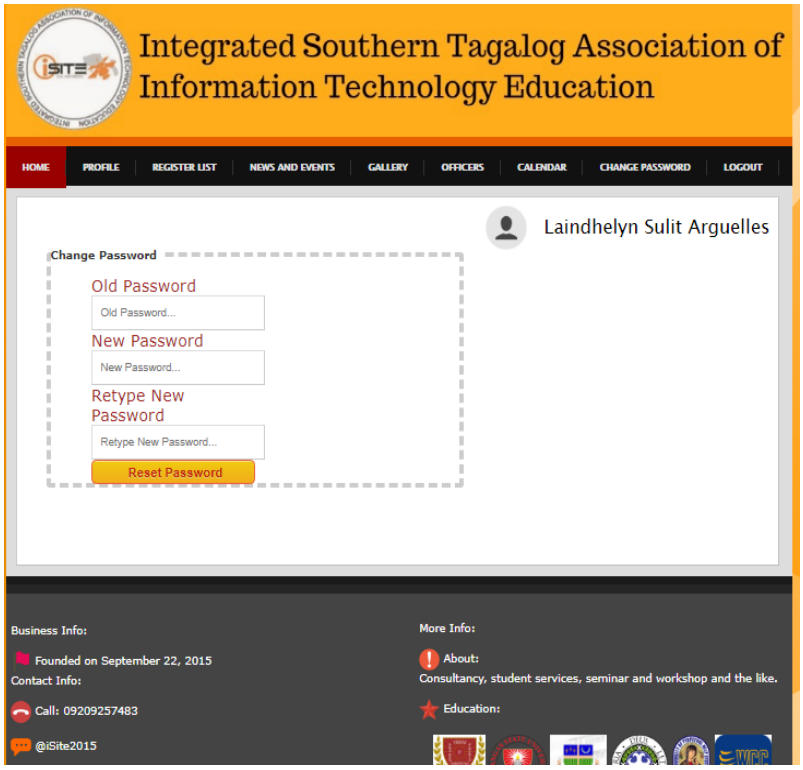


FIGURE 46 : CHANGE PASSWORD (PROFESSOR)

The professor can change his or her password for security.

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This capstone project entitled "An Multimedia System for ISITE" dealt with the Organization's profile, Users profile, News and Events, all the necessary Information on how to become a member of the Organization.

ISITE is Information center for members and to those who want to visit the website. The creation of this Multimedia System enhanced the author, programming abilities and creativity in designing, to help students develop their skills in information and computer studies with the use of various software's in programming language, the author were able to accomplish the creation of Online Multimedia System for ISITE.

Online Multimedia System for ISITE was developed by the author for the Online membership, Events Attendance and members to know the upcoming events and activities of the Organization. The System serves as Regional Student organization catering to seminars, conferences, research presentation and IT skills competition for IT educators and students. It was founded last October 2015 by 5 deans of different universities in CALABARZON

5.2 Conclusion

Based on the features cited above, the researchers came up with the following conclusion:

1. The images and graphics in the multimedia system was utilized to make it more interesting and for the users to know the important information needed.

2. This Online Multimedia System will encourage users to join in the organization because it has all the important information about the organization that the users can view.

3. The Online Multimedia System provides online registration designed by the authors that will help the users to easily become part of the organization. The system will be a means of giving updates to members and non-members of the organization.

5.3 Recommendations

The authors gladly recommend the multimedia system to the members of ISITE particularly the IT educators. This may serve as a guiding tool on how to join the organization and improve members in the field of Information Technology. On the other hand, the authors recommend this multimedia system for ISITE use. It could be of great help to them in encouraging IT people to join in the organization. Lastly, to maintain the multimedia system the admin may update all the information about news, list of members and officers.

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