

**THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT  
SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE  
PHILIPPINES- CAVITE**

**A Research Project**

Presented to the faculty of the  
Department of Industrial Technology  
Technological University of the Philippines- Cavite  
C.Q.T. Ave. Salawag,  
Dasmarinas City, Cavite

by

**CRISANTO JULIUS J. AREGLADO  
RYAN ANGELO B. DELA CRUZ  
GENESIS M. MISLOS  
DANTE M. TIAGAN JR.**

In Partial fulfillment of the Requirements for the Degree of  
**Bachelor of Engineering Technology**

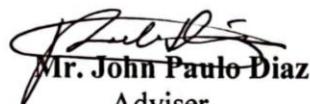
January 2023



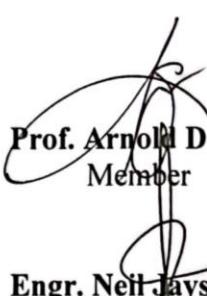
Technological University of the Philippines  
**DEPARTMENT OF INDUSTRIAL TECHNOLOGY**  
 Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite  
 Telefax: (046) 416-4920  
 Email: cavite@tup.edu.ph | Website: [www.tup.edu.ph](http://www.tup.edu.ph)

### APPROVAL SHEET

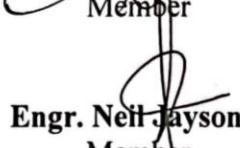
The project study entitled "**The Development of Thesis Archive Management System** in Technological University of the Philippines- Cavite", prepared and submitted by **Crisanto Julius J. Areglado, Ryan Angelo B. Dela Cruz, Genesis M. Mislos, and Dante M. Tiagan**, in partial fulfillment of the requirements for the degree Bachelor of Engineering Technology, is hereby approved and accepted.

  
**Mr. John Paulo Diaz**  
 Adviser

  
**Prof. Jay Victor Gumboc**  
 Chairperson

  
**Prof. Arnold De Vega**  
 Member

  
**Prof. Ma. Patria Juliet Escalona**  
 Member

  
**Engr. Neil Jayson Narciso**  
 Member

  
**Prof. Beverly De Vega**  
 Member

Approved in partial fulfillment of the requirements for the degree Bachelor of Engineering Technology.

2-8-2023  
 Date

  
**Prof. Jay Victor Gumboc**  
 Head, IT Department

2-9-23  
 Date

  
**Prof. Maria Cecilia N. Reyes**  
 Assistant Director for Academic Affairs

## **DEDICATION**

The researchers would like to dedicate this study to Lord Jesus Christ, for giving them strength, knowledge, wisdom and guidance throughout the entire process and development of this thesis project, through all the difficulties and challenges they encounter, and for giving us perseverance to pursue the objective in this study

The researchers would also like to dedicate this study to their families and friends who constantly help and support them morally, mentally, spiritually and emotionally.

The researchers would like to extend their wholehearted thanks and appreciation to every one of you.

## ACKNOWLEDGEMENT

This study would not have been possible without the help and support of the following people. The researchers would like to give their greatest gratitude to every one of them, from the bottom of their hearts.

First and foremost, the researcher would like to thank Mr. John Paulo Diaz for his unwavering support for the project "**Thesis Archive Management System for the Technological University of the Philippines - Cavite**" his knowledge, understanding and wisdom are truly commendable, during the development of the project and writing of the research paper. He truly helped achieve the goal of this study, for that the researchers are truly grateful to have such a wonderful mentor.

The researchers would also like to express their gratitude to the panelists for their contributions to further improve the project with their critique. The researcher would like to extend their appreciation for your time, support, and advice, they could not have made this possible without your help.

To the loving families of the researchers, for all the love, encouragement, inspiration and support emotionally and financially.

The researchers would like to thank everyone who never stops to support and provide opportunity, resources and support for the success of this study, the researchers would like to express their greatest gratitude, from the bottom of their hearts.

## **ABSTRACT**

This study develops a web-based application for the management of electronic thesis documents of the Technological University of the Philippines that allows the uploading, updating, and displaying of e-thesis documents. The purpose of this system is to digitally preserve the existing thesis documents in the library, allowing students to have easier access to these e-documents online. The web application was successfully developed with the use of different frameworks and programming languages. The front end of the application was designed and built using the combination of HTML, Bootstrap and CSS. For the backend of the program the researchers used Python, Django, XAMPP, MySQL, and Apache Server. Moreover, this study includes the digitalization of the existing hardbound copies of the thesis papers in the library to be stored as well in the system. The researchers utilized Cam Scanner, a mobile application for digital scanning, to be able to achieve this task and saved the files in pdf format. On the other hand, the test and evaluation result of the project shows 4.79 overall mean in different categories which includes performance efficiency, usability, security and maintainability which corresponds to very satisfactory descriptive result, and that the implementation of an online thesis archive management system gives more accessibility and is much better than implementing or using traditional library system that use physical storage for thesis documents which are vulnerable to its disfigurement and ruination, reducing the usage of paper storage by saving all the records electronically in the system.

## TABLE OF CONTENTS

### **PRELIMINARIES**

Title Page	i
Approval Sheet	ii
Dedication	iii
Acknowledgement	iv
Abstract	v
Table of Contents	vi
List of Tables	viii
List of Figures	xi

### **Chapter 1 – INTRODUCTION**

Background of the Study	1
Objectives of the Study	2
Scope and Limitations of the Study	3

### **Chapter 2 – CONCEPTUAL FRAMEWORK**

Review of Related Literatures and Studies	6
Conceptual Framework	17
Definition of Terms	19

### **Chapter 3 – METHODOLOGY**

Project Design	21
Project Development	34
Operation Procedure	61

Testing Procedure	62
Evaluation Procedure	64
<b>Chapter 4 – RESULTS AND DISCUSSION</b>	
Project Description	66
Project Structure	67
Project Test Results	113
Project Capabilities and Limitations	144
Project Evaluation Results	145
<b>Chapter 5 – SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS</b>	
Summary of Findings	148
Conclusions	149
Recommendations	150
<b>REFERENCES</b>	151
<b>APPENDICES</b>	153
<b>RESEARCHER’S PROFILE</b>	198

## LIST OF TABLES

<b>Table</b>	<b>Title</b>	<b>Page</b>
1	Likert Scale	65
2	Descriptive Interpretation of the Mean	65
3	Functionality Test for the Admin Account Registration	113
4	Functionality Test for Account Registration Process	114
5	Functionality Test for Updating Account Information	115
6	Functionality Test for Password Update Process in Student Account	116
7	Functionality Test for Thesis Project Uploading Process in Admin Side	117
8	Functionality Test for Thesis Project Updating Process in Admin Side	118
9	Functionality Test for Thesis Project Uploading Process in Student's Side	119
10	Functionality Test for Thesis Project Submitting Process in Student's Side	120
11	Functionality Test for Student Submitting Pdf Access Request	121
12	Functionality Test for Admin Adding/Updating Department	122
13	Functionality Test for Admin Adding/Updating Course Major	122
14	Accuracy Test for Admin Approving Thesis Projects	123
15	Accuracy Test for Admin Rejecting Thesis Projects	124
16	Accuracy Test for Admin Approving PDF Access Requests	125
17	Accuracy Test for Admin Declining PDF Access Requests	126
18	Accuracy Test for Displaying and Accessing Thesis Projects to Students	127

19	Accuracy Test for Displaying Thesis Projects in Admin's side	128
20	Accuracy Test for Displaying Pdf Access Requests in Admin's side	129
21	Accuracy Test for Students Accessing Pdf file with Pending Access	130
22	Accuracy Test for Students Accessing Pdf file with Declined Access	131
23	Accuracy Test for Students Accessing Pdf file with Approved Access	132
24	Accuracy Test for Admin Accessing Pdf file with Approved Access	133
25	Accuracy Test for Viewing Details of Approved Thesis Projects in Admin Side.	134
26	Accuracy Test for Viewing Details of Rejected Thesis Projects in Admin Side.	135
27	Accuracy Test for Viewing Details of Pending Thesis Projects in Admin Side.	136
28	Accuracy Test for Displaying Registered Accounts in Admin Side.	137
29	Reliability Test for Logging in of Registered Account with Verified Email Address	138
30	Reliability Test for Logging in with Unregistered Account, Incorrect Credentials	139
31	Reliability Test for the Registration of the Web App	139
32	Reliability Test for Uploading and Storing Multiple Thesis Projects	140
33	Reliability Test for Creating and Storing Multiples Requests	140
34	Reliability Test for Unauthorized Account Accessing Admin-Authorized Pages	141

35	Reliability Test for Unauthorized Account Accessing Student-Authorized Pages	142
36	Reliability Test for Unauthorized Account Accessing PDF Media URL	143
37	Summary of Evaluation Results	146

## LIST OF FIGURES

Figure	Title	Page
1	The NDLTD Logo	8
2	Project List Page GUI of “Online Thesis Archiving System”	9
3	Capstone and Thesis Online Archiving System GUI	10
4	Animo Repository	11
5	Digital Archives @ UPD	12
6	The PDF.js Logo	13
7	Conceptual Framework of the Study	17
8	Homepage Wireframe	22
9	Registration Wireframe	23
10	Login Wireframe	24
11	Repository Wireframe	25
12	Display Selected Thesis Wireframe	26
13	Personal Repository Wireframe	27
14	My Profile Wireframe	28
15	Submit Thesis Wireframe	29
16	Manage Approved Thesis Wireframe	30
17	Manage Pending Thesis Wireframe	30
18	Add Thesis Wireframe	31
19	Update Thesis Wireframe	32

20	Admin Profile Wireframe	33
21	Admin Change Password Wireframe	33
22	Login System Flowchart	34
23	Forgot Password Flowchart	35
24	User Registration with Email Verification Flowchart	37
25	Adding of Thesis Project	39
26	Updating of Thesis Project	40
27	Evaluation of Pending Thesis Projects	41
28	Resubmission of Rejected Thesis Project	43
29	Accessing Thesis Project Flowchart	44
30	Viewing of PDF File Flowchart	45
31	Update Personal Profile Flowchart	47
32	Displaying Thesis According to Status Admin Side	49
33	Displaying of PDF Access Requests According to Status	50
34	Evaluation of Pending PDF Access Requests	51
35	Management of Department	53
36	Management of Program	55
37	Displaying of Registered Accounts	57
38	Thesis Archive Block Diagram	59
39	Scanning of Thesis	60
40	Account Login Page	67
41	Registration of Account Page	68

42	Repository Page	69
43	Collection of Programs Page	70
44	List of Thesis Under Selected Program	70
45	Collection for Keywords	71
46	Thesis Project Under Selected Keyword	71
47	Thesis Details Page	72
48	Request PDF Access Page	73
49	Pending PDF Access Request Page	74
50	Declined PDF Access Request Page	75
51	Display PDF File Page	76
52	Edit Profile Page	77
53	Change Password Page	78
54	Personal Repository Page	79
55	Display Details of Submitted Thesis (Upper Part)	80
56	Display Details of Submitted Thesis (Bottom Part)	80
57	Consent Agreement	81
58	Submission Form	82
59	Resubmit Thesis Project Page	84
60	Dashboard	85
61	Admin Uploading Thesis Project	87
62	Manage Approved Thesis	89
63	Updating Thesis Project	91
64	Viewing of Approved Thesis Project Information	92

65	Manage Pending Thesis Projects	93
66	Evaluate Pending Thesis Project Page	95
67	Manage Rejected Thesis Projects	96
68	View Rejected Thesis Project Information	97
69	Manage Department Page	99
70	Edit Department Page	100
71	Manage Program Page	102
72	Admin Edit Program Page	103
73	Registered Accounts Page	104
74	View Account Details Page	106
75	Manage PDF Access Requests Page	108
76	Evaluate PDF Access Request Page	110
77	Admin Edit Profile Page	111
78	Admin Change Password Page	112

## **Chapter 1**

### **INTRODUCTION**

#### **Background of the Study**

Thesis Management System is a system that will facilitate the viewing of thesis and research works and a platform for uploading upcoming research works (Alano et al., 2018). According to Behrooz et al. (2019), Electronic Theses and Dissertations (ETDs) programs have been recognized as one of the most effective channels through which theses and dissertations can be made available to academic communities and beyond.

In Technological University of The Philippines- Cavite, thesis is one of the final requirements for the final-year students. The submission of the thesis to the Library of the University comes with the traditional paperbound version and a cd. These valuable items are manually kept in the library with which the paperbound theses are open for the university students to be personally accessed.

However, the influx of pandemic has put difficulties for the students to access the theses in the library. This is the problem pinpointed by Ms. Rosario Noriel (Head of TUP-C Library Dept.) that theses are no longer that easily accessible in the current pandemic situation because students have to go first to the school library to access the theses, and this requires them to follow some protocols and restrictions implemented by the university. The additional problem is that the existing system— OPAC System— does not contain the entire content of the thesis. It just serves like a list of theses in the library.

With the existing problems consulted by the researchers, some solutions are perceived to solve these difficulties and challenges. The researchers came up with an

online-based thesis archive management system for the library of Technological University of the Philippines- Cavite. The system aims to store and manage the electronic documents (in pdf format) of the theses and upcoming thesis works in the university. This way, the system will be able to store the complete content of the thesis and innovate the thesis management system in the university. Given that the system is online-based, there is a pdf access request prior to students accessing the uploaded pdf files of the theses in the system and auto-generated citation formats for every thesis to protect the papers from plagiarism and ensure their privacy. This will solve the constraints among the students from accessing the theses in the library due to the current pandemic situation while ensuring the e-theses protection. The system will come in web-based that is responsively compatible with mobile and pc devices, this way it can be in any platform conveniently available for the students of the university.

## **Objectives of the Study**

The general objective of this study is to develop a web-based thesis archive management system that will serve as a management storage and displaying of the electronic thesis documents of the Technological University of the Philippines-Cavite.

Specifically, the study aims to:

1. To design a web application with the following features:
  - a. Store, update and display electronic thesis documents submitted by the students or uploaded by the administrator in the system.

- b. Auto-generated citation formats for every submitted thesis in the system to help the students properly cite the authors and their thesis papers to avoid plagiarism.
  - c. A permission request functionality for accessing the PDF file of a particular research paper to be submitted by the students and to be approved by the admin, respectively.
  - d. A ‘most viewed’ feature that helps the students identify the most popular thesis papers in the system. As well as a search functionality to easily filter the thesis papers according to the students’ choices.
2. Develop the web application according to its design.
  3. Test and improve the web application in terms of its accuracy, reliability, functionality, and timeliness.
  4. Evaluate the web application in terms of its: performance efficiency, usability, security, and maintainability.

### **Scope and Limitations of the Study**

The scope of this study focuses on the development of web-based Thesis Archive Management System which will only be implemented for the Technological University of the Philippines- Cavite. The system serves its purpose as viewer and storage for the electronic thesis documents of the university. The thesis document should be in a pdf document-type submitted by the researchers– to be approved and managed by the administrator of the system.

The study will only be focusing only on the theses submitted and conducted by the students of the Technological University of the Philippines - Cavite campus. Also, theses that will be included in the digitization process should only between the range of year 2005 up to 2018.

Meanwhile, the study does not extend to the storing of other documents that are not related to thesis papers as well as the thesis that are not conducted by the students of Technological University of the Philippines, Cavite campus. The digitization of the thesis papers at the library of the Technological University of the Philippines - Cavite campus will be limited to the researches submitted in the university during the year 2005 up to 2018 and those only available that are dated in year 2004 and below.

The study develops a digital management system for the thesis documents of the university. This will help solve the problems experienced from manual-based management of the thesis documents such as the unexpected damages of hard bound copies and cd, as well as the safety and security of these papers from loss and plagiarism. The difficulty on the limited accessibility of the students from these thesis documents given the pandemic situation is also aimed to be resolved.

The primary benefactors of the study are the various sectors of the Technological University of The Philippines, Cavite as follows:

The students. This study aims to reach the thesis papers of the university to the students through the web-based platform. This will help the students access the thesis without physically visiting the university's library and enable them to be aware and knowledgeable about the existing thesis papers of the university.

The Proponents. The study will also enable the proponents of the thesis papers of the university to submit their electronic thesis documents in the system that will help them share their works within the university community. The system also provides an auto-generated citation format for their thesis papers to allow them and their thesis papers to be cited properly to avoid plagiarism.

The Library Department. The study will be beneficial to the library department in regards to the handling and storing of theses, the issue with the safety and security of the thesis documents, as well as its accessibility. The digitalized thesis management system for the university will enable the library department to cope up with the technological advancements by elevating the manual-based system to a computerized-based system allowing the library to take a hold of more complete, secured and easy management of electronic thesis documents.

The Researchers. The outcome of the study will benefit the present researchers and the future researchers to further expand their knowledge related to the study. This study may also be one of the bases of a new theory that will arise about the thesis management system and help those who have the same subject matter.

## **Chapter 2**

### **CONCEPTUAL FRAMEWORK**

This chapter deals with literatures and information that the researchers gathered for a better understanding of the topics under study. The sources and data were gathered from websites, various theses and dissertations.

#### **Review of Related Literatures and Studies**

##### **The History of Electronic Thesis and Dissertations**

The concept of digital representations of theses and dissertations or also known as Electronic Thesis and Dissertations (ETD's) is not a new one. The history of electronic theses and dissertations begins in 1987 when it was first discussed at a meeting which were convened by Nick Altair of UMI and the representatives from Virginia Tech, the University of Michigan, and two fledgling software companies: ArborText and Soft Quad in Ann Arbor, Michigan (Fineman, 2003). Later in 1988, with the funding of Virginia Tech, Soft Quad's Yuri Rubinsky invented the first-ever SGML Document Type Definition (DTD) followed by the appearance of Portable Document Format of Adobe's Acrobat in the early 1990. The appearance of Adobe Acrobat's Portable Document Format (PDF) and Document Type Definition (DTD) had paved the way to make electronic thesis and dissertation more possible and the inherent complexities with the SGML could be avoided where ETDs are concerned (Fineman, 2003).

## The ETDs Software Development

In 1996, Virginia Tech received funding from the Southeastern Universities Research Association (SURA) to explore ETDs by using the Standard Generalized Markup Language (SGML) and the Portable Document Format (Thompson, n.d.). This was followed by the US Department of Education funding in 1997 that would allow Virginia Tech to extend the project for ETDs to the national level (McMillan, 1999).

The years of intense collaborative work among different institutions resulted in the emergence of the first ETD db software from Virginia Tech in 1996, providing a complete mechanism for electronic thesis and dissertation submission. Later, on January 03 1997, Virginia Tech became the first ever university to have implemented a requirement for the submission of electronic thesis and dissertations among their graduate students ([vtechworks.lib.vt.edu](http://vtechworks.lib.vt.edu)). Thereafter the concept of ETDs spread to Canada, the United Kingdom, Germany, and other countries (Fineman, 2003).

Other southeastern universities—including Auburn, Clemson, the University of Delaware, the University of Georgia, Georgia Tech, Oklahoma State, Mississippi State, North Carolina State, and the University of West Virginia, helped to test the software. Since 1996 the software has been freely available to institutions around the world.

## The Networked Digital Library of Theses and Dissertations

One of the early keys for ETD movement, Virginia Tech maintained its leadership role by coordinating with the development of distributed digital library that allowed the system to perform search and browsing of ETDs based on particular categories and enabling the downloading for local reading or printing of the said electronic documents,

promoting the easy accession of the ETDs from different participating institutions (Mission, Goals, and History).

The conceptual framework from the implementation of the digital library system had become the basis for the creation of the NDLTD. The National Digital Library of Thesis and Dissertations also known as NDLTD is a free voluntary federation established in the year 1966 through the funding of the U.S. Department of Education (Fineman, 2003 & Fox et. al, 1996).

As the scope of the organization became international, its name was changed to Networked Digital Library of Thesis and Dissertations retaining its acronym NDLTD, carrying its mission and goal to promote the adoption, creation, use, dissemination, and preservation of ETDs (Mission, Goals, and History). In 2003, the organization had more than 196 member institutions, with which 172 were academic institutions in the United States and abroad (Fineman, 2003). Today, the NDLTD members are not only composed of academic institutions across the globe, but also is comprise of its “partner organizations including: Adobe, the American Library Association, the Association of Research Libraries, the Coalition for Networked Information, the Joint Information Services Committee, OCLC Online Computer Library Center, ProQuest/UMI, and Theses Canada—all working toward the goal of unlocking the benefits of shared knowledge for all” (Mission, Goals, and History).



**Figure 1.** The NDLTD Logo

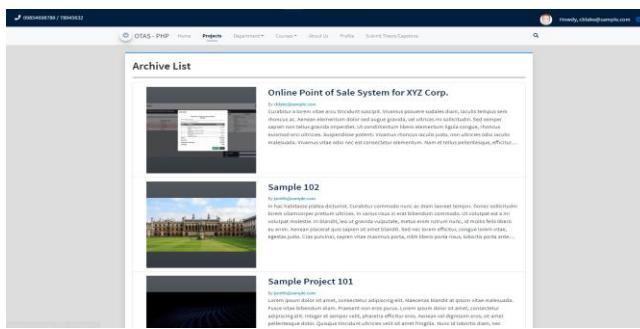
Source: <https://ndltd.org>

## Thesis Archive Management System Online Projects

### Online Thesis Archiving System using PHP/OOP with Free Source Code

Based on the project of Montero (2021) submitted to Sourcecodester.com, the online thesis archiving system was developed using the following tools: XAMPP v3.3.0, PHP Language, MySQL Database, HTML, CSS, JavaScript, jQuery, Ajax, Bootstrap, Admin LTE, and other plugin/libraries and written in PHP and object-oriented programming.

The system consists of two modules: the management module and the student module. Montero (2021) stated that “the management module is the part of the system where the school management can manage the system information and important lists on the system”. This management module is accessible by the Admin and the Staff user with limited access to the management module. Meanwhile, the student module allows the student users to explore the thesis projects stored in the system. The module also provides registration of accounts for the students and after the admin has verified the student account, “the student will have permission to submit the project but still be upon approval of the management” (Montero, 2021).



**Figure 2.** Project List Page GUI of “Online Thesis Archiving System”

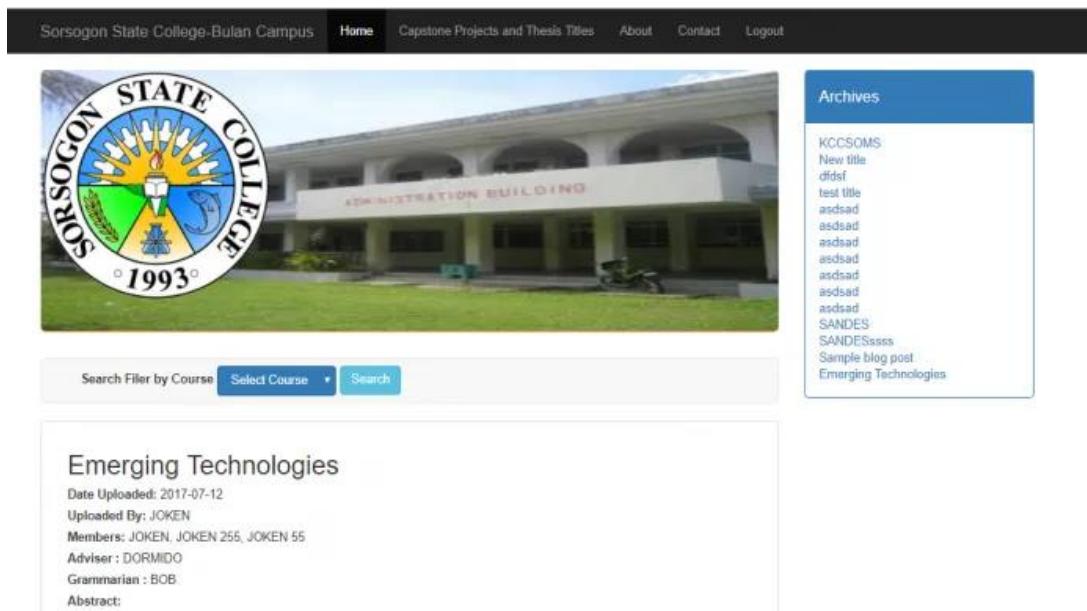
Source: <https://www.sourcecodester.com/php/15083/online-thesis-archiving-system-usingPhoop-free-source-code.html>

## Capstone and Thesis Online Archiving System

The Capstone and Thesis Online Archiving System was a project submitted by Joken Villanueva to [itssourcecode.com](https://itssourcecode.com/). According to Villanueva (2018), the project was proposed by a fourth year Bachelor of Science in Information Technology undergraduate students as their capstone project in the academic year 2017-2018.

Furthermore, Villanueva (2018) mentioned that the system has two operating modules, namely: the capstone and theses online archiving system and the integrated existing plagiarism checker that are used by the administrator account.

The said project will serve as a repository for all capstone and thesis submitted by the undergraduate students of the Sorsogon State College.



**Figure 3.** Capstone and Thesis Online Archiving System GUI

Source: <https://itssourcecode.com/free-projects/php-project/thesis-online-archiving-system-using-php/>

## Animo Repository

The Animo Repository is a digital repository of the De La Salle University serves to store the scholarly and creative works deposited by their faculty members, students, researchers and anyone who is affiliated with the university.

For searching the publications, the digital repository offers two options: the basic search which performs a full-text search of terms within any metadata field of the system; the advanced search that performs search on specific fields narrowing and combining options for searching. The list of publications can also be narrowed into collections, disciplines, colleges and units, and authors.

The digital repository allows anyone to fully access the site. It does not require registration to be able to view the research papers and other creative works of the university which come in an embargo period. Meanwhile, the pdf files of the research papers are only available to be accessed by the authorized visitors of the system.

Submission of research papers is available for registered users in the system. The submission requires an agreement form for the consent and terms regarding the paper.



**Figure 4.** Animo Repository

Source: <https://libapps-au.s3-ap-southeast-2.amazonaws.com/accounts/204986/images/submit.PNG>

## Digital Archives @ UPD

The Digital Archives is the official institutional repository of the University of the Philippines Diliman which is in charge for the acquisition, maintenance, preservation, and access of digital records such as the university records, personal papers, UPiana collection, and thesis/dissertation of the university.

The repository allows access to anyone being able to view and browse across the research papers stored in the system with the limitations of being unable to download or view the full text of the content. This means the Digital Archives @ UPD requires login to fully obtain access. The registration of the system only allows using a UPD webmail account (Steps in Submitting ETDs).

The digital archive allows the university's graduating students to submit their thesis in the system that accepts the electronic version of the thesis document. It also implements an embargo period to restrict the access to e-documents for 12 months starting from the date printed on the title page of the document.



**Figure 5.** Digital Archives @ UPD

Source: <https://i0.wp.com/mainlib.upd.edu.ph/wp-content/uploads/da-banner.png?fit=600%2C200&ssl=1>

## A PDF Reader in JavaScript: PDF.js

PDF.js is an open-source JavaScript library and web standard-based platform for parsing and rendering PDF files that is licensed under the Apache (Smith, 2020). The project led by the Mozilla Corporation was an experiment to build a full-fledged PDF viewer using JavaScript and HTML. Later in 2011, it became Mozilla Firefox's PDF viewer initially released as an extension for Firefox browser but later became the built-in pdf viewer for Firefox version 19 and above (Pez, 2020).

PDF.js being similar to Chrome's PDF Viewer is built entirely on web technologies, HTML, CSS3, and JavaScript that means it renders pdf files natively in the browser. This makes the PDF.js more fast, lightweight, and secure (Parfeni, 2012). PDF.js is supported in the browsers such as Firefox, Chrome, Opera, Edge, IE 11, Safari 9+ but is not supported in Safari 8 and below, IE 10 and below, and Android 4 and below (Pez, 2020). Moreover, web-applications such as the LinkedIn Learning, Dropbox, Eduative.io, Paypal, Binance use PDF.js to enable the previewing of PDF documents ([www.wappalyzer.com](http://www.wappalyzer.com)).



**Figure 6.** The PDF.js Logo

Source: [https://commons.wikimedia.org/wiki/File:Pdf-js\\_logo.svg](https://commons.wikimedia.org/wiki/File:Pdf-js_logo.svg)

## **Database Management System**

A database management system also known as DMS is crucial to computing because computers are excellent at handling vast volumes of data, whether as standalone utility or as a component of other programs. These data can be from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network.

In the early time, there were only two types of database management system, namely: hierarchy and network model. Hierarchy model's nodes or components have a child/parent relationship with one other node or component. Meanwhile, the only difference between the hierarchy model and the network model is that the latter's components can have multiple relationships.

Overtime, these models are overtaken by something called a relational model. In the relational model, “individual components have attributes that are linked to their identities through a database table design” (Database Management System (DBMS), 2022).

## **MySQL**

MySQL is a database management system that follows the relational model. It stores data in separate tables rather than storing them in one large storage. The SQL in MySQL stands for “Structured Query Language” – the standardized language for accessing the database. Moreover, MySQL is an open source means it is essentially free for the users without any charges or payment. MySQL is also fast, reliable, scalable, and easy to use.

## **Related Studies**

### **Abstract of Online Thesis Archiving System for University of Makati**

Gilles (2019) conducted a study to develop an online thesis archive system for the University of Makati. The system contains the features of searching, previewing of full theses and abstract, users can also download theses. The system's user type includes the admin account that can add, update and delete a thesis project to the system and the users that can preview and download the thesis (Gilles, 2019).

Furthermore, Gilles (2019) mentioned that the system uses the front-end tools such as the PHP, HTML, JavaScript, and CSS whereas the back-end tools are XAMPP and MySQL. For the digitalization of the thesis papers stored in the library, Gilles (2019) used the Cam Scanner application by capturing the hardcopy of the thesis and saving it to PDF format.

### **Theses and Dissertations Abstract E-Archiving System with SMS Support**

Alpasan (2022) developed “Theses and Dissertations Abstract E-archiving System with SMS Support” for easier finding and retrieving of related literature from the e-library collections of thesis and dissertations through the use of SMS.

Moreover, Alpasan (2022) stated that the results of the developed system had a mean of 4.81 interpreted as very good and “the findings implied that the degree in which the functions facilitate had accomplished the specified tasks and objectives of the developed system of the specified users in searching and archiving the abstract of their related study.”

## **Thesis Management System**

Based on the study conducted by Alano, et. al (2018) in the Polytechnic University of the Philippines, the existing problems in the College of Computer and Information Sciences Research room could be resolved through the thesis management system. According to Alano, et. al (2018), the primary issue facing the professors, staff, and coordinator is making prior theses simple for students to seek for or borrow. Many students would be able to use a web-based thesis management system, according to proponents, as they wouldn't need to go to a research room. The thesis management system's online accessibility will aid academics, staff, and students in their work. The readers will need to register an account on the thesis management system and provide some of their basic information so it can be stored there.

## **Design and Implementation of Graduation Thesis Management System**

According to Xiaoping Feng, Fanqi Wei and Yan Zhang the researchers of Design and Implementation of Graduation Thesis Management System. Since IT technology has advanced so quickly, widely, and deeply, it has been ingrained in every facet of social and professional life. The essential functions and general structure of the produced system are determined by this paper's analysis of the graduation thesis management system's current actual scenario. The "graduation thesis" serves as a platform to measure students' knowledge and thoroughness. It has now become commonplace to use them to assist teaching, instructors, students, and society as a whole through optimum management. A stage in the practical teaching of colleges and universities is the graduation thesis. It symbolizes a student's level of academic proficiency as well as their capacity for learning.

It's crucial to handle the thesis if you want the graduation thesis teaching procedure to go off without a hitch. The manual method of managing graduation theses in the past has not been able to satisfy needs, and their flaws are becoming more and more obvious. The inadequacies of manual management in the past have been considerably reduced by information management in educational administration.

## Conceptual Framework

EMPHATISE	DEFINE	IDEATE	PROTOTYPE	TEST
<ul style="list-style-type: none"> <li>• Library Department</li> <li>• Students</li> <li>• Personal experience of the researchers in accessing the thesis papers of the university</li> </ul>	<ul style="list-style-type: none"> <li>• Limited means of accessibility of the students to the thesis papers given the pandemic situation</li> <li>• The existing system does not store the entire data of the thesis including its electronic document file.</li> <li>• Unwanted damage/s to the hardbound copies and cds of the theses.</li> </ul>	<ul style="list-style-type: none"> <li>• To enable students to access the thesis papers of the university through online.</li> <li>• To provide a complete management and storage system for thesis papers of the university.</li> <li>• To digitally preserve the thesis papers of the university.</li> </ul>	The Development of Web-based Thesis Archive Management System.	<ul style="list-style-type: none"> <li>• Functionality</li> <li>• Accuracy</li> <li>• Reliability</li> </ul>

**Figure 7.** Conceptual Framework of the Study

The Design-thinking model is used as the conceptual framework for the development of this study. The diagram above illustrates the five-stages of the design thinking model proposed by Hasso Plattner Institute of Design at Stanford (Dam, 2022). These stages are used by the researchers to apply the methodology to the development of a web-based thesis archive management system.

In order to conduct the study, the researchers should determine the problems of their users they can empathize with as part of the first stage. The librarian of the university

was thoroughly briefed and interviewed regarding the problems and difficulties faced with thesis archiving. The researchers also empathize with their personal experience in how easy it may be to access these thesis papers in the library.

Second is to define. This stage undertakes the gathered problems of the researchers as they empathize with the needs and problems of their users. Particularly, the problems are the constraint accessibility of the students to the stored thesis papers in the library, the OPAC— the existing system of the university's library does not completely store the information of the thesis papers, and the security and unwanted damage on hardbound copies and CDs of these papers.

The third stage which is to ideate presents the ideas of the researchers to resolve these problems. The first idea is that students should be able to access the thesis papers of the university through a web-based application in order to combat the constraint of the thesis papers' accessibility marked up by the pandemic. The second idea is to provide a management system for thesis papers so that the library would be able to store and manage the complete information of the thesis papers including their electronic documents. The third idea is the digital preservation of the thesis papers particularly for the existing ones stored in the university's library.

The development stage introduces the application the researchers come up with in order to resolve the gathered problems. The researchers would develop a web-based thesis archive management system that has the primary features of storing and displaying the thesis projects that are uploaded either by the admin or student account. There would be a request functionality for accessing the PDF file of a particular research paper and an auto-generated citation format for every research paper to avoid plagiarism. A 'most viewed'

and search functionality for students to easily sort the thesis papers in the system. Furthermore, the front-end tools to be used in developing the system are HTML, Bootstrap, CSS and JavaScript. The researchers would also use PDF.js for rendering the PDF thesis documents in the system. Meanwhile, the back-end tools to be used are Django, XAMPP and MySQL.

Lastly, the fifth stage is the testing of the software. The web application would be tested according to its functionality, accuracy, and reliability in order to determine its degree of success in solving the gathered problems.

## **Definition of Terms**

In order to have completely understand the project, the following words are defined:

**Thesis Archive System.** A system that will facilitate the viewing and storing of theses of the university through this project.

**Digital Preservation.** It is the main aim of the project that involves scanning the physical thesis copies of the university to ensure their continuous availability and accessibility in the future.

**Graduation Thesis.** It is research that relates to a degree program or is part of the study program of the university which will be digitally scanned and stored in the project.

**Electronic Thesis and Dissertations (ETD).** It refers to the electrical documents representation of a thesis or dissertation in replacement to the physical copy which the project will store and display.

**Open-source JS Library.** It is a resource of pre-built JavaScript code that is used to easily enhance and design the frontend of the project.

**MySQL.** It is a relational database management system used to store data from the project.

**PDFjs.** It is an open source javascript pdf viewer used to render and display the pdf files stored in the project.

**Admin.** The usertype of the project responsible for managing the system.

## **Chapter 3**

### **METHODOLOGY**

This chapter covers the design concept, construction, and implementation of the system's innovations.

#### **Project Design**

The research design for this project proposal was based upon the analysis of the existing OPAC system to develop a new, digitalized and web-based thesis archiving system as part of the project requirements.

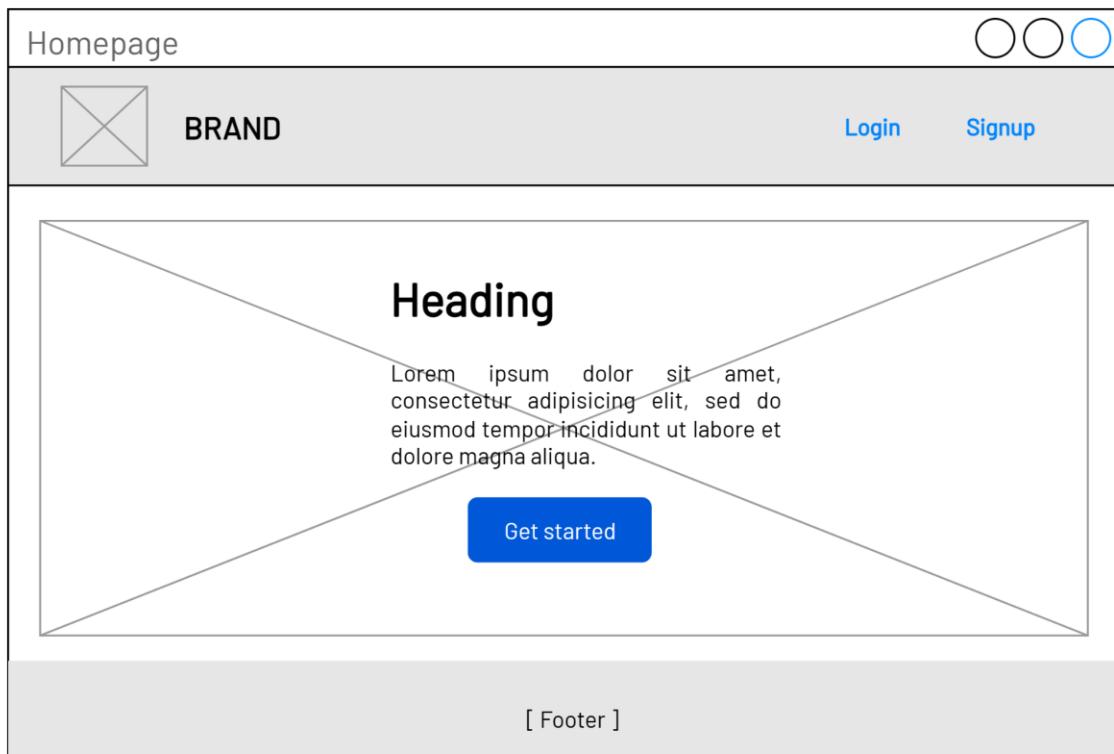
The web application is composed of functionalities such as account registration, thesis submission and evaluation, update and display of thesis projects, adding and updating of department and course major, and management process for accessing the pdf document of the thesis.

The account registration is used to gather information from students who are going to access and use the web application. It will also ensure that only students of TUP- Cavite will be able to access the system using their gsfe account. The registration includes a username, first name, last name, gsfe email and a password. Moreover, there will be a provided admin account for the use of the library.

Furthermore, students and the administrator account will both have the capability to upload their thesis projects in the system. However, the ones submitted by the students will undergo evaluation first which will be handled by the admin account to either reject or approve and become accessible in the system.

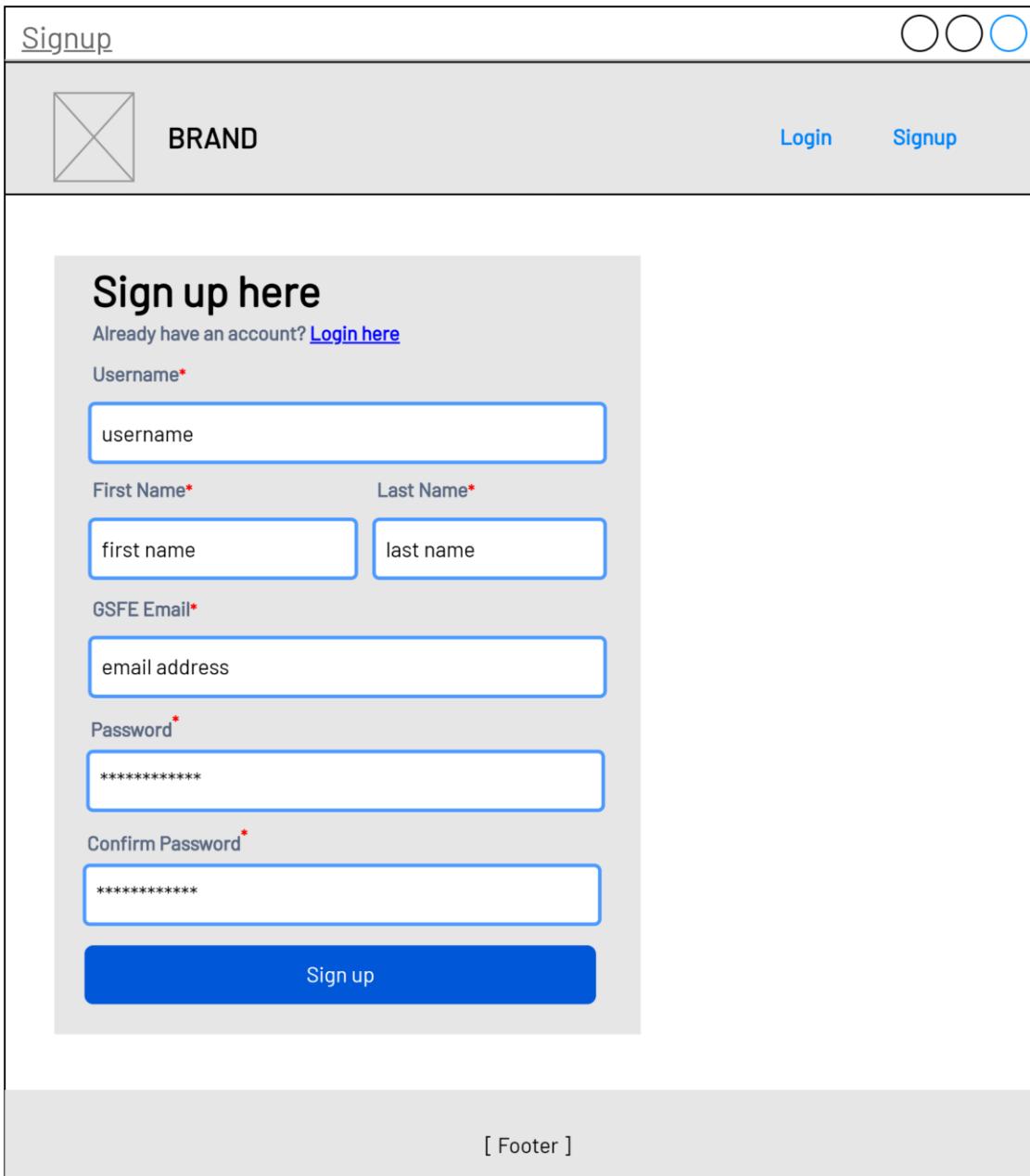
Meanwhile, in order to access the pdf document of the thesis projects, students are required to submit a request to access the file. This will then be approved by the admin account and only after that, the student should be able to view and download the pdf file.

The proposed wireframes of the web application are shown in the figures below.



**Figure 8.** Homepage Wireframe

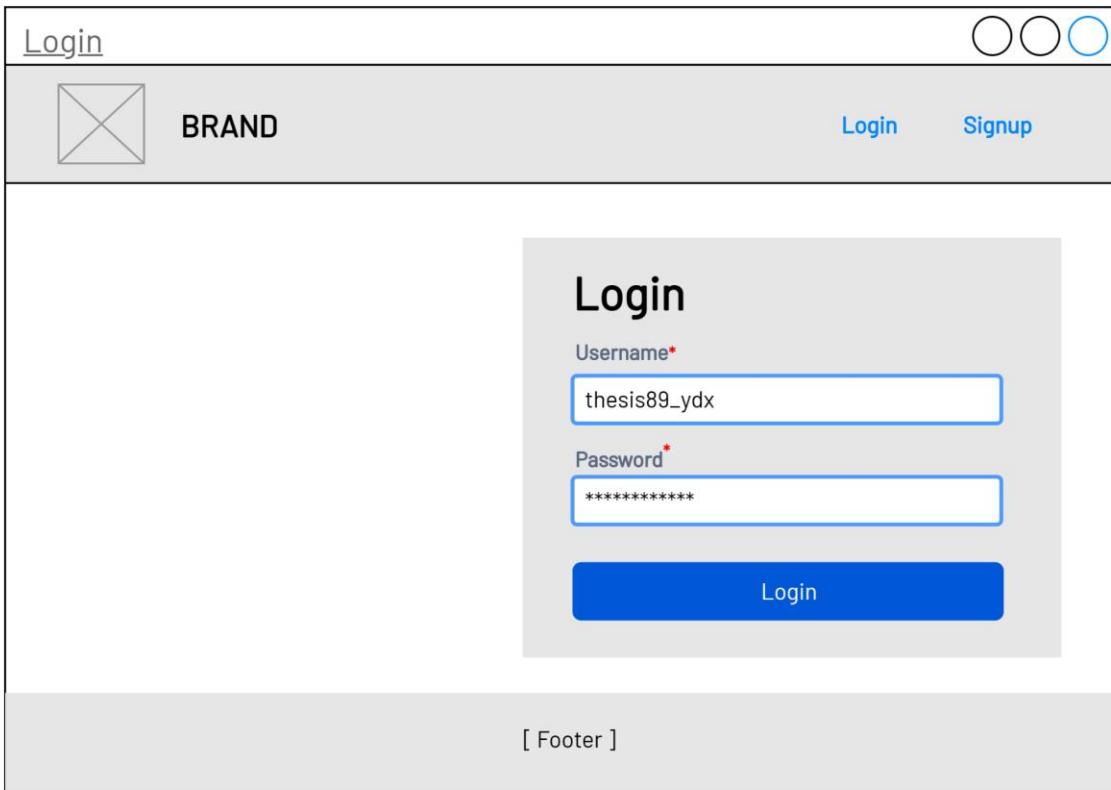
Beginning with the homepage wireframe of the system as shown in Figure 8, this contains the heading and text that briefly introduces the system. Meanwhile the navigation bar contains two links for the login and signup page.



The wireframe shows a registration page titled "Signup". At the top right are three circular icons. Below the title is a logo placeholder labeled "BRAND" and links for "Login" and "Signup". The main form area is titled "Sign up here" and includes fields for "Username\*", "First Name\*", "Last Name\*", "GSFE Email\*", "Password\*", "Confirm Password\*", and a "Sign up" button. A footer section at the bottom contains the text "[ Footer ]".

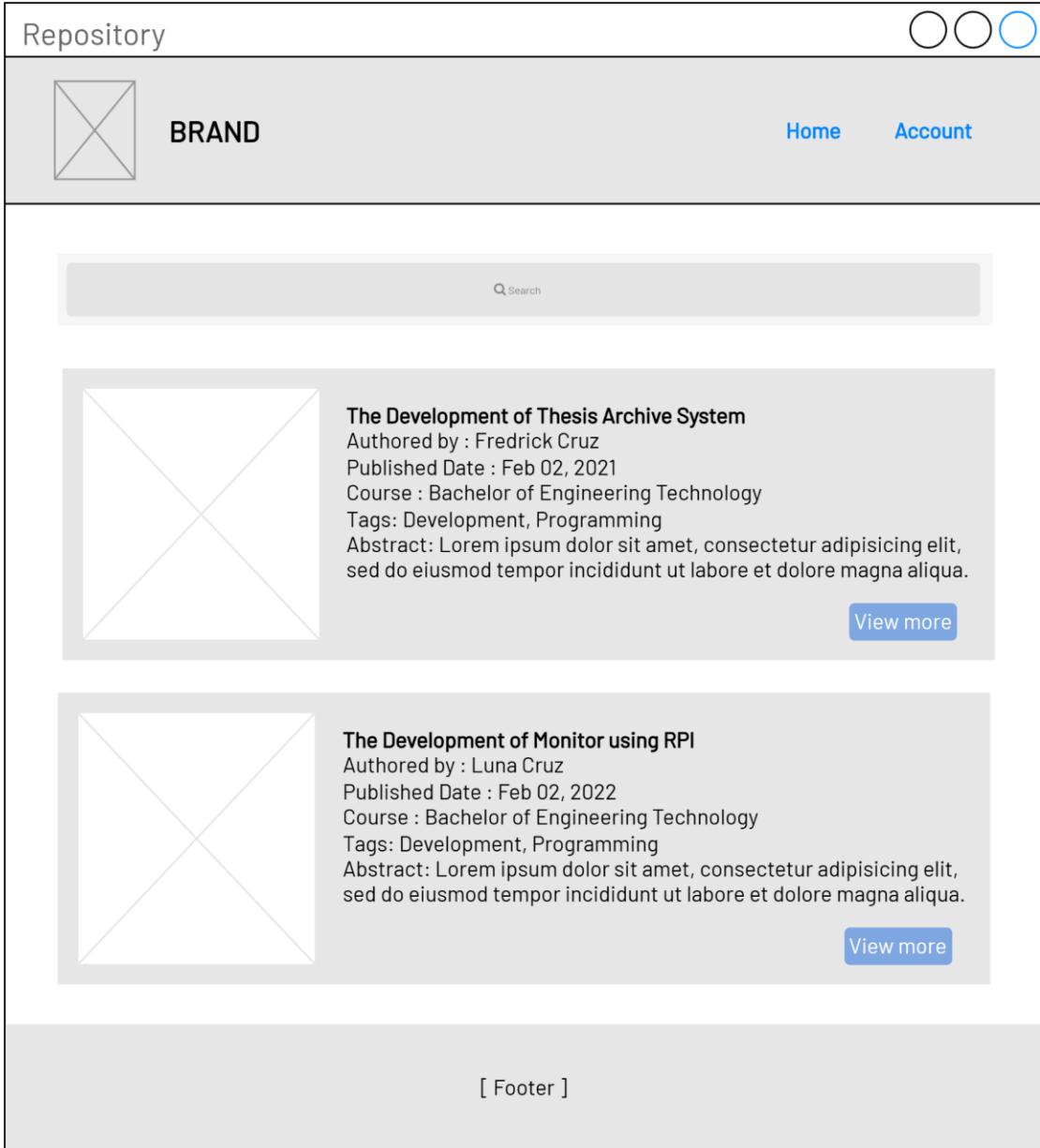
**Figure 9.** Registration Wireframe

In order to allow a new user to create an account to access the system, the signup wireframe responsible for that is shown in Figure 9. This requires the username, first name, last name, password, and gsfe email address of the user.



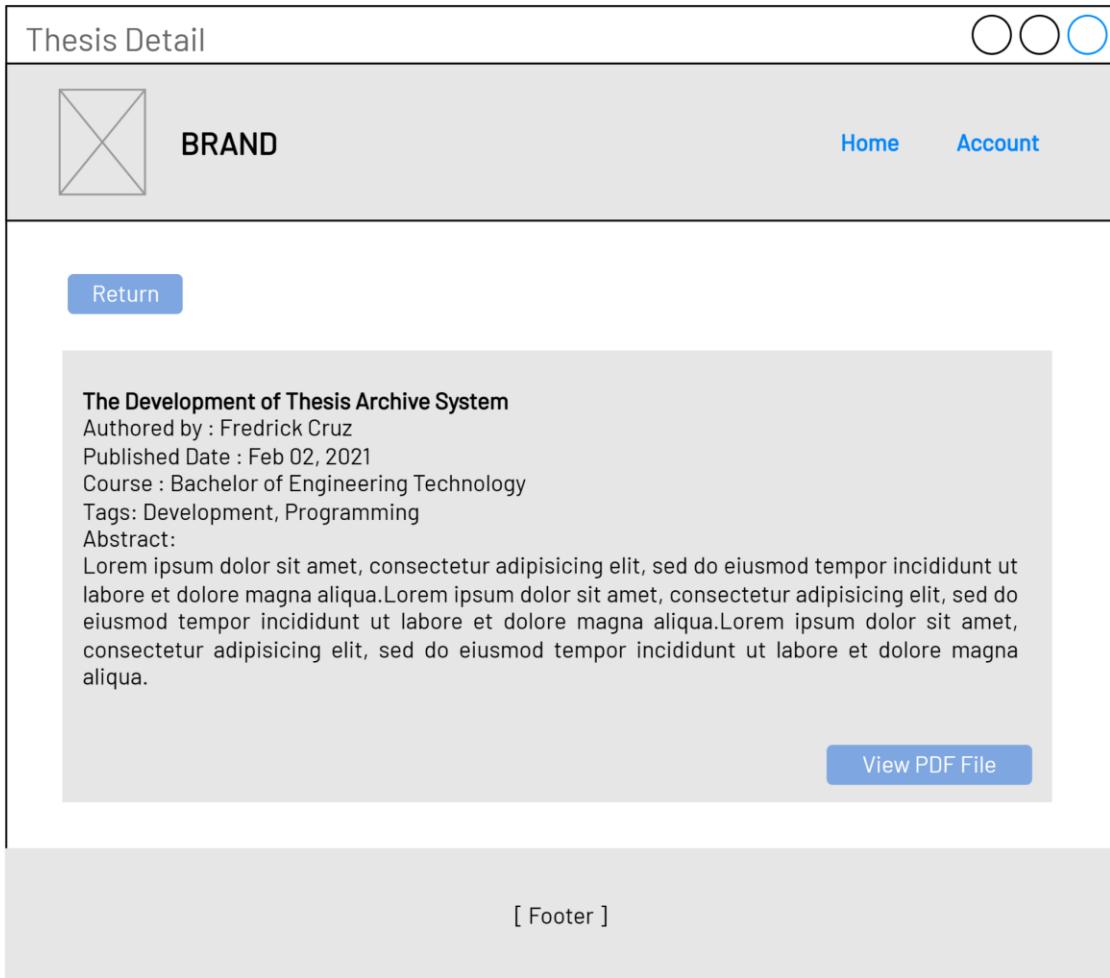
**Figure 10.** Login Wireframe

Meanwhile, the Figure 10 shows the wireframe for login for registered accounts such as of the admin and students in the system. The login requires the username and password of the account of the registered account.



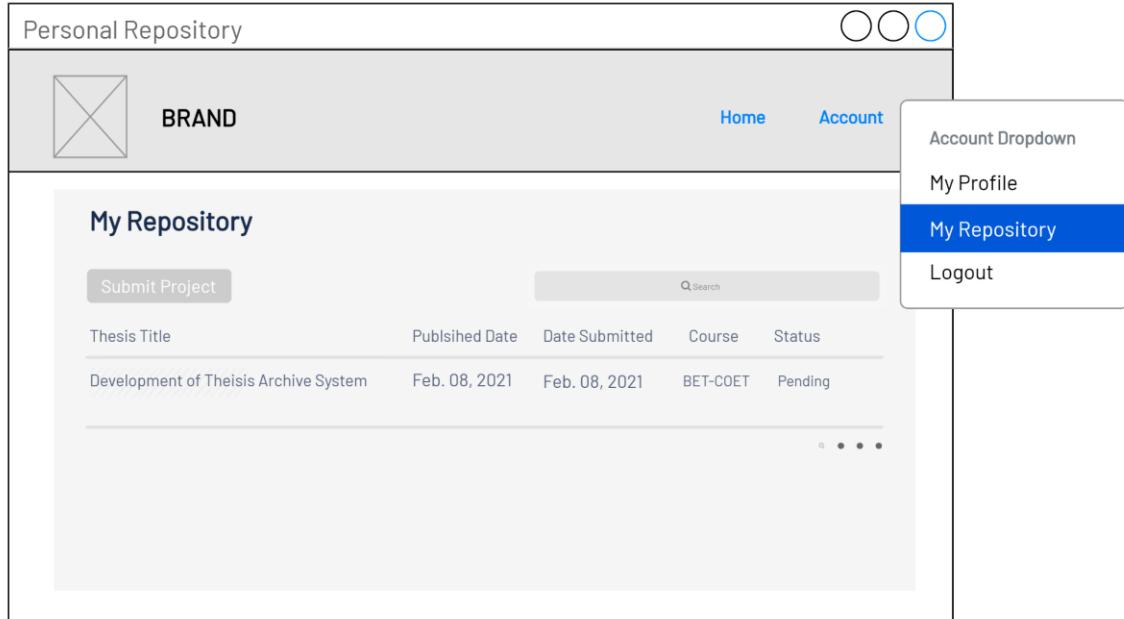
**Figure 11.** Repository Wireframe

In displaying the available thesis projects in the system, the repository wireframe in Figure 11 is shown. This is the landing page as the student logins to the system. The theses are displayed in cards with their information such as the title, author, published date, course, truncated abstract and tags.



**Figure 12.** Display Selected Thesis Wireframe

After selecting a thesis from the Figure 11, the Figure 12 shows the wireframe for displaying the selected thesis of the student. This contains the full context of the abstract as well as the title, author, course, tags, and published date of the thesis. A button for viewing its pdf file is also provided.



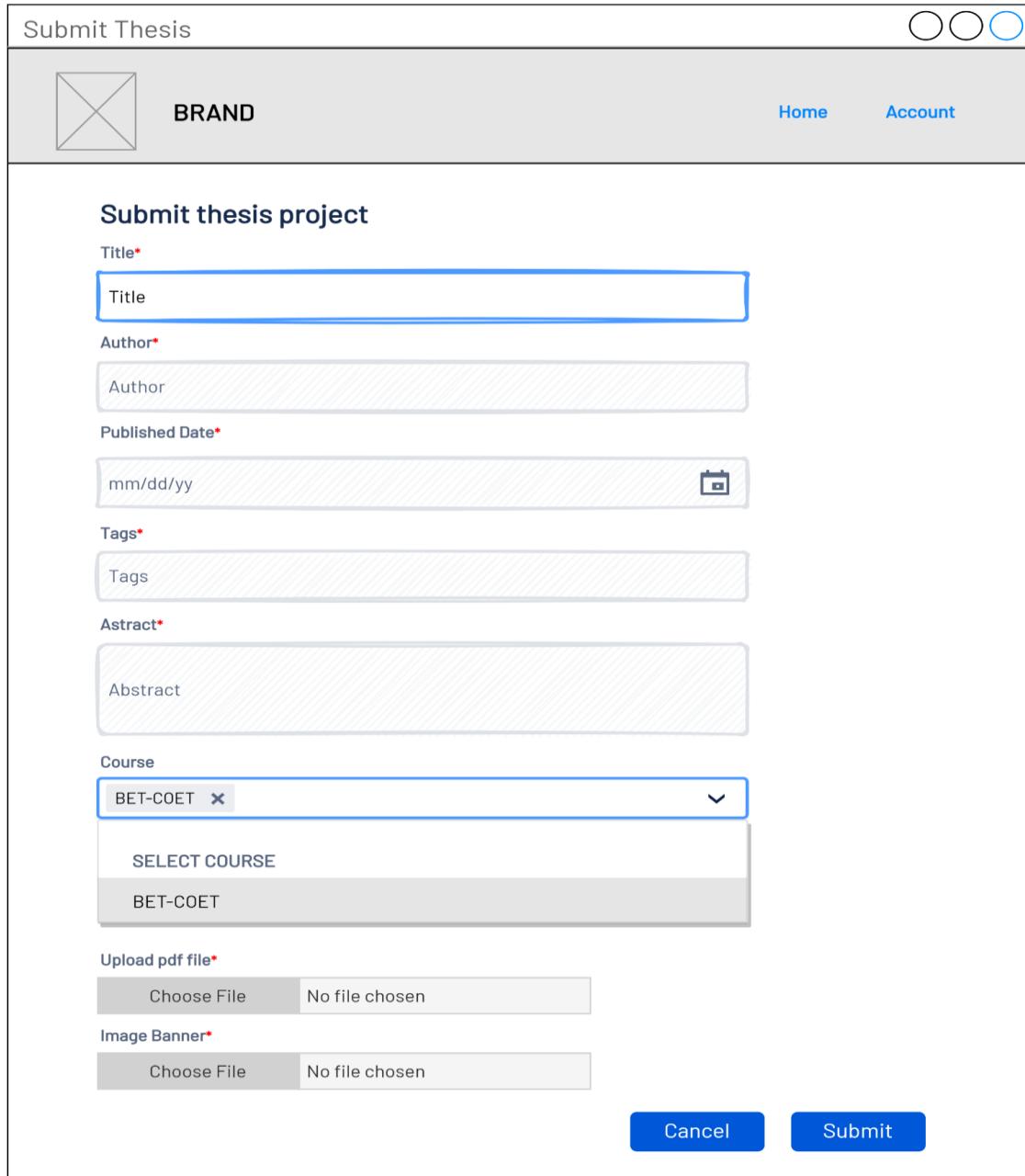
**Figure 13.** Personal Repository Wireframe

On the other hand, the student can manage their personal repository in the system as shown in the Figure 13. This page allows the student to submit a thesis in the system and manage his/her submitted thesis projects according to their status: approved, status or rejected.

The wireframe illustrates the 'My Profile' page of a web application. At the top, there is a header bar with three circular icons on the right. Below the header, the word 'BRAND' is displayed next to a square icon containing an 'X'. To the right of 'BRAND' are links for 'Home' and 'Account'. A dropdown menu is open from the 'Account' link, showing options: 'Account Dropdown' (disabled), 'My Profile' (disabled), 'My Repository' (selected and highlighted in blue), and 'Logout'. The main content area is titled 'My Profile' and contains form fields for updating user information. The fields include: 'Username\*' with value 'thesis89\_ydx'; 'First Name\*' with value 'Loveir'; 'Last Name\*' with value 'Dei'; 'Email\*' with value 'ryanangelo.delacruz@gsfe.tupcavite.edu.ph' (disabled); and 'Password\*' with value '\*\*\*\*\*'. A blue 'Update' button is located at the bottom right of the form.

**Figure 14.** My Profile Wireframe

The profile page of the registered account in the system is shown in Figure 14. This page allows the student to update his/her credentials such as the username, first name, last name and password. The email address is disabled means it cannot be updated.



The wireframe for the 'Submit Thesis' page is structured as follows:

- Header:** 'Submit Thesis' on the left, three circular icons on the right.
- Logo:** A square icon with a diagonal cross.
- Page Title:** 'BRAND' centered above the form.
- Navigation:** 'Home' and 'Account' links in the top right corner.
- Section Header:** 'Submit thesis project' at the top of the form.
- Form Fields:**
  - Title\***: An input field with a blue border.
  - Author\***: An input field with a light gray background and diagonal hatching.
  - Published Date\***: An input field with a light gray background and diagonal hatching, featuring a calendar icon on the right.
  - Tags\***: An input field with a light gray background and diagonal hatching.
  - Abstract\***: A large input field with a light gray background and diagonal hatching.
  - Course**: A dropdown menu currently showing 'BET-COET' with an 'X' icon to clear it. Below the dropdown is a list of courses:
    - SELECT COURSE
    - BET-COET
  - Upload pdf file\***: A file upload field with 'Choose File' and 'No file chosen' labels.
  - Image Banner\***: A file upload field with 'Choose File' and 'No file chosen' labels.
- Buttons:** 'Cancel' and 'Submit' buttons at the bottom right.

**Figure 15.** Submit Thesis Wireframe

In order for a student to submit a thesis, a wireframe is shown above to handle such task. The page displays a form that requires some data of the thesis to be submitted in the system.

**ADMIN ACCOUNT**

Approved Thesis

Add Thesis

Search

Thesis Title	Author	Published Date	Date Uploaded	Course	Tags	Action
The Development of Thesis Archive	Fredrick Cruz	Feb. 08, 2021	May 11, 2021	BET-COET	Development, Programming	<a href="#">Edit</a> <a href="#">View more</a>

Sign-out

**Figure 16.** Manage Approved Thesis Wireframe

Meanwhile, the wireframe for managing the approved theses in the system by the admin is shown in Figure 16. The admin can add and update the information about the thesis and view its full details.

**ADMIN ACCOUNT**

Pending Thesis

Add Thesis

Search

Thesis Title	Author	Published Date	Date Uploaded	Course	Tags	Action
The Development of Thesis Archive	Fredrick Cruz	Feb. 08, 2021	May 11, 2021	BET-COET	Development, Programming	<a href="#">Approve</a> <a href="#">Reject</a>

Sign-out

**Figure 17.** Manage Pending Thesis Wireframe

On the other hand, the wireframe for managing the pending thesis in the system by the admin is shown in Figure 17. The admin can approve or reject the thesis submitted by the student in the system.

The wireframe shows the 'Add Thesis' interface. On the left, a sidebar titled 'ADMIN ACCOUNT' contains 'Manage Thesis' with sub-options: 'My Profile', 'Update Profile', 'Change Password', and 'Sign-out'. The main area has a title 'Add Thesis'. It includes fields for 'Title\*', 'Author\*', 'Published Date\*', 'Course' (dropdown selected to 'BET-COET'), 'Tags\*', 'Abstract' (text area), 'Upload pdf file\*', 'Image Banner\*', and two file upload buttons ('Choose File' and 'No file chosen'). At the bottom are 'Cancel' and 'Add' buttons.

**ADMIN ACCOUNT**

Manage Thesis

My Profile

Update Profile

Change Password

Sign-out

**Add Thesis**

Title\*

Author\*

Published Date\*

mm/dd/yy

Course

BET-COET

Tags\*

Programming, Development

Abstract

Upload pdf file\*

Choose File No file chosen

Image Banner\*

Choose File No file chosen

Cancel Add

**Figure 18.** Add Thesis Wireframe

The admin is able to upload a thesis and become readily accessible in the system by navigating to the figure above that shows the wireframe for adding a thesis on the admin side.

**ADMIN ACCOUNT**

**Manage Thesis**

- My Profile
- Update Profile
- Change Password

**Sign-out**

### Update thesis project

Projects are where your repositories live. They are containers you can group similar repositories in for better code organisations.

**Title\***

**Author\***

**Published Date\***

**Course**

BET-COET

**SELECT COURSE**

BET-COET

**Tags**

**Abstract\***

What is important for people to know?

**Upload pdf file\***

Choose File No file chosen

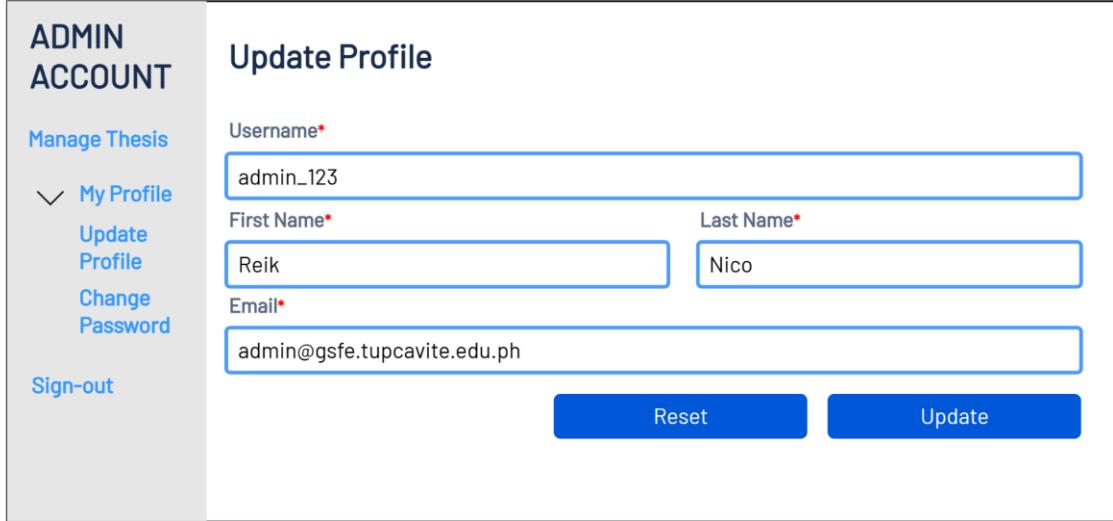
**Image Banner\***

Choose File No file chosen

**Update**

**Figure 19.** Update Thesis Wireframe

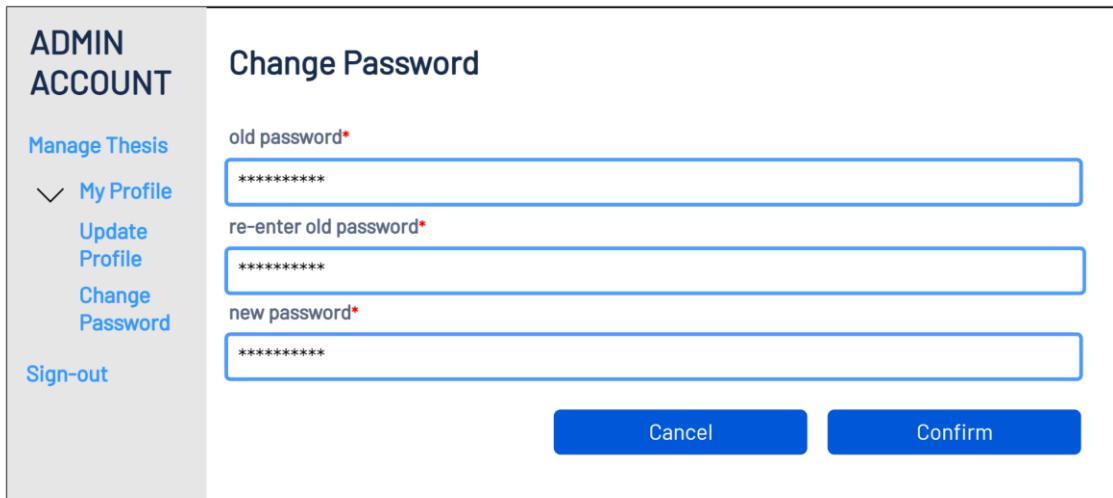
Likewise, the admin can update the uploaded thesis projects in the system as shown in Figure 19 for updating a thesis wireframe.



The wireframe for the Admin Profile page is titled "Update Profile". It features a sidebar on the left with "ADMIN ACCOUNT" at the top, followed by "Manage Thesis", a collapsed "My Profile" section containing "Update Profile" and "Change Password", and "Sign-out" at the bottom. The main content area has a title "Update Profile". It contains fields for "Username\*" (admin\_123), "First Name\*" (Reik) and "Last Name\*" (Nico), and "Email\*" (admin@gsfe.tupcavite.edu.ph). At the bottom are "Reset" and "Update" buttons.

**Figure 20.** Admin Profile Wireframe

Meanwhile, the figure above shows the wireframe for the profile page of the admin account. This page allows the admin to update his/her credentials in the system such as its username, first name, and email.



The wireframe for the Admin Change Password page is titled "Change Password". It has a sidebar on the left with "ADMIN ACCOUNT" at the top, followed by "Manage Thesis", a collapsed "My Profile" section containing "Update Profile" and "Change Password", and "Sign-out" at the bottom. The main content area has a title "Change Password". It contains fields for "old password\*" (\*\*\*\*\*), "re-enter old password\*" (\*\*\*\*\*), and "new password\*" (\*\*\*\*\*). At the bottom are "Cancel" and "Confirm" buttons.

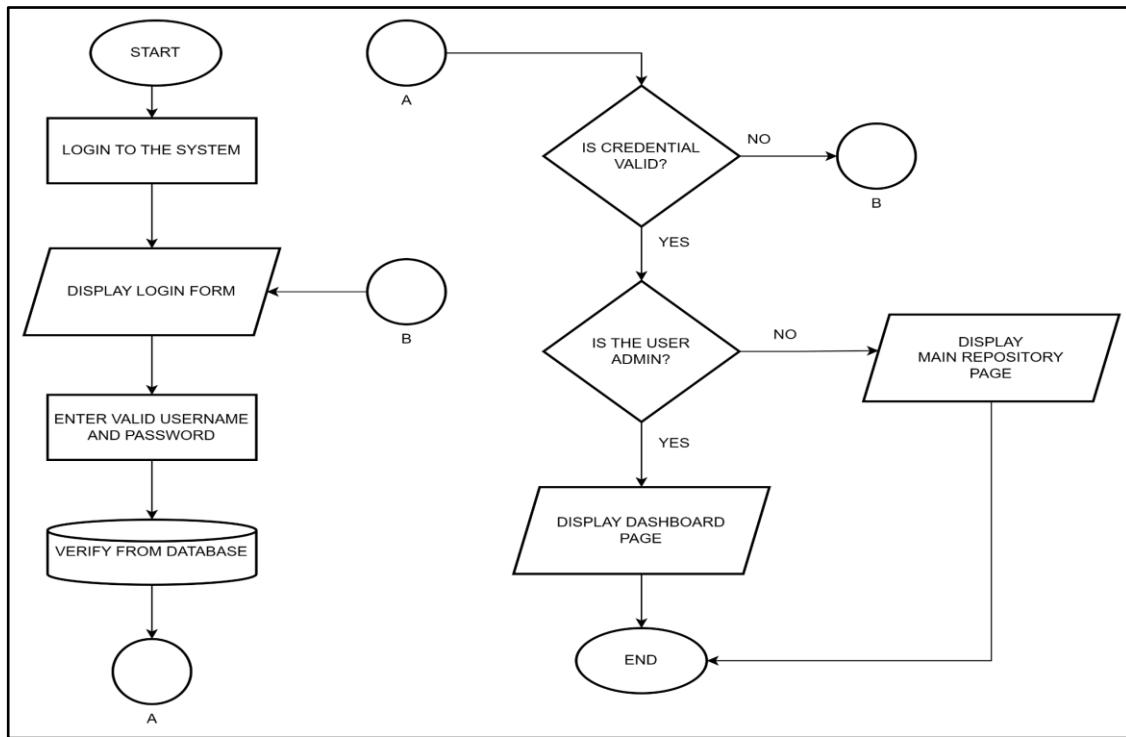
**Figure 21.** Admin Change Password Wireframe

The admin can also update his/her password by the Figure 21 shown above. The form requires the old password and the new password with confirmation.

## Project Development

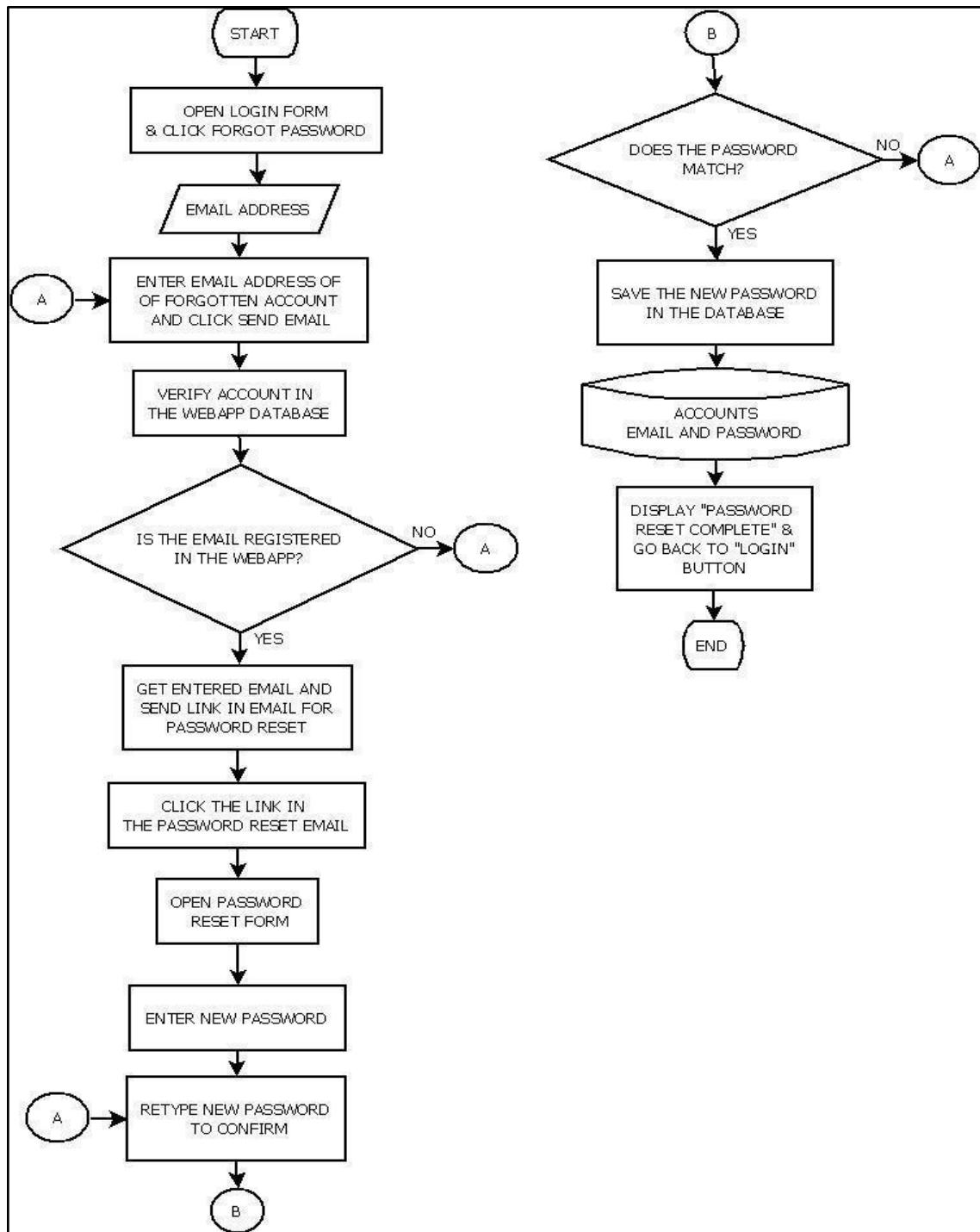
This section contains the software details, the frameworks and tools used to develop the application, flowcharts for the operations, and conducted procedures to meet the application's requirements.

### Flowchart of operations



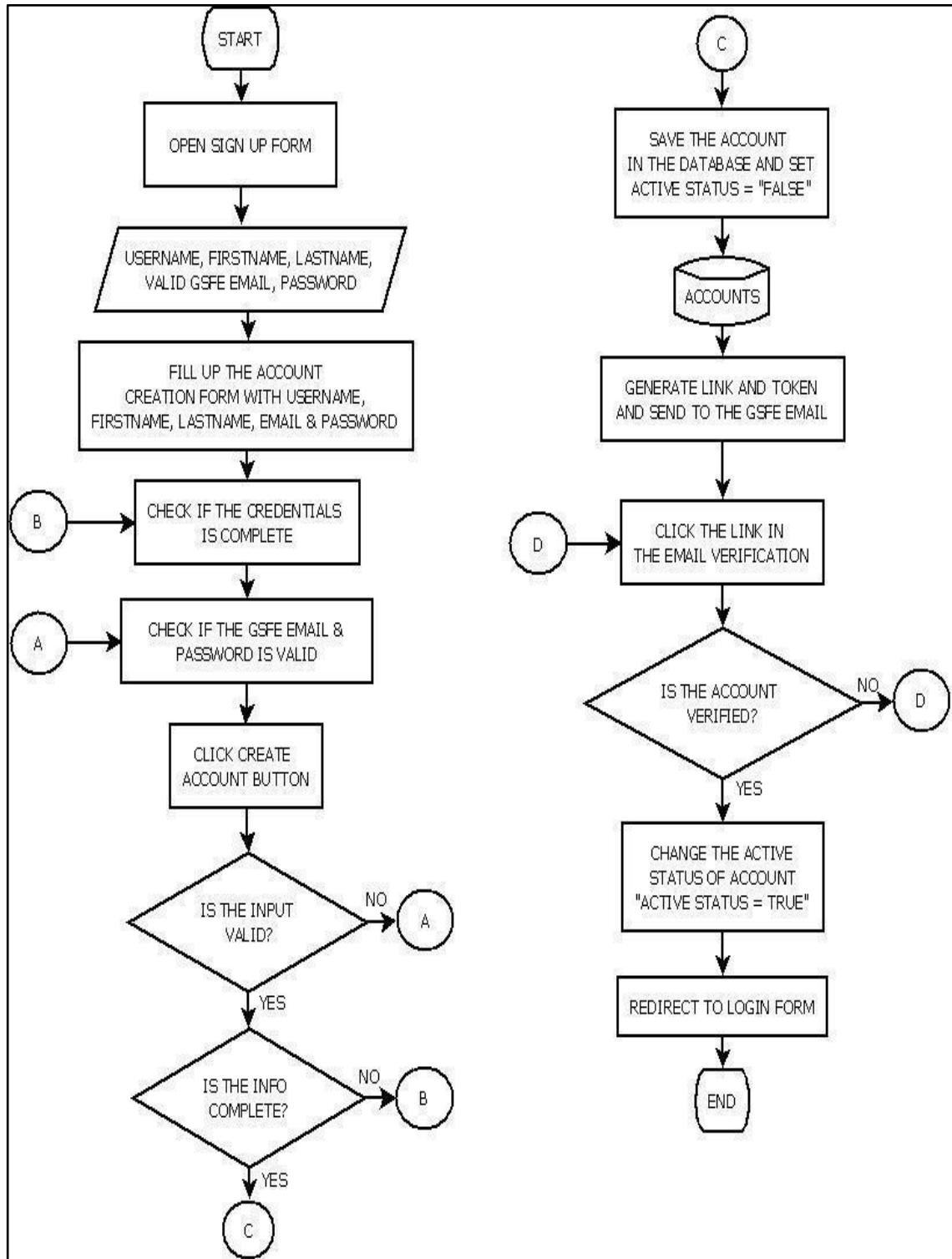
**Figure 22.** Login System Flowchart

The flowchart for the login system is shown in Figure 22. In the login page, the user must enter his/her username and password. If the entered credentials are not valid, the user would be notified that either the username or password are not correct. However, if it is valid, the account of the user would be identified as either a student or admin account.



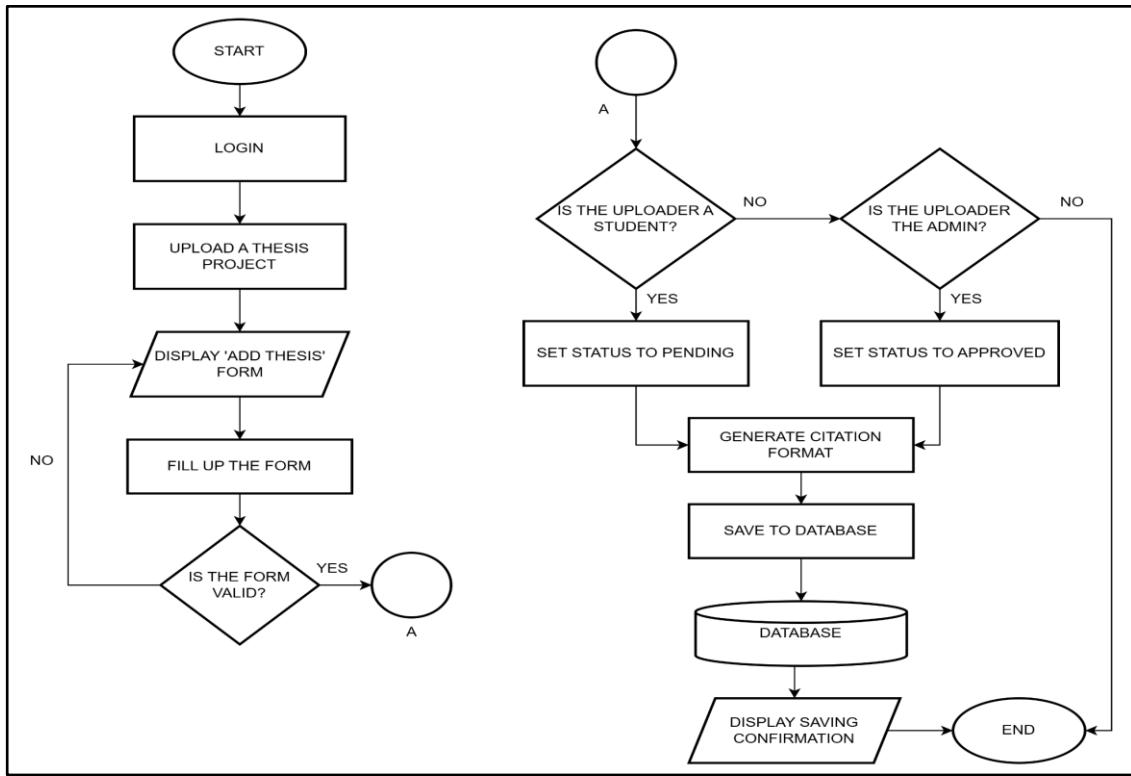
*Figure 23.* Forgot Password Flowchart

The flowchart above, as shown in Figure 23, is for the forgotten password. First when a user has forgotten his/her password, she/he would be asked to search his/her email address for that account registered in the system. If the email address does exist, there would be a link sent to the entered email address. The user would then click on the link sent to his/her email address. If the link and token clicked are valid, the user would be redirected to the reset password page, otherwise the user would be notified that the link is no longer valid.



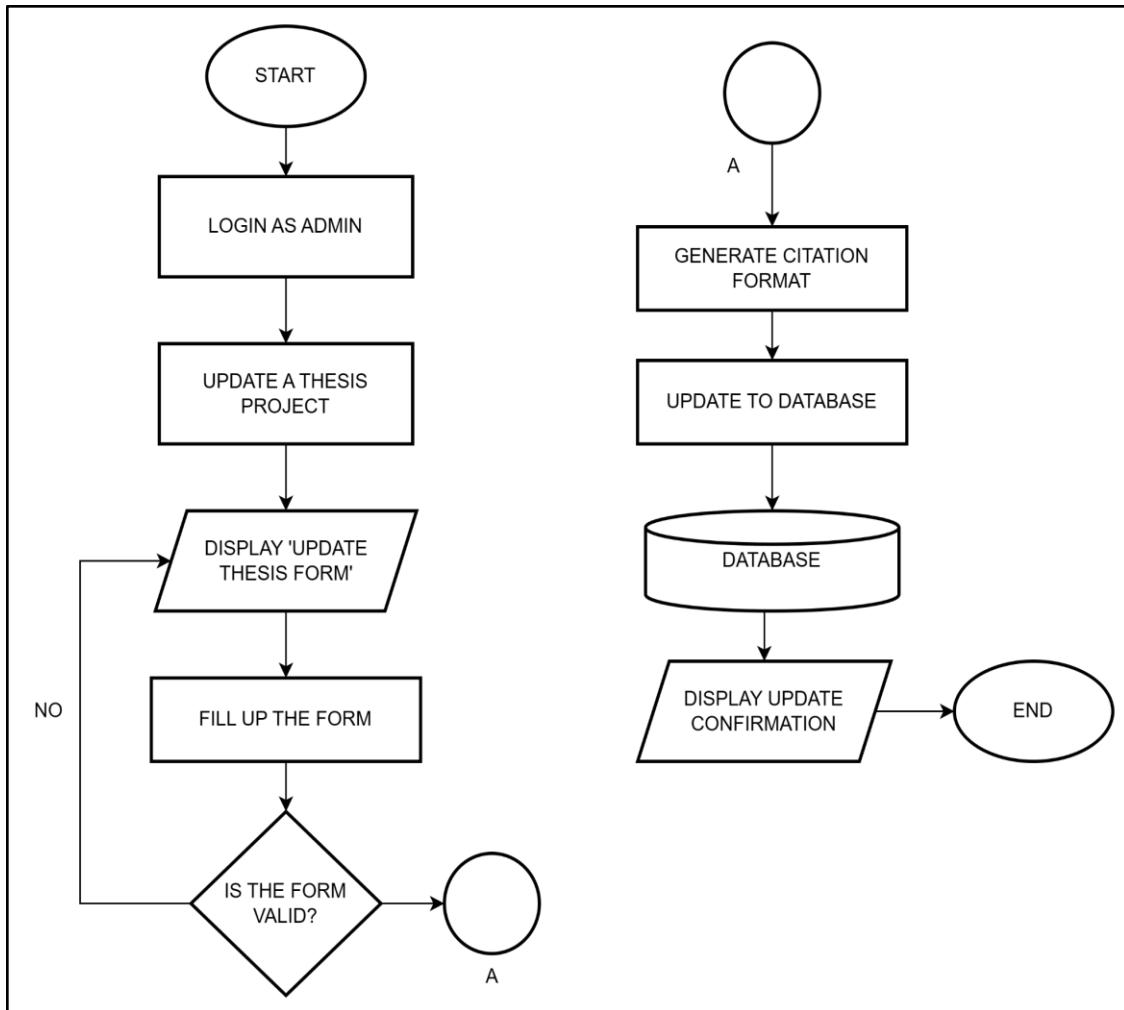
**Figure 24.** User Registration with Email Verification Flowchart

In order to provide an outline on the user registration with email verification, flowchart above is shown. First, to register, the user must navigate to the sign-up page of the system. The user would be required to fill the form with username, first name and last name, gsfe email address, and password. If the data are valid, the user would be notified that he/she has to confirm his/her entered email address. To do this, a confirmation link is sent to the user's email address upon submitting the registration form. The user has then to click the sent confirmation link in order to guarantee the email address belongs to him/her. If the said link is valid, the user would be notified that his/her account has successfully verified its email address and is now able to access the system.



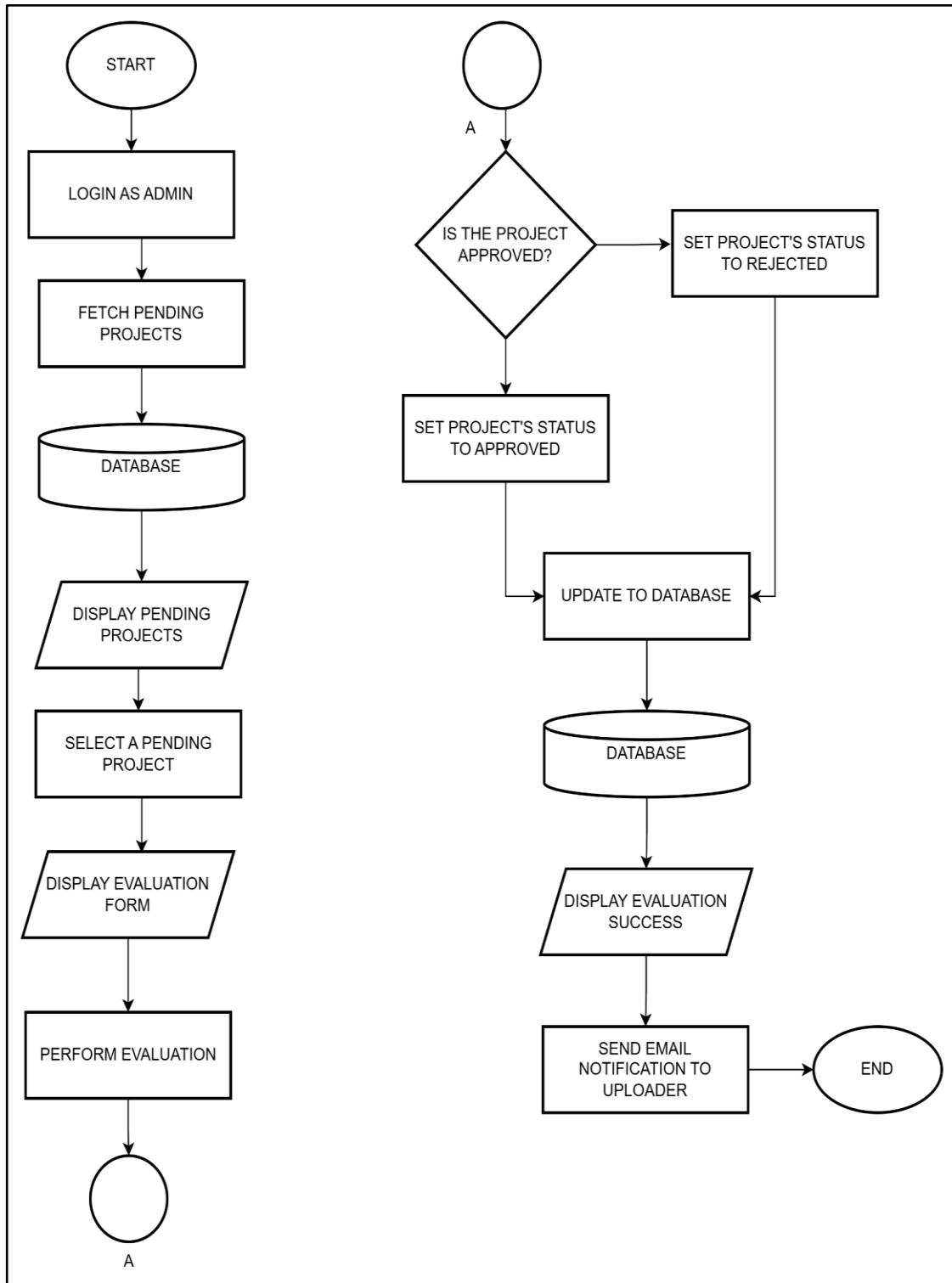
**Figure 25.** Adding of Thesis Project

Moreover, the outline for adding thesis manuscripts according to user types is shown in Figure 25. First, the user must login in order to be able to submit a project. In submitting a thesis project, a form would be displayed requiring the information of the thesis such as its title, authors, publication date, course major, keywords, abstract and a pdf file. Upon submission the form would be validated first. If the form is valid the user type of the uploader would be determined. If the uploader is the Administrator, the status of the thesis project would automatically be set to ‘Approved’ Meanwhile, if the uploader is a student, the status of the thesis project would be set to ‘Pending’ The data from the form would be then saved to the database alongside the thesis project’s generated citation formats.



**Figure 26.** Updating of Thesis Project

For updating a thesis project, Figure 26 shows the flowchart for the operation of such task. The user must be logged in as admin first. Then after selecting a project to update from the approved table by clicking the edit button, an update form would be displayed to allow updating the thesis information. Upon submitting the form, it would be validated first. If the form is valid, the data would be updated to the database as well as its updated generated citation formats.

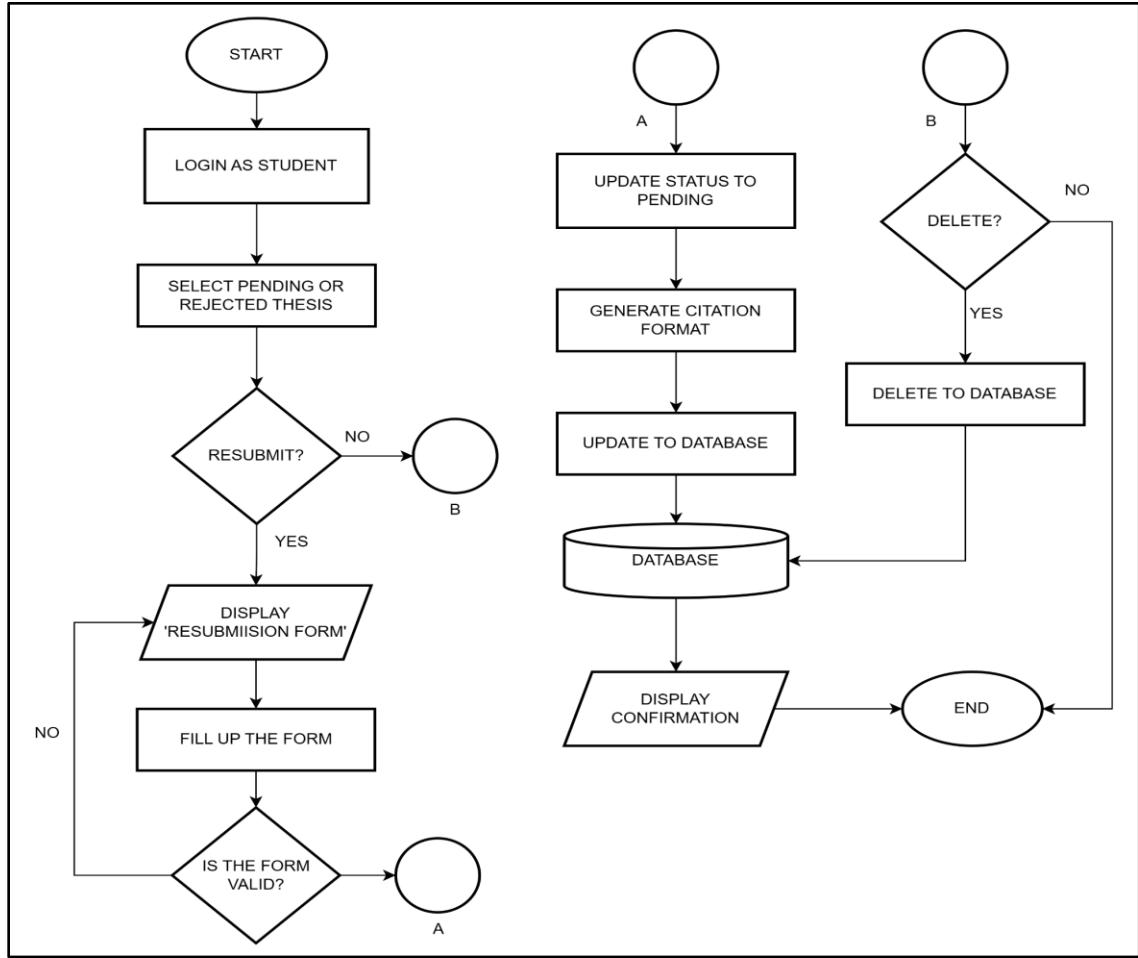


**Figure 27.** Evaluation of Pending Thesis Projects

The approval or rejection of the submitted thesis project in the system is shown in Figure 27. In order to manipulate the figures, the user must be logged in to the admin account and redirect to ‘manage repository’. After so, he/she may desire to evaluate the submitted projects by the registered students in the system listed in the pending table.

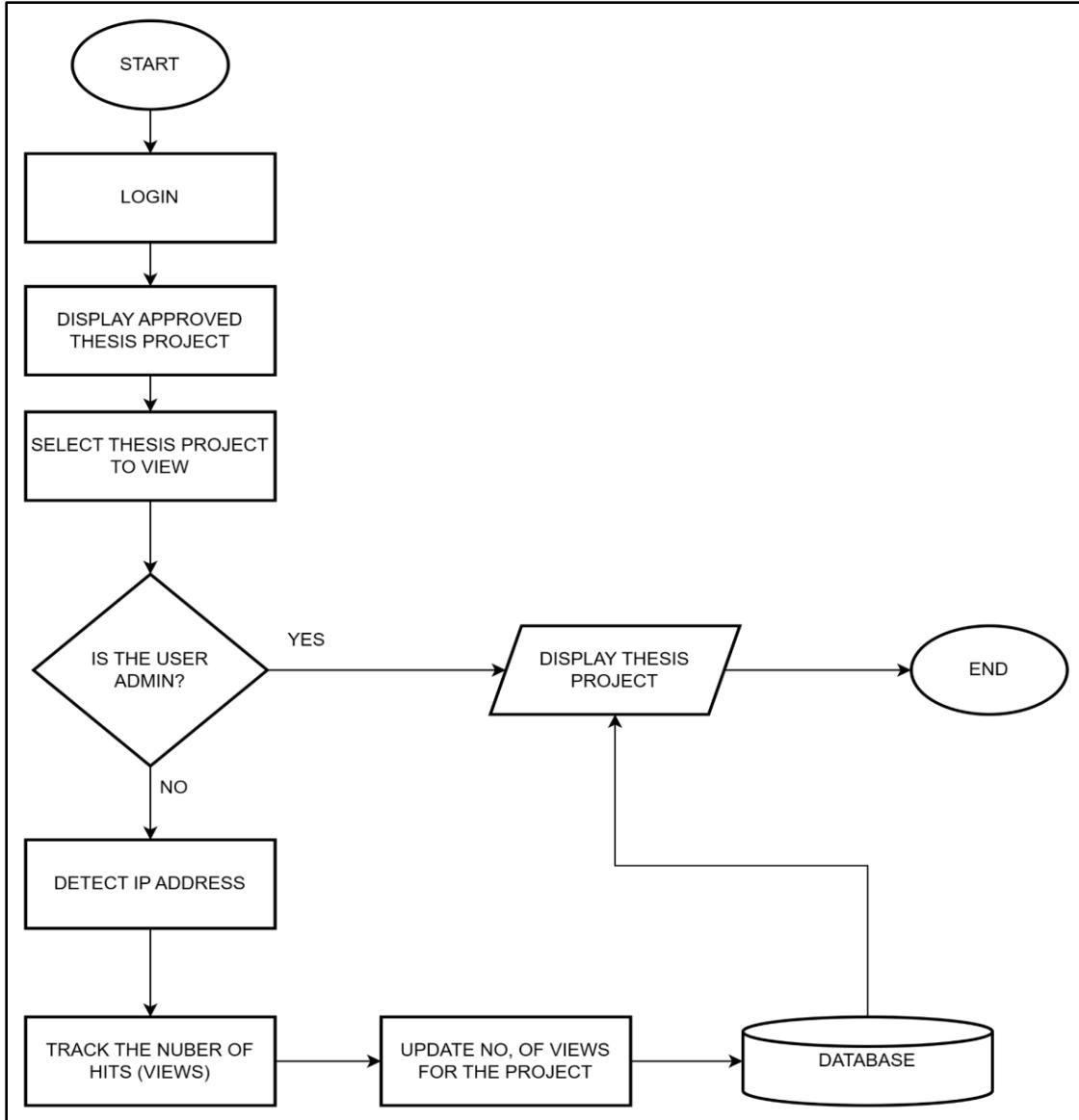
In approving or rejecting the thesis projects, the pending projects in the system would be shown. From there the admin would select a pending project that he/she would like to evaluate. After the selection, the admin would be redirected to the evaluation form in which he/she would either reject or approve the project.

After the submission of the evaluation form, the project’s status would be updated to the database depending on the admin’s decision. If the thesis project is approved, its status would be set to ‘approved’ but if it is rejected, the thesis project’s status would be set to ‘rejected’. The uploader would then be notified about the result in his/her registered email address in the system about the result of the evaluation.



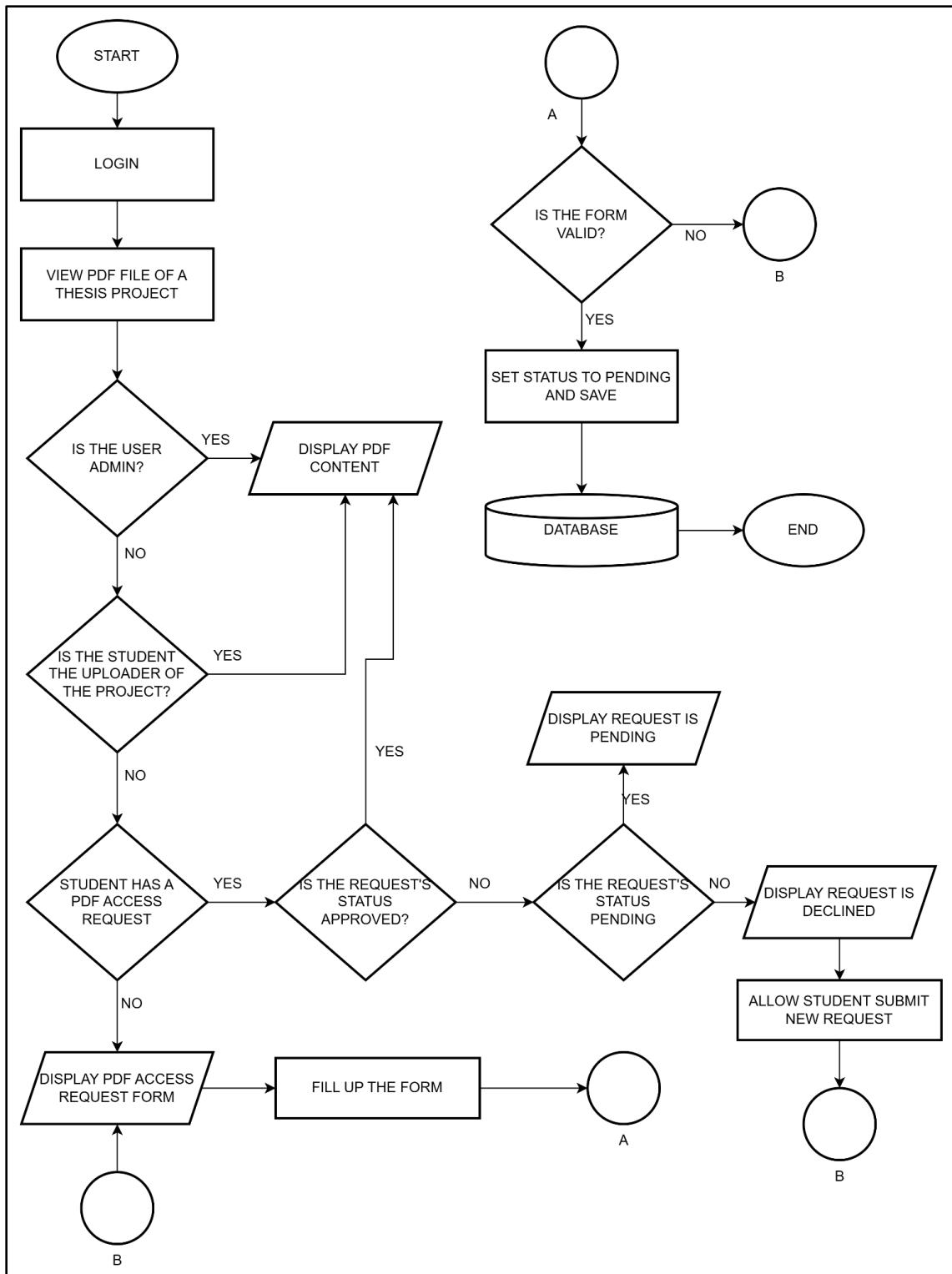
**Figure 28.** Resubmission/Deletion of Pending and Rejected Thesis Projects

On the other hand, the process for a student resubmitting or deleting a pending or rejected thesis project is shown in Figure 28. First the user must login to its account. The student would select his/her pending or rejected thesis project either to resubmit or delete it from the system. If resubmit, the resubmission form would be displayed in which the student can update the current information of the project to fix the errors or fill up the incompleteness. Upon submission the thesis project's status would be reverted back to 'pending', generate citation formats, and update to the database. Meanwhile, if deleted, the thesis project would be deleted from the database.



**Figure 29.** Accessing Thesis Project Flowchart

Moreover, Figure 29 shows the process of viewing available (approved) thesis projects in the system. In order to view the thesis project, the user must be logged in. After so, the user must select a thesis project to view. If the user is a student, a number of hits/views would be tracked for the project. Then, the selected thesis project would be displayed



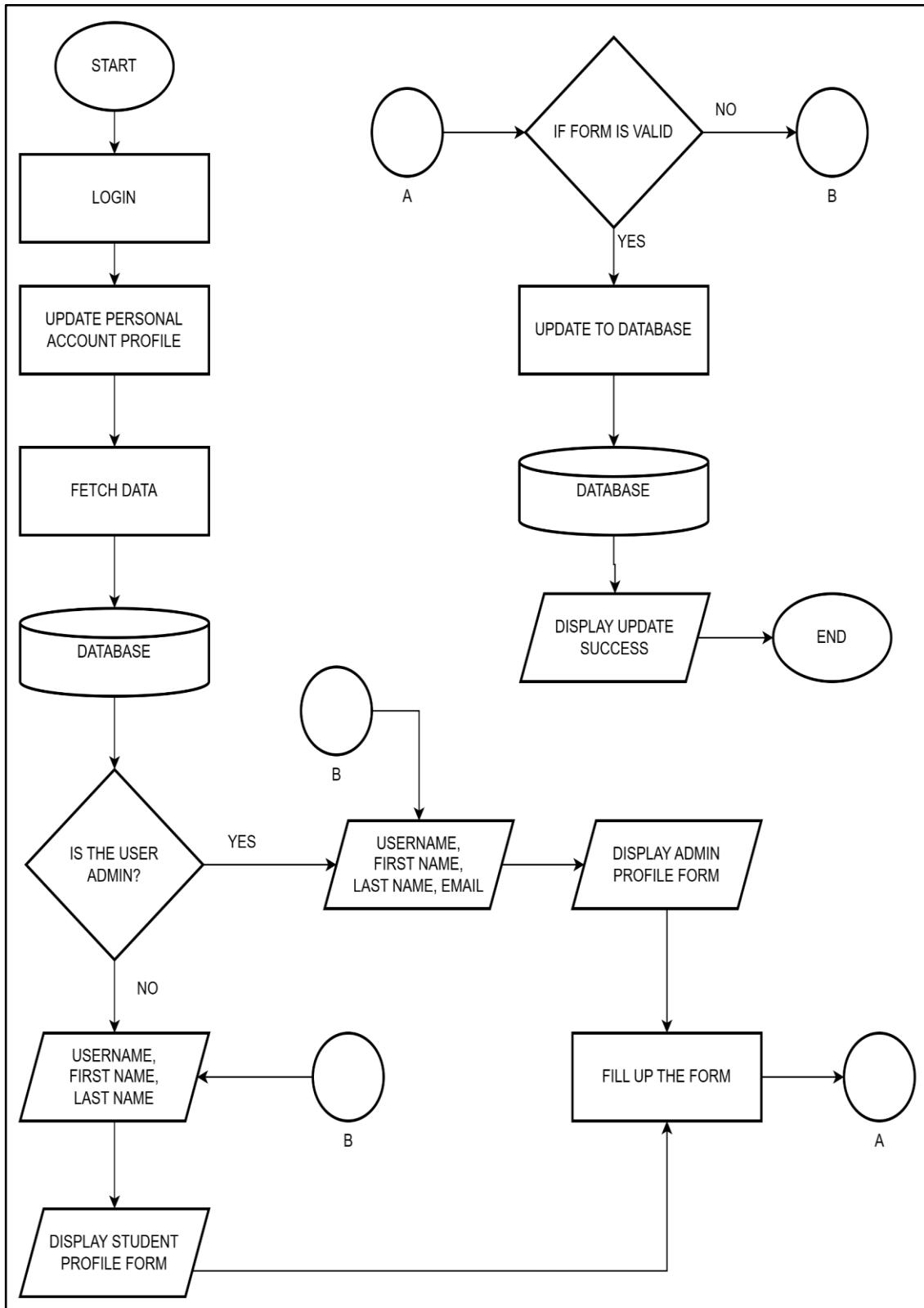
**Figure 30.** Viewing of PDF File Flowchart

The process for giving access to thesis pdf files is shown in Figure 30 above. The admin is able to view all the pdf file of the available thesis projects in the system. Meanwhile the student would be required to submit a pdf access request.

In submitting a pdf access request, the student would be displayed with the pdf access request form which he/she would submit in order to ask for access on the particular pdf file. The request would be submitted and saved to the database and displayed in the admin's pdf access request table which is set for approval or declined.

Approved pdf access request from the student would allow him/her to access the pdf file of a particular thesis with which he/she requested to access. However, if the request is declined, the student would be allowed to submit a new access request for that particular thesis.

Meanwhile, the student can already gain access to the pdf file if given that he/she is the one who uploaded that particular thesis. He/she would no longer be asked to submit a request form in order to view the pdf file of the approved thesis project he/she submitted to the system.

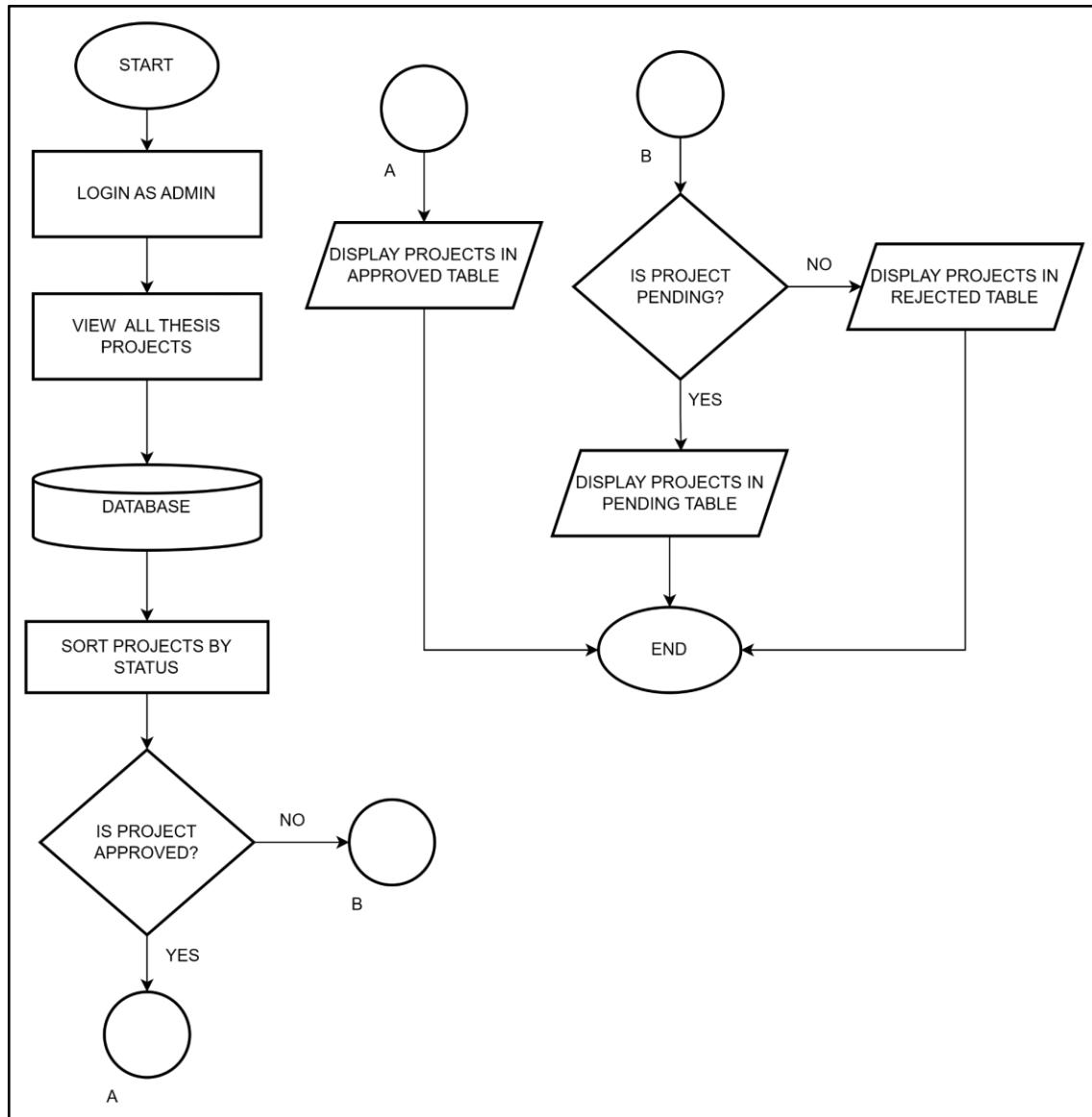


**Figure 31.** Update Personal Profile Flowchart

Moreover, the operation for the updating of the personal account's profile is shown in the Figure 31 above. If the user wants to update his/her profile information saved to the system, there would be a profile form with which the user can update his/her existing information.

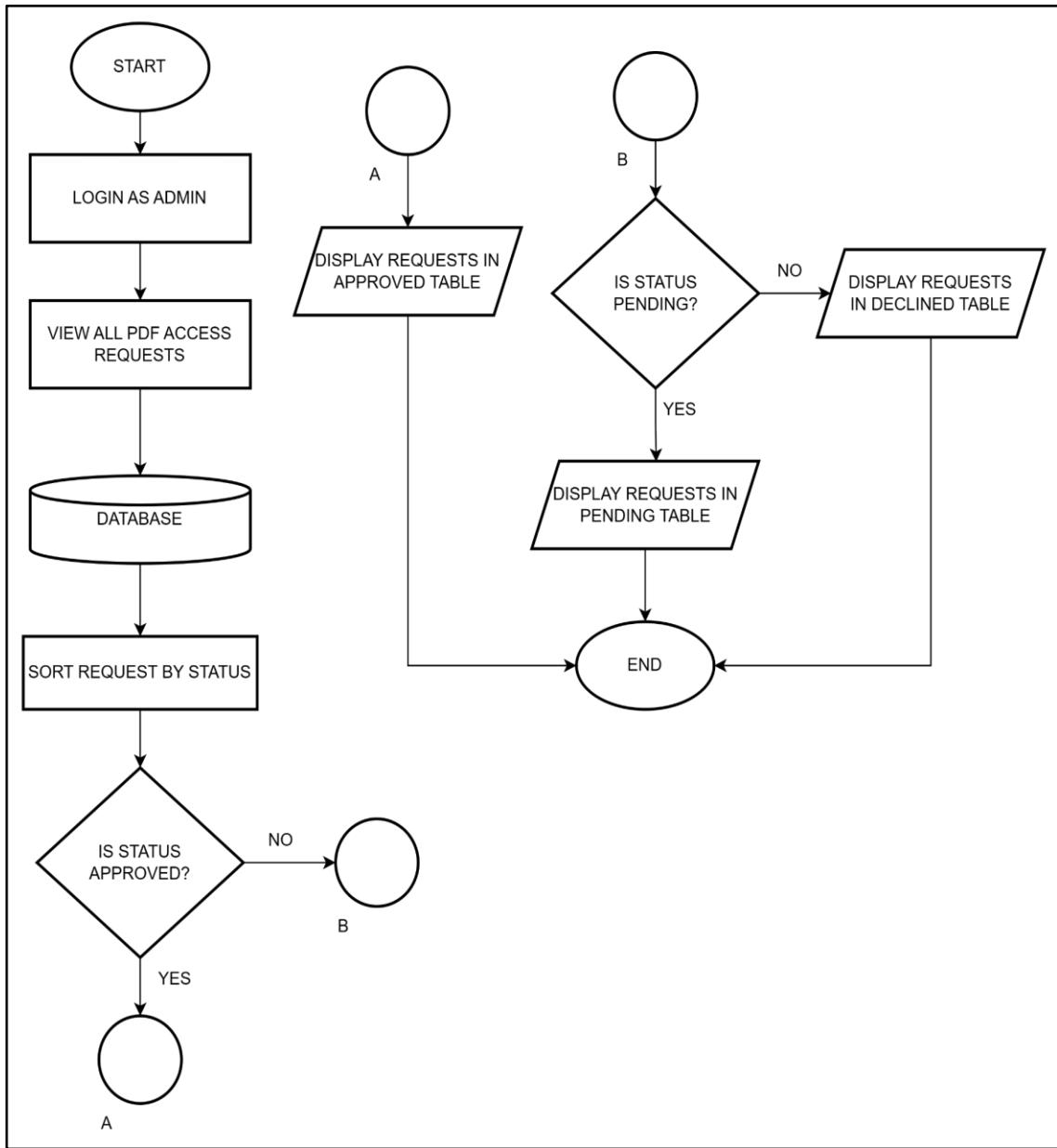
The student is able to update only his/her first name, last name, and user name; the email address is already permanent and cannot be changed. The user can also update his/her password but it is of separate module.

Meanwhile, the admin can update his/her name, last name, username, and email. After a successful update, the user would be notified that his/her profile has been updated successfully.



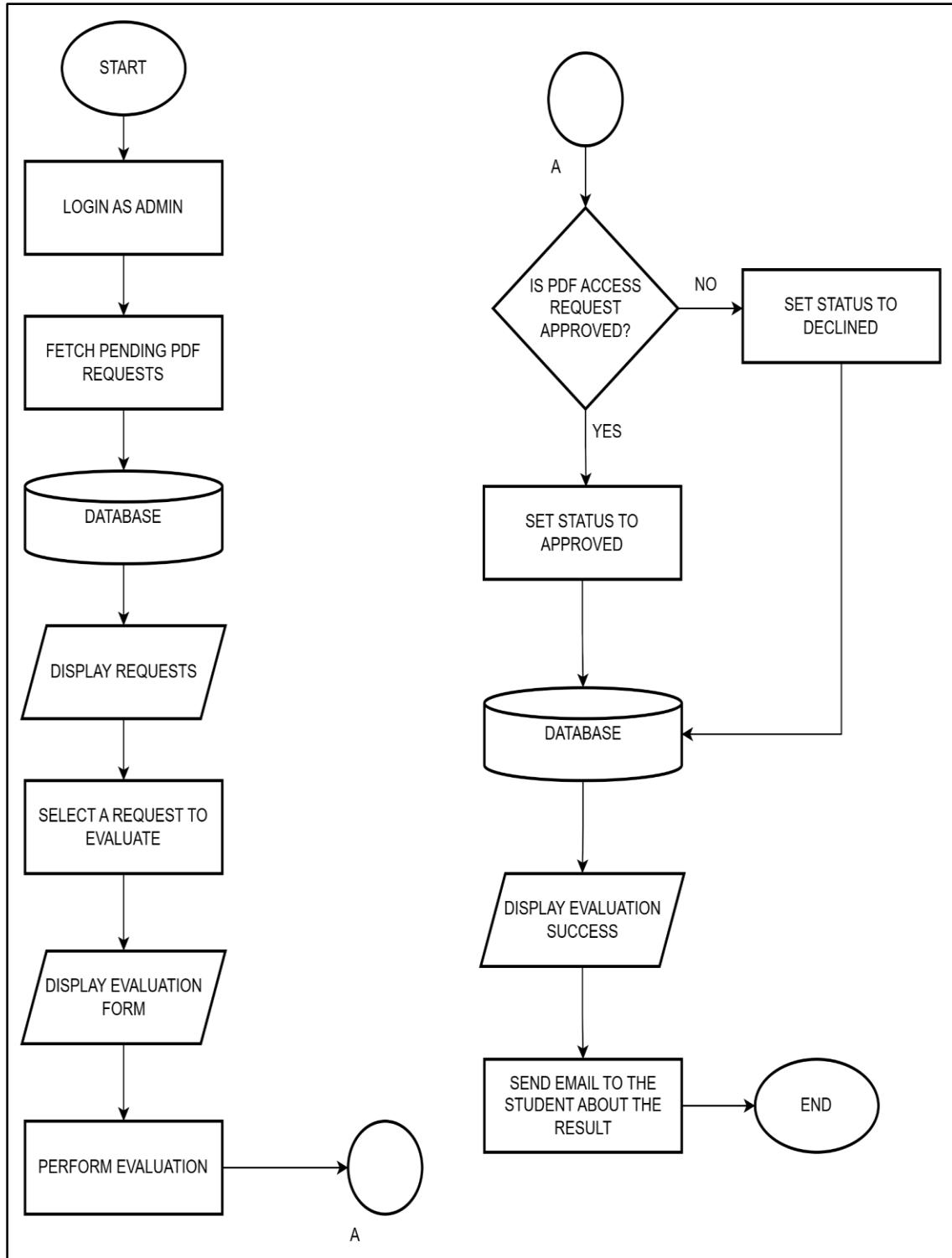
**Figure 32.** Displaying Thesis According to Status Admin Side

In order to display thesis projects according to their status on the admin side, the Figure 32 shows the flowchart for that. Approved thesis projects are displayed on the approved, pending thesis projects are displayed on the pending table, and rejected thesis projects are displayed on the rejected table.



**Figure 33.** Displaying of PDF Access Requests According to Status

Meanwhile, for displaying PDF access requests according to their status on the admin side, Figure 33 shows the flowchart for that. Approved requests are displayed on the approved table. Pending requests are displayed on the pending table which can be evaluated through Figure 34. And declined requests are displayed on the rejected table.

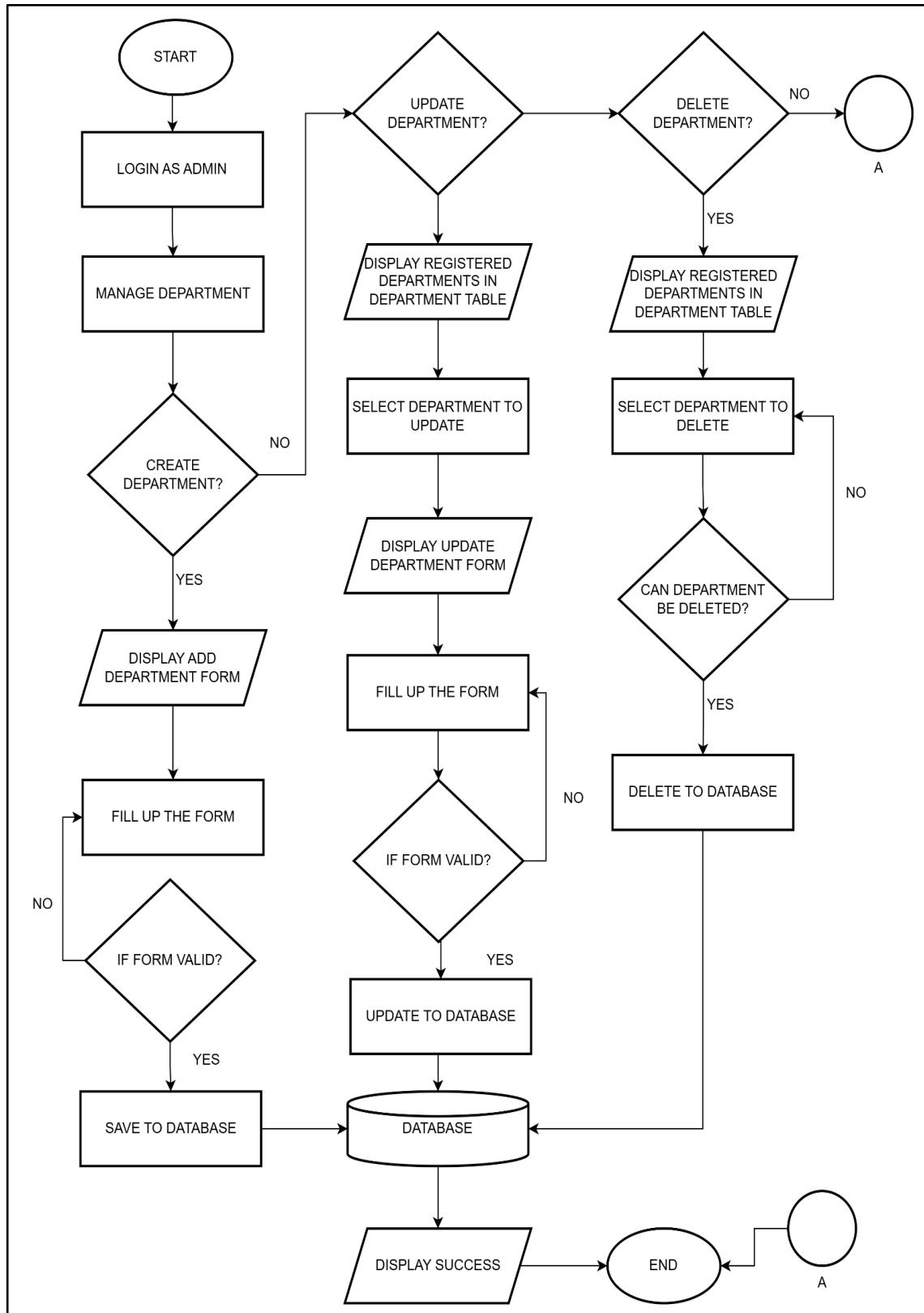


**Figure 34.** Evaluation of Pending PDF Access Requests

For the process of evaluating pending pdf access requests, the Figure 34 shows the flowchart for that operation. In order to evaluate a request, the user must be logged into the admin account. The pending pdf requests from the pending requests table is from which the admin would select a request to evaluate.

Upon selecting a request, an evaluation form would be displayed with which the admin would be able to either approve or decline the request. If the evaluation is approved, the status of the request would be set to ‘approved’ allowing the student to access the pdf file. However, if it is declined, the status would be set to ‘declined’.

The result would be updated to the database, and an email notification would be sent to the student’s registered email address about the result of his access request to a particular thesis project’s pdf.

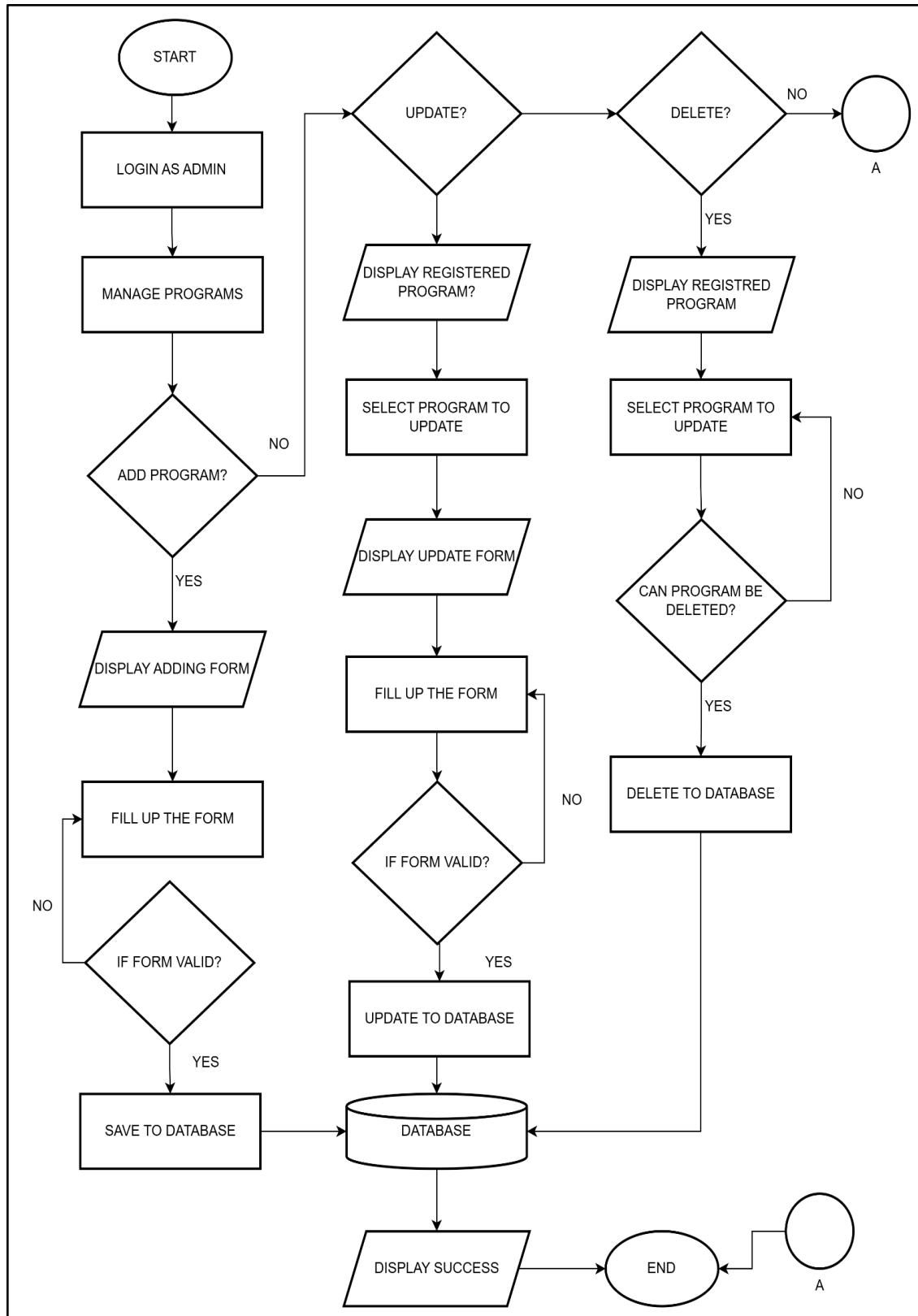


**Figure 35.** Management of Department

Furthermore, Figure 35 shows the process for managing departments. First the user must login in as an admin account to be able to manage the departments. If the admin would like to add a department, a form would be displayed for adding the department, this contains the department name and abbreviation fields. If the form is valid, the department would be successfully added to the database.

Meanwhile, registered departments are also displayed in the department table with which the admin can select from to update or delete the information. If the admin would like to update a department, an update form would be displayed for this. Upon submission, if the form is valid, the department would be successfully updated to the database.

However, if the admin would like to delete a department, the department would be determined first whether it can be deleted or not. The only reason it cannot be deleted is when there are already programs registered under the said department. If the department is able to be deleted, then it would be deleted from the database. If not, the admin may select another department to delete.

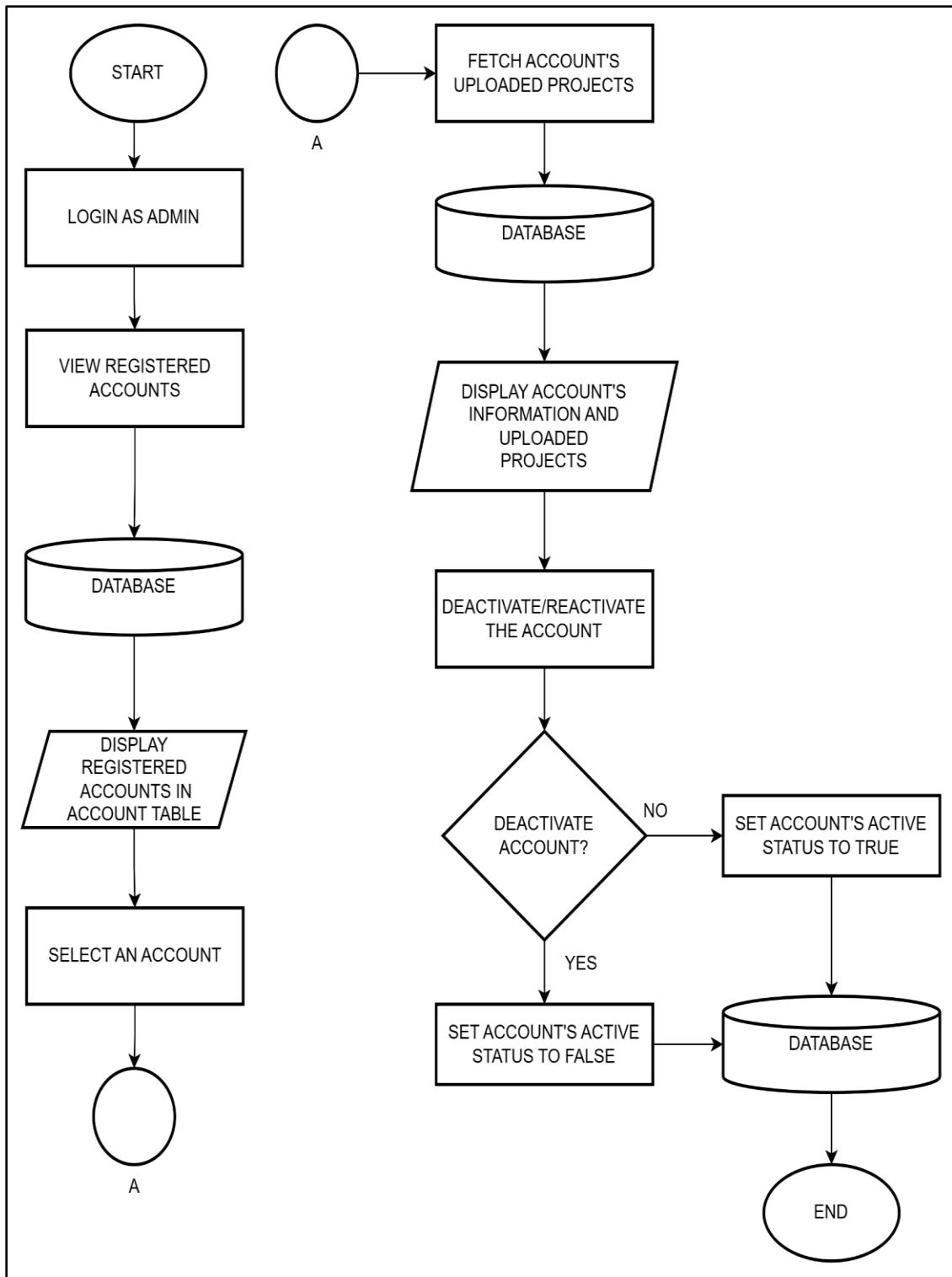


**Figure 36.** Management of Programs

As shown in Figure 36 for the process of managing the programs, first the user must login in as an admin account. If the admin would like to add a program, a form would be displayed for adding the program, this contains the department and course name. If the form is valid, the program would be successfully added to the database.

Meanwhile, registered programs are also displayed in the program table with which the admin can select from to update or delete the information. If the admin would like to update a program, an update form would be displayed for this and if the form is valid upon submission, the program would be successfully updated to the database.

However, if the admin would like to delete a program, it would be determined first whether it can be deleted or not. The only reason the program cannot be deleted is when there are already thesis projects registered under this in the system. If the program is able to be deleted, then it would be successfully deleted in the database.

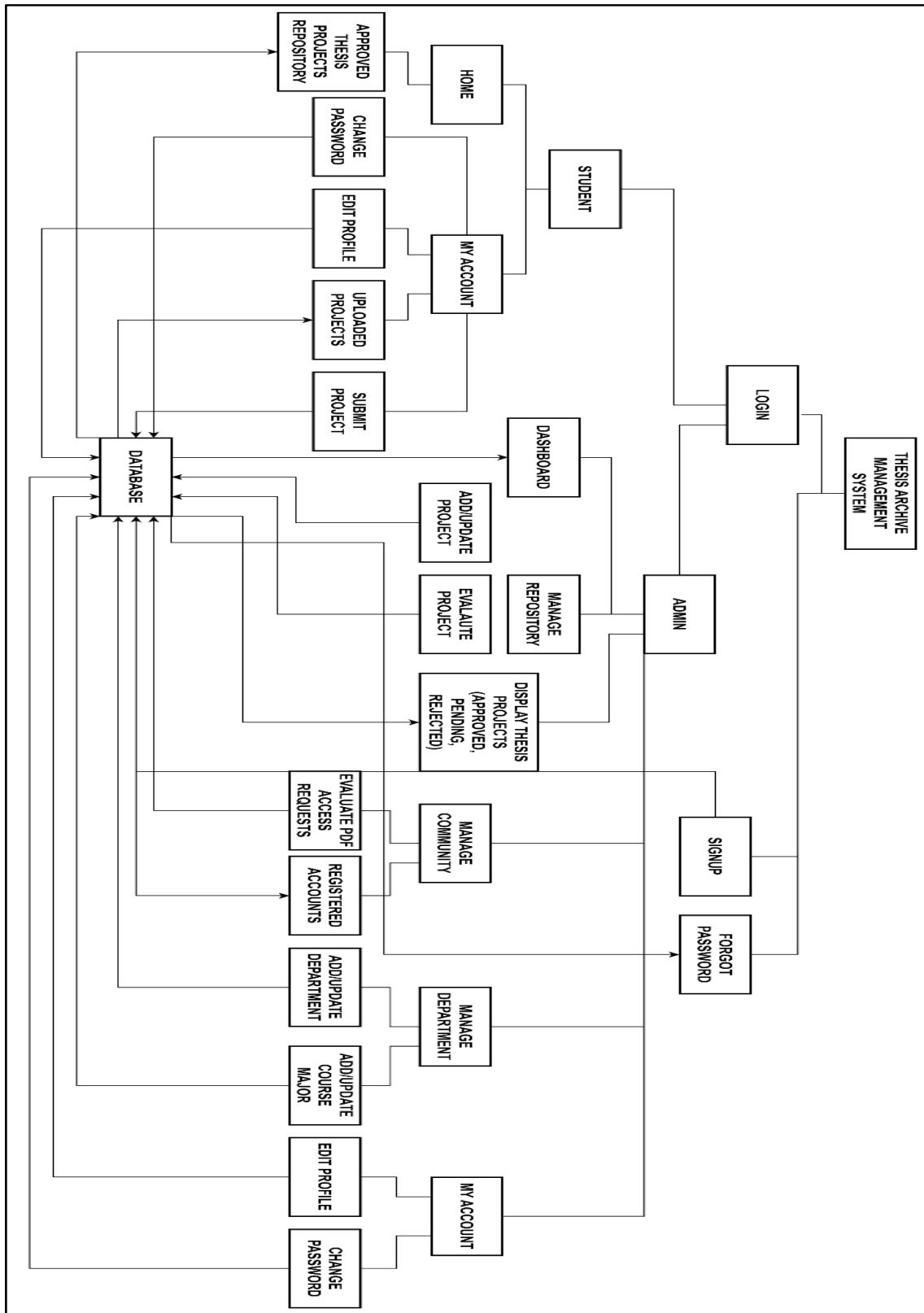


**Figure 37.** Displaying of Registered Accounts

Lastly, Figure 37 shows the flowchart for displaying registered accounts in the system. In order to do this, the user must login as an admin account. The registered accounts would be displayed in the account table alongside their information. The admin should then select an account.

After selecting, the account's information including its activeness status and verification status as well as its uploaded thesis projects in the system would be displayed. Then, a deactivation or reactivated button is also shown.

The deactivation button would deactivate the account by setting its active status to false in the database. This would disallow the account to access the system any longer. Meanwhile, the reactivation button would reactivate the deactivated account by setting back its active status to true. This would allow the account access to the system once again.



**Figure 38.** Thesis Archive Block Diagram

## Digitalization of Thesis Projects



**Figure 39.** Scanning of Theses

The researchers were able to scan the existing hardbound copies of thesis projects stored in the library as shown in Figure 39. The researchers conducted a scanning procedure to be able to create a softcopy for the existing thesis projects based on the library's master list.

### **Django**

A web development python framework used to develop the backend of the web application to operate and process logics.

### **XAMPP**

A cross-platform web server which is used to develop, create, and test the web application on a local webserver.

## **PDFjs**

A web standard-based platform for rendering pdf files used to display and render the pdf files of the thesis projects in the system.

## **Client-side Programming Languages**

The programming languages such as JavaScript, HTML, and CSS are used to deal with the user interface and display of the web application.

## **CamScanner**

A mobile application used to scan and digitize the hardbound copies of the thesis papers stored in the library.

## **Operation Procedure**

In order to operate the web-based application of Thesis Archive Management System, below is the list of procedures to operate the system at its full performance.

1. Ensure that the web server and database server are active.
2. Ensure the email host user is properly configured for sending email verifications and notifications.
3. Open a web browser to access the web application with internet connectivity.
4. Create an Admin Account, then.
5. A user needs to register an account first with the use of a g-sfe email account.
6. A user needs to verify his/her account via email verification sent to his/her entered g-sfe email address.
7. The verified user must login to the system to access the thesis projects.
8. Browse thesis projects through the use of the search bar or collections.

9. To access the pdf file, the user must submit a request first.
10. The admin would evaluate the request and notify the user about the result of the request through email.
11. To submit a thesis project, the user must fill the submission form and required pdf file.
12. The submitted project would be pending and undergo evaluation to be approved or rejected by the admin.
13. The admin should evaluate a thesis project and state the reason for the result.
14. The uploader would be notified through email about the result of the evaluation.
15. To edit a profile, the user must update the required information.
16. To change a password, the user must also input the old password.
17. If the password is forgotten, a user must click the forgot password in the login page, then enter its registered email address.
18. A confirmation for password reset should be sent to the email address.

### **Testing Procedure**

In order to determine that the system performs according to its functions, the researchers undertook a series of tests in accordance with the system's functionality, reliability, and accuracy.

1. Test the functionality of the Thesis Archive Management System both on student and admin's side in terms of:
  - a. Account registration
  - b. Profile and password update processes

- c. Thesis project uploading and updating processes
  - d. Submitting pdf access request
  - e. Adding and updating of department and course major
2. Test the reliability of the Thesis Archive Management System in terms of:
- a. Login process with registered and invalid account
  - b. Performance on storing multiple number of accounts
  - c. Performance on storing multiple number of projects
  - d. Performance on storing multiple number of requests
  - e. Accessing unauthorized URLs depending on the user types
  - f. Accessing unauthorized PDF media URL
3. Test the accuracy of the Thesis Archive Management System in terms of
- a. Evaluating submitted thesis projects and pdf access requests
  - b. Displaying and accessing available projects in the system
  - c. Displaying of pdf access requests
  - d. Accessing of pdf file according to access status
  - e. Displaying registered accounts in the system

## Evaluation Procedure

In order to evaluate the system, the following procedures are conducted:

1. The researchers brief on the purpose of the system, how it operates and how to use it.
2. The researchers allowed the respondents to explore the system according to their likings while assisting and answering their further queries.
3. Afterwards, the respondents are given the evaluation form.
4. The respondents evaluated the system according to the Likert Scale.
5. The researchers collected the raw data, tabulated and computed the mean.
6. The results would be interpreted according to the Descriptive Interpretation of the Medium.

**Table 1.***Likert Scale*

Numerical Scale	Descriptive Rating
4.51 - 5.00	Outstanding
3.51 - 4.50	Very Satisfactory
2.51 - 3.50	Satisfactory
1.51 - 2.50	Fair
1.00 - 1.50	Poor

**Table 2.***Descriptive Interpretation of the Mean*

Numerical Scale	Descriptive Rating
5	Outstanding
4	Very Satisfactory
3	Satisfactory
2	Fair
1	Poor

## **Chapter 4**

### **RESULTS AND DISCUSSION**

This chapter will present the Project Description, Project Structure, Project Test Result, Project Capabilities and Limitations, and Project Evaluation Results.

#### **Project Description**

The Thesis Archive Management System is a web-based application that allows the storing and displaying of the thesis projects online. This can be accessed through a web browser on any device as long as there is internet connectivity and the servers are active.

The web-application has two user types: the registered student accounts and the admin. The system allows students to browse and view the thesis projects of the university stored in the system. For the students to easily browse through the system, collections are provided such as a thesis collection under a particular course major or a collection under a particular keyword.

They can view the thesis information of a particular thesis project such as its title, author, publication date, as well as the abstract. A recommended citation is also displayed. Each time the user views a thesis, it generates a count for views for that particular project. Moreover, they can also access the pdf file of the thesis projects through a request form, as well as be able to submit their own thesis projects in the system by filling the submission form.

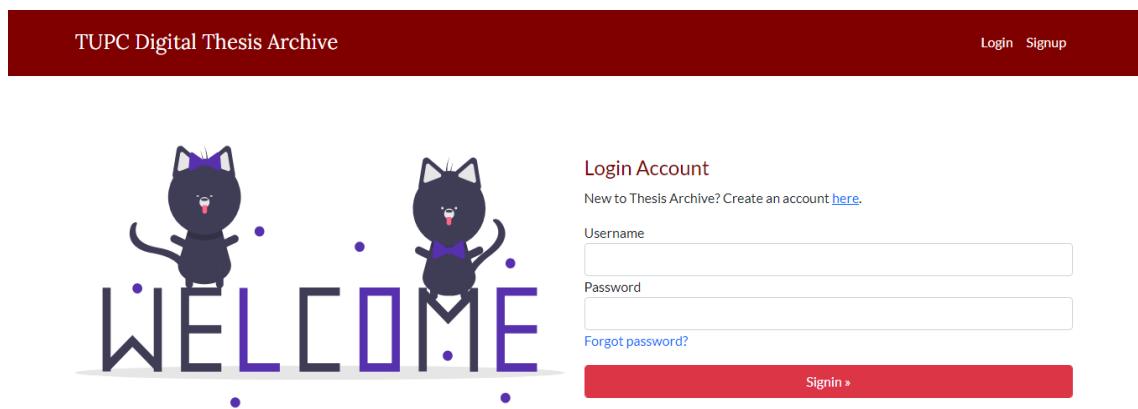
Meanwhile, the system allows the admin to manage the thesis projects such as to upload, update, and evaluate submitted thesis projects, to evaluate the pdf access requests

of the students, the registered user accounts, and the adding and updating of department and course majors.

## Project Structure

### Login Page

Beginning with the figure below shows the login page of the web-based system. It allows a user to access the system and redirects to a particular main window depending on its user type— either be an admin account or a registered student account. The admin account is a default account already created in the system. Meanwhile the registered student account is the one personally registered by a new user in the system. The login page requires the username and password of the account to validate its credentials and decide whether to access the system or not. Furthermore, forgot password feature is already included in the login page. A user who forgot its password should click so for the procedures in creation of a new password.



**Figure 40.** Account Login Page

## Signup Page

Meanwhile, Figure 41 below shows the sign-up page of the system. This is where a new student can create an account for accessing the system. The sign-up form requires a student's username that must be unique to all registered usernames in the system, the first name and last name of the student, gsfe email address which should also be unique and the student has to verify later, and lastly the password that has certain conditions such that: it cannot be similar to the other information, must be at least of 8 characters, not entirely numeric and commonly used.

The registration of the account is not fully completed not long after the student has verified his/her gsfe email address. This means if the student has successfully registered an account but has not verified its email address yet, then he/she may not be able to access the system in the meantime.

TUPC Digital Thesis Archive

Login   Signup

Create Account

Already have an account? Login [here](#).

Username

First name  
 Last name

Email

Use only valid TUP Cavite gsfe account

Password

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation

Enter the same password as before, for verification.

**Signup »**

**Figure 41.** Registration of Account Page

## Repository Page

Furthermore, the Figure 42 below shows the repository page of the system. This is what contains the main window after a registered student logs in to the system. The repository page contains collections of available-to-access thesis projects in the system. These collections are sorted by programs and keywords. By clicking on these collections would redirect the user to another page that displays thesis projects under that particular collection.

There is also a search bar for students to browse by. The search bar would allow the student to search for any keyword, title, author, thesis adviser, abstract, published date of the thesis across the entire repository or certain collection. Additionally, there are also the lists that show the recently uploaded theses and most viewed theses in the system.

TUPC Digital Thesis Archive

Home My Account ▾ Logout

Search for across the entire repository...

Search

**Collection by Disciplines**

Thesis paper collection submitted by the students of different major courses

[Bachelor of Engineering Technology \(165\)](#)

Thesis papers under the Bachelor of Engineering Technology

**Recent Submissions**

Recently submitted thesis projects in the system

[Development of IOT and SMS Based Electrical Appliances Control System](#)  
By Jherome Alcantara, Chrispin Dalandon, Ronnel Norte

Innovation of Filtration and Ventilation Systems During Blast Technolog... (DFT) Walidah Shar...

**Figure 42.** Repository Page

## Collection by Program

In connection to the previous figure, the Figure 43 below shows the section of the repository page that displays the collection of programs in the system with the number of their corresponding available thesis projects. As the user selects from this, it will be navigated to another page showing the lists of theses under this program as shown in the Figure 44.



### Collection by Disciplines

Thesis paper collection submitted by the students of different major courses

#### Bachelor of Engineering Technology (21)

Thesis papers under the Bachelor of Engineering Technology

**Figure 43.** Collection for Programs



[Home](#) > Collection for Bachelor of Engineering Technology

Search for in this collection...

Search

### Collection for Bachelor of Engineering Technology

Collection of thesis papers submitted to Bachelor of Engineering Technology

#### [Combination Of Acacia Bark Extract And Cornstarch As Natural Binder In The Development Of Medium Density Abaca Fiberboards](#)

By Brix Cacacha Catherine Espinoza Adviser Example June 19, 2022 12 views Fiber Board Natural Binder

The combination of acacia bark extract and cornstarch as natural binder in the development of medium density abaca fiberboard is discussed in this paper. It was written to aid in the reduction of the use of chemicals in the production of fiberboards due to the fact that many people nowadays prefer to use traditional materials such as formaldehyde resin, the traditional fiberboard binder, has been replaced with a natural binder. The researchers created three different mix design proportions for abaca fiber, acacia bark and cornstarch. This is an environment, health friendly, and affordable board since the materials, such as acacia ...

#### [Development Of Automatic Watering System For Vertical Coco Peat Based Farming](#)

By Renzel Cypress Karl Renzo Erquiza John Jose Gloria Dave Kenneth Adviser Edmundo G. Frias June 9, 2022 9 views automatic Watering system Farming

The Automatic watering system for vertical coco-peat based farming is developed for its advantage of consuming less area as compared to other farming techniques. It uses soil moisture sensors to monitor the moisture content of the soil and solenoid valves to allow or block water based on soil conditions. Submersible pump is employed for transferring water from sub reservoir to main reservoir when water level reached the float switch beyond threshold level (23.5 liters). The refilling of main reservoir is performed through solenoid valve which is tapped from water utility and turned on by another float switch. The prototype's components ...

**Figure 44.** List of Theses Under Selected Program

## Collection by Keywords

On the other hand, the Figure 45 below shows the section of the repository page for the collection of keywords in the system with the number of available thesis projects that correspond to them. The student can live search across these keywords and when selected one keyword, it would be navigated to another page displaying the list of theses that have that selected keyword as shown in the Figure 46.

The screenshot shows the Thesis Archive homepage with a dark red header bar containing the text "Thesis Archive", "Home", "My Account", and "Logout". Below the header, a section titled "Collection for Thesis' Keywords" is displayed. It includes a sub-section "Collection of keywords of theses" and a search bar with the placeholder text "Search for keywords...". A large list of keywords is provided, each followed by a count in parentheses. The keywords include: drainage (1), waste (3), automatic (2), system (2), Development (1), Electronic (1), Cabinet (1), Medicine (1), Personnel Tracker (0), Contract Tracing System (0), QR code (1), Thermal Scanning (0), Logbook (0), Storing (0), Report (0), Library (1), Library Management (0), Kiosk (0), Books (0), Management System (1), Custodial (1), Janitor (1), Road Sweeper (1), Multi-Purpose (1), Cleaner (1), Reusable Water (1), Water (1), Water spray (1), Eco-Friendly (1), Wastewater (1), Tanks (1), Raspberry Pi (1), Tracker (1), Determiner (1), Soil (1), Soil Sampling (1), Borrower (1), Coin (1), Bill (1), Timer (1), Notifier (1), Operated Locker (1), Microcontroller (3), Creeper (1), Recycling (1), Etching (1), PCB (1), Etching Machine (1), Fine Aggregates (1), CHB (1), FCB (1), Replacement (2), Fiber Board (1), Natural Binder (1), Arduino (3), Prototype (2), Biometric (1), SMS (1), Watering system (1), Farming (2), Glass (1), Window Protector (1), Automobile (1), Sound System (1), Solar Power (1), Portland Cement (1), Bender (1), contactless flushing (1), touchless bidet (1), electronic bowl system (1), Security (0), Camera (0), bricks (0), abaca (0), reinforced (0), cement (0), binder (0).

**Figure 45.** Collection for keywords

The screenshot shows the TUPC Digital Thesis Archive page with a dark red header bar containing the text "TUPC Digital Thesis Archive", "Home", "My Account", and "Logout". Below the header, a breadcrumb navigation "Home > Collection for keyword 'Multi-Purpose'" is shown. A search bar with the placeholder text "Search for in this repository..." and a "Search" button are also present. The main content area displays a section titled "Collection for keyword 'Multi-Purpose'" with the sub-section "Collection of thesis papers with keyword 'Multi-Purpose'". A specific project listing is shown: "Development Of Multi-Purpose Road Sweeper For Custodial At Technological University Of The Philippines Cavite" by Lorenzo Garcia, Mark Jason Dominguez, Miguel Antonio Urrete, Adviser Marco Figueira, March 23, 2021, 2 views, and the keywords Custodial, Janitor, Road Sweeper, Multi-Purpose. A descriptive text at the bottom states: "This project design proposal entitled "DEVELOPMENT OF MULTI PURPOSE ROAD SWEEPER FOR CUSTODIAL AT TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE" is a novel method dealing on how janitor can lessen the job and can do a multi-tasking job at one go. The research aimed to offers a convenient and easiest to do janitor job faster. Project description and operation procedure were identified to present the step by step procedure of the project."

**Figure 46.** Thesis Projects Under Selected Keyword

## Thesis Detail Page

Meanwhile, the figure below shows the thesis detail page in the system. As the student selects and clicks the title of the thesis from the previous figures, she/he will be navigated to this page, generating a hit count for the number of views for that particular thesis.

This page contains the information of the thesis in the system including the full abstract text, number of views, (link) tags, recommended citations which can be copied, and the like. The ‘View PDF File’ as clicked would display the pdf file of the thesis given that the student has access to it. On the other hand, the ‘back to previous page’ button would allow the student to go back to its previous page.

The screenshot shows a thesis detail page with the following elements:

- Header:** TUPC Digital Thesis Archive, Home, My Account, Logout
- Back to previous page:** A red button with white text.
- Title:** Development Of Multi-Purpose Road Sweeper For Custodial At Technological University Of The Philippines Cavite
- Author:** By Lorenzo Garcia, Mark Jason Dominguez, Miguel Antonio Urrete
- Adviser:** Adviser Marco Figueroa
- Degree:** Bachelor of Engineering Technology
- Published:** March 23, 2021
- Views:** 3 views
- Tags:** Custodial Janitor Road Sweeper Multi-Purpose
- Actions:** View PDF File
- Abstract:** A section containing the abstract text of the thesis.
- Recommended Citation:** Options for APA, MLA, Chicago citation formats.
- Text Content:** The abstract text describes a project design proposal for a multi-purpose road sweeper.

**Figure 47.** Thesis Details Page

## Request for PDF Access Page

If a student wants to view a pdf file of a particular thesis project, she/has to request for access first. The figure below shows the page for requesting access. This page displays as the student clicks the view-pdf-file button from the previous figure.

The page contains an informative text that informs the student has no access to the pdf file yet. Below this is the form for requesting an access to the pdf file. The form only requires a valid reason of accessing the file and the student should click the ‘submit’ to send the request.

In clarification, the access would only be applied to a certain thesis project that is requested by the student.

The screenshot shows a web page titled "TUPC Digital Thesis Archive". At the top right, there are links for "Home", "My Account", and "Logout". The main content area starts with a greeting "Hello, Ryan Angelo!". Below it, a message states that the user is trying to access a thesis titled "Development Of Multi-Purpose Road Sweeper For Custodial At Technological University Of The Philippines Cavite", which they are not yet authorized to access. A note says they need to submit a request. The form is titled "File Access Request Form" and asks for a "Reason" in a text area. A red "Submit" button is at the bottom right of the form.

**Figure 48.** Request PDF Access Page

## Pending PDF Access Request Page

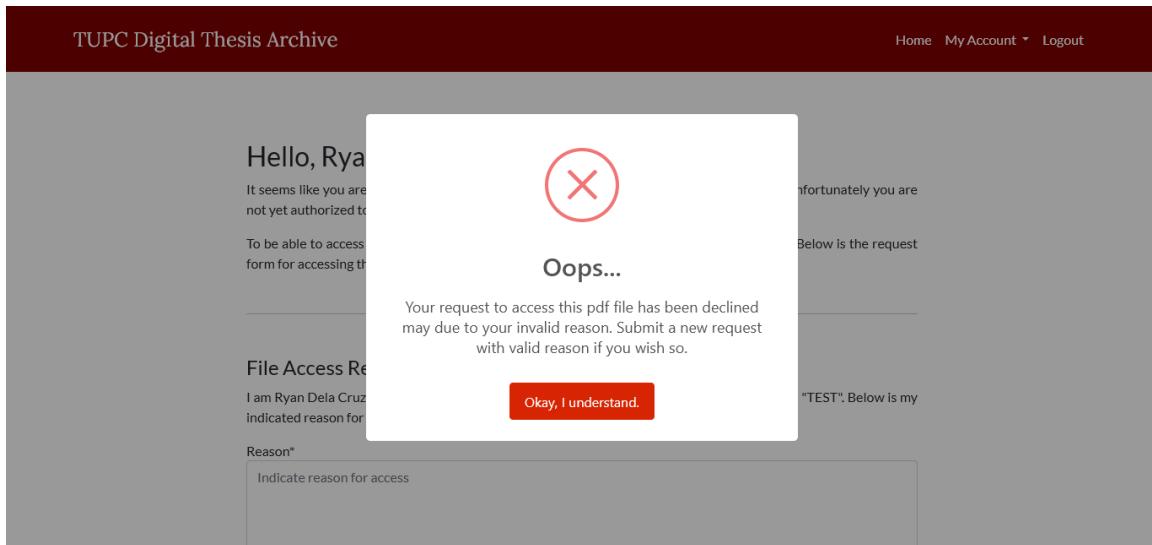
If a student has already sent an access request for a particular PDF file and is pending, the page as shown in the figure below will display informing the student the request is currently pending. This is to notify that the student has already submitted a request and that the admin would evaluate it first.



**Figure 49.** Pending PDF Access Request Page

## Declined PDF Access Request Page

Meanwhile, if a student has submitted an access request to the file and the admin has declined the request in evaluation, the figure below shows the page that notifies the student his/her request has been declined due to his/her invalid reason for accessing the file. However, the student would be allowed to submit a request again through the same form as shown in Figure 48.

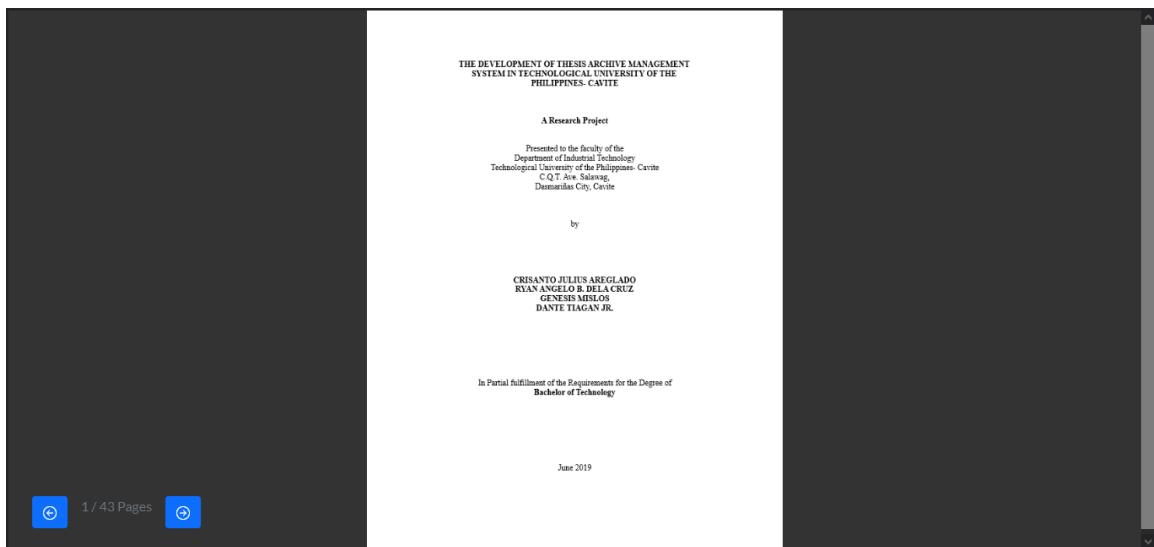


**Figure 50.** Declined PDF Access Request Page

## Display PDF File Page

On the other hand, the figure below shows the page that displays the pdf file of the thesis project given that the student's access to the file has been approved by the admin, either way the student is the one who submitted the thesis project which means she/he no longer needs to submit a request for accessing the file.

As shown, the student can use the right and left button to navigate through the pdf file's pages. The page number of the file is also shown to guide the student at what page she/he is currently at.



**Figure 51.** Display PDF File Page

## Edit Profile Page

The Figure 52 below shows the page for updating profile information of the student account. This page allows the student to modify his/her username, first and last name in the system. The email and date joined fields are both non-editable as these data are permanent and unalterable.

Having that said, only the username, first name and last name can be updated in the system by clicking on the ‘update’ button. Meanwhile, the ‘reset’ button will bring the form back to its default data.

The screenshot shows a web page titled 'Edit Profile' under the 'TUPC Digital Thesis Archive' header. The page has a dark red header bar with 'Home', 'My Account', and 'Logout' links. Below the header, the title 'Edit Profile' is centered above a sub-header 'Edit your profile account details'. The main content area contains several input fields:

- Username:** A text input field containing 'ryan\_123'.
- First name:** A text input field containing 'Ryan Angelo'.
- Last name:** A text input field containing 'Dela Cruz'.
- Email:** A text input field containing 'ryanangelo.delacruz@gsfe.tupcavite.edu.ph'.
- Date joined:** A text input field containing '2022-12-17 23:22:01'.

At the bottom right of the form are two buttons: a dark grey 'Reset' button and a red 'Update' button.

**Figure 52.** Edit Profile Page

## Change Password Page

For updating the password, the Figure 53 below shows the page for changing the password of the student. It requires the old password and the new password in updating the current password of the student's account.

Just like in the registration, the new password requires the same conditions: it cannot be too similar to other information, should be at least of 8 characters, not entirely numeric and commonly used.

The old password in the form represents the current password of the student in the system. If the old password is not valid nor match, he/she may neither be able to update the password at all. Moreover, clicking the 'update' button would submit and update the password given certain conditions have been passed. And the 'reset' button would bring back the form to its default data.

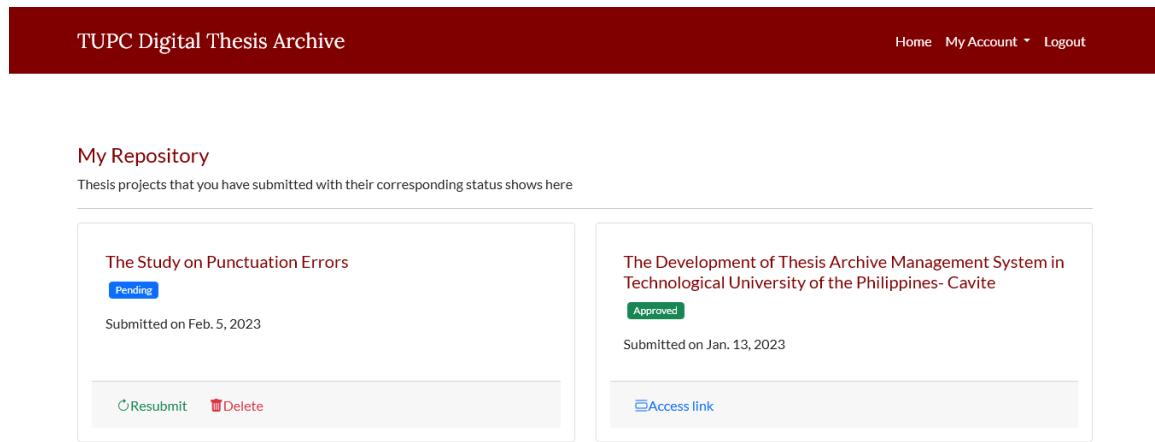
**Figure 53.** Change Password Page

## Personal Repository Page

The personal repository page is shown in Figure 54 below that allows students to manage their personal repository in the system. This page displays the uploaded projects of the user alongside their status in the system sorted by the dates they are submitted.

The title in every card serves as a link that when clicked displays the full information of the uploaded thesis project of the student. The resubmit and delete buttons are provided for pending and rejected projects. These allow the student to resubmit or delete the thesis, respectively.

Meanwhile, the access-link action is only for approved projects which navigates to the link of displaying the approved thesis project in the repository.



The screenshot shows the 'My Repository' section of the TUPC Digital Thesis Archive. It lists two thesis projects:

- The Study on Punctuation Errors**: Status: Pending. Submitted on Feb. 5, 2023. Actions: Resubmit, Delete.
- The Development of Thesis Archive Management System in Technological University of the Philippines- Cavite**: Status: Approved. Submitted on Jan. 13, 2023. Actions: Access link.

**Figure 54.** Personal Repository Page

## Display Details of Submitted Thesis

In connection the Personal Repository Page, the figures below show the details of the submitted thesis project in a side canvas. The side canvas appears as the student clicks the title of one of its thesis projects. Moreover, this canvas contains the full information of the thesis including its status, auto-generated recommended citations and the date it is submitted to the system.

The screenshot shows the 'My Repository' section of the TUPC Digital Thesis Archive. On the left, there is a list of submitted thesis projects. One project titled 'The Study on Punctuation Errors' is selected, showing its details on the right. The details include:

- Status: Approved
- Title: The Development of Thesis Archive Management System in Technological University of the Philippines- Cavite
- Author: Ryan Dela Cruz, Crisanto Areglado, Dante Tiagan
- Thesis Adviser: Adviser Example
- Tags: TEST
- Published: Published in January 2023
- Views: 4 views
- Submitted: Submitted on Jan. 13, 2023
- Tags: Tags
- View PDF File

Below the details, there is an abstract section with a summary of the system's purpose and development.

**Figure 55.** Display Details of Submitted Thesis (Upper Part)

The screenshot shows the 'My Repository' section of the TUPC Digital Thesis Archive. On the left, there is a list of submitted thesis projects. One project titled 'The Study on Punctuation Errors' is selected, showing its details on the right. The details include:

**Recommended Citations**

Generated citation formats for this manuscript. Note that retrieved url is subject to change.

- APA**  
Dela Cruz, R., et al. (2023). The Development of Thesis Archive Management System in Technological University of the Philippines- Cavite. Retrieved from 127.0.0.1:8000/personal\_repository/.
- MLA**  
Dela Cruz, Ryan, et al. "The Development of Thesis Archive Management System in Technological University of the Philippines- Cavite." TUPC Digital Thesis Archive, 2023. Web.
- Chicago**  
Ryan Dela Cruz, Crisanto Areglado, and Dante Tiagan. 2023. "The Development of Thesis Archive Management System in Technological University of the Philippines- Cavite." TUPC Digital Thesis Archive. January 2023. 127.0.0.1:8000/personal\_repository/.

**Figure 56.** Display Details of Submitted Thesis (Bottom Part)

## Submit Project Page

The page for submitting a thesis project is shown in the Figures 57 and 58 below.

The page is divided into two section. The first section is where the instructions, requirements and the consent agreement underlay that inform the user about the process and requirements in submitting a thesis, as well as the consent that the student has to agree with by checking the checkbox provided as shown in the Figure 57.

The screenshot shows a web page titled "Submit Manuscript" from the "TUPC Digital Thesis Archive". At the top right, there are links for "Home", "My Account", and "Logout". Below the title, there is a section titled "Consent Agreement" containing the following text:

I/We hereby grant Technological University of The Philippines Cavite's Library to archive this particular work of ours through the TUPC Digital Archives platform.

I/We also grant the Library to make this submission accessible in electronic format for educational and research purposes only.

I/We agree that the Library may convert and migrate this submission to any medium or format, and keep more than one copy for purposes of security, back-up, and preservation.

I/We further agree that this consent will remain in place unless I terminate it via signed communication with the Libraries.

I/We confirm that:

1. The version I/we submitted is the final version approved by my thesis committee/panel
2. The submission is my/our original work that properly cites other sources of information and it contains permitted works from original sources (e.g., text excerpts, images, sound or video content, interview transcripts, observational studies).
3. The submission does not contain any confidential, personal and sensitive information belonging to others.
4. The information I/we have provided about the submission is accurate to the best of my knowledge and belief.

Please check this if you agree to the terms above

**Figure 57.** Consent Agreement

Moreover, the second section displays the submission form as shown in figure 58. The form has fields to cater the thesis data such as its title which should be unique, author which can be populated dynamically by clicking the ‘add author’, published date, course, abstract, keywords, and pdf document file.

Meanwhile, the ‘preview pdf file’ button allows the student to preview the pdf file of the one he/she has entered to the pdf field. This would give proper assistance to the student entering the data to the form. The upload and reset buttons submit the submission form and reset the entries in the form, respectively. Upon successful submission, the thesis status would be set to pending and the user would be navigated to his/her personal repository page.

**Submission Form**  
Please fill the required information below

**Describe the thesis**  
Define the thesis project

Title	<input type="text"/>
Adviser	<input type="text"/>
Adviser	<input type="text"/>
Published year	2023
Published month	January
Course	.....
Keywords	<input type="text"/>
A comma-separated list of tags.	
Abstract	<input type="text"/>

**Document File**  
Upload the softcopy of the thesis

Pdf	<input type="file"/> Choose File	No file chosen
-----	----------------------------------	----------------

**Preview PDF File**

**Add Authors**  
Enter the authors of the thesis

First Name	Last Name	Delete?
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

**Add Author**

**Reset** **Submit**

**Figure 58.** Submission Form

## **Resubmit Thesis Project**

On the other hand, the Figure 59 shows a page that displays the re-submission form for a pending/rejected thesis project. The page contains the same consent agreement and the resubmission form to update the initial data of the thesis.

The resubmission form shows the same field such as the title, author, adviser, published date, course, abstract, keywords, and pdf file. The student can remove the excess author for instance, by checking on the corresponding delete checkbox in the author field. Meanwhile, the pdf field allows the student to see the existing pdf file and update it to a different one.

Moreover, the ‘pdf preview’ button allows the user to preview the new pdf file to replace the current one she/he has submitted to the system. This would give student assistance to easily update the data that should be updated.

Below the form are the upload and reset buttons provided to submit the resubmission form and reset the entries in the form, respectively. Upon successful resubmission, it will change the date of the thesis project's existing ‘date uploaded’ to the date it is resubmitted. The thesis project would also become pending again.

Then, the user would be navigated back to his/her personal repository page displaying his/her uploaded projects

**TUPC Digital Thesis Archive**

[Home](#) [My Account](#) [Logout](#)

**Resubmit Manuscript**

Follow the instructions below to submit theses/dissertation.  
Before submitting, please read all relevant policies and/or submission guidelines.

The submission process consists of the following steps:

1. Read and accept the Consent Agreement below
2. Provide the right information about thesis
3. Upload your electronic file, in pdf format

Before you begin, please be sure you have the following items:

1. The description of your thesis (Title, Author, Adviser, Course Major, Publication Date)
2. The abstract
3. A list of keywords for your thesis
4. The final version of your thesis in PDF format (not more than 30mb in size) that should contain the Approval Sheet

**Consent Agreement**

I/We hereby grant Technological University of The Philippines Cavite's Library to archive this particular work of ours through the TUPC Digital Archives platform.

I/We also grant the Library to make this submission accessible in electronic format for educational and research purposes only.

I/We agree that the Library may convert and migrate this submission to any medium or format, and keep more than one copy for purposes of security, back-up, and preservation.

I/We further agree that this consent will remain in place unless I terminate it via signed communication with the Libraries.

I/We confirm that:

1. The version I/we submitted is the final version approved by my thesis committee/panel
2. The submission is my/our original work that properly cites other sources of information and it contains permitted works from original sources (e.g., text excerpts, images, sound or video content, interview transcripts, observational studies).
3. The submission does not contain any confidential, personal and sensitive information belonging to others.
4. The information I/we have provided about the submission is accurate to the best of my knowledge and belief.

Please check this if you agree to the terms above

**Submission Form**

Please fill the required information below

<b>Describe the thesis</b>	<b>Document File</b>
Define the thesis project	Upload the softcopy of the thesis
Title The Development of Thesis Archive System	PDF Currently: <a href="#">pdf/10-DesignSynthesisx2.pdf</a> <input type="checkbox"/> Clear
Adviser John Paulo Diaz	Change: <input type="button" value="Choose File"/> No file chosen
Published year 2023	
Published month January	<input type="button" value="Preview PDF File"/>
Course Bachelor of Engineering Technology	
Keywords Study	
A comma-separated list of tags.	
Abstract	The figure shows a page that displays the re-submission form for a rejected thesis project. Apart from the submission form, the reason for rejection is also displayed. There can also be seen the upload and reset buttons that submit the submission form and reset the entries in the form, respectively. Moreover, upon successful resubmission, it will also change the date of the thesis project's existing 'date uploaded' to the date it is resubmitted. The thesis project would also become pending again as well.

**Add Authors**

Enter the authors of the thesis

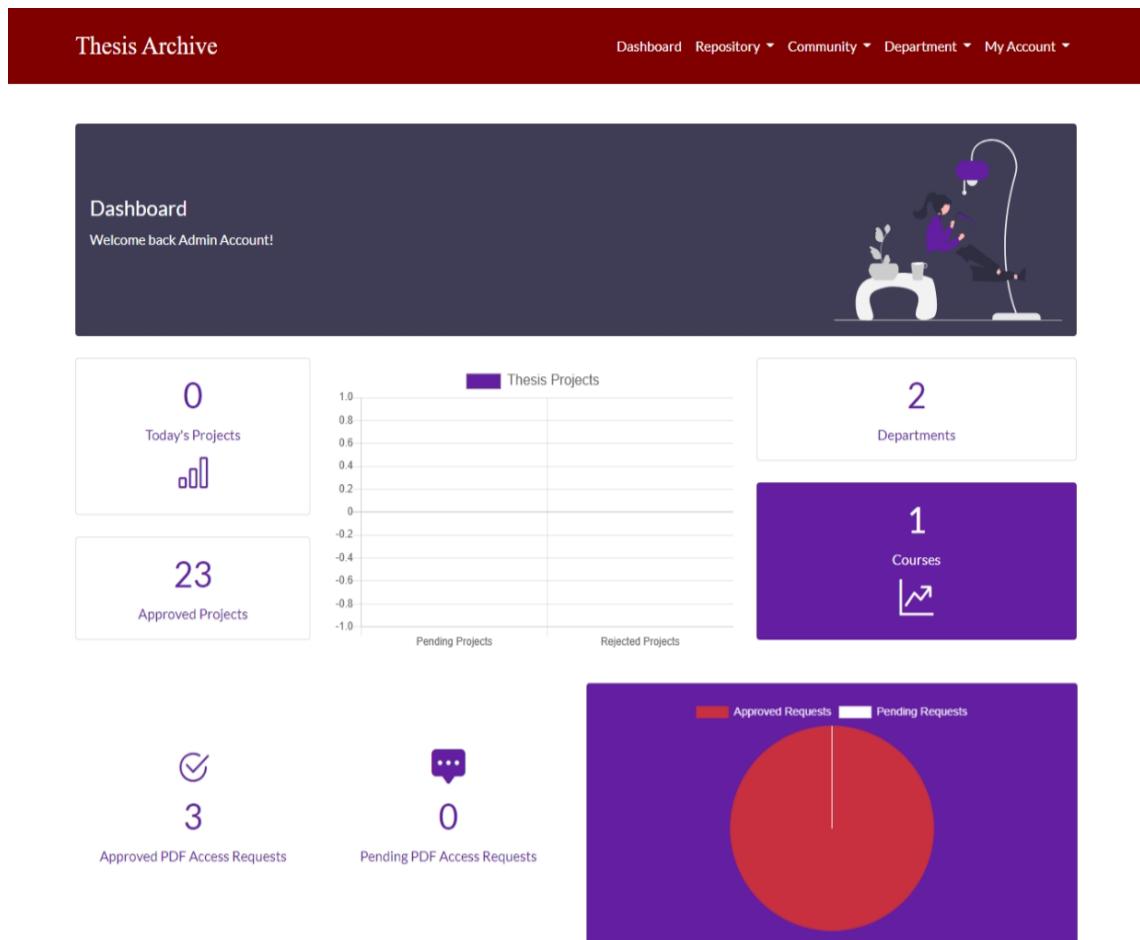
First Name	Last Name	Delete?
Ryan	Cruz	<input type="checkbox"/>

**Figure 59.** Resubmit Thesis Project Page

## Admin Side

### Dashboard Page

Below is the Figure 60 that shows the dashboard page of the admin account. As the admin logs into the system, he/she will be directed to this page. The dashboard page shows the number of approved, rejected and pending projects in the system. It also displays the number of registered programs and departments as well as the number of pending and approved pdf access requests.



**Figure 60.** Dashboard

## Uploading Thesis Project

The Figure 61 below shows the admin page for uploading of the thesis project. This page contains the form for uploading a thesis. Unlike to the one in the student' side, this page does no longer require consent agreement.

The submission form has the required fields such as the title, adviser, author, abstract, publication date, course, keyword, and pdf file of the thesis. The author field can be populated dynamically by clicking on the ‘add author’ button.

Meanwhile, the ‘preview pdf file’ button allows the admin to view the pdf file entered on the pdf field. This would give assistance to the admin to enter the right data to the form.

Below the form are the reset and upload buttons. The upload button would submit the form while the reset button would bring back the form to its default value which is none. This page is navigated under the dropdown of the Repository link in the navbar.

TUPC Digital Thesis Archive

[Dashboard](#) [Repository](#) [Community](#) [Department](#) [My Account](#)

**Upload Manuscript**  
 Thesis manuscripts uploaded by the admin account would automatically be accessible to the system.

---

**Submission Form**  
 Please fill the required information below

**Describe the thesis**  
 Define the thesis project

Title

Adviser

Published year

Published month

Course  
\*\*\*\*\*

Keywords

A comma-separated list of tags.

Abstract

**Document File**  
 Upload the softcopy of the thesis

Pdf  
 No file chosen

[Preview PDF File](#)

**Add Authors**  
 Enter the authors of the thesis

First Name	Last Name	Delete?
<input type="text" value="First Name"/>	<input type="text" value="Last Name"/>	<input type="checkbox"/>

Reset

Upload

**Figure 61.** Admin Uploading Thesis Project

## Manage Approved Thesis Projects

For managing the approved thesis projects, the Figure 62 shows the page consists of graph and table. The graph shows the number of approved theses in every program and the table shows the tabulated data of the approved theses.

The table contains the thesis title, author, published date, keywords and course in which the admin can search for something across the data columns and sort them either by ascending or descending order. The export to CSV button generates the CSV file for the information of the approved thesis projects in the system

Moreover, there are two actions the admin can conduct among the approved projects. The edit action allows the admin to update the thesis project redirecting to another page. Meanwhile, the more action allows the admin to view the full information of the thesis project which would be displayed to another page as well.

TUPC Digital Thesis Archive Dashboard Repository ▾ Community ▾ Department ▾ My Account ▾

### Approved Manuscripts

This is the management repository for approved thesis manuscripts in the system



#### Graph Data

Showing graph for the number of approved manuscripts under registered programs



Bachelor of Engineering Technology

#### Approved Manuscripts

Showing results for the approved manuscripts

Show  
10▼  
entries
[Export to CSV](#)
Search:

Title	Author	Course	Published Date	Uploaded by	Date Uploaded	No. of Views	Actions
A Study on Concrete Roof Tile with Granulated Glass	Advincula, Joseph Cuenca, Alma Riz Braga, Mabel Dizon, Crystal Sarmiento, Joan	Bachelor of Engineering Technology	January 2023	Dante Tiagan	Jan. 8, 2023	6	<a href="#">Edit</a> <a href="#">More</a>
An Experimental Study of Using Waste Fiber Cement Board as Partial Replacement of Fine Aggregates for 4" Non-Load Bearing Concrete Hollow Block	Begueras, John Oscar Orlain, Genivie Porcadilla, Christine Mae Tayag, Asherline Kristal	Bachelor of Engineering Technology	January 2023	Administration Accountt	Dec. 18, 2022	3	<a href="#">Edit</a> <a href="#">More</a>
Automatic Strainer Removal Of Waste Drainage System	Kilayko, Karl Max Lavena, Bart Dericson	Bachelor of Engineering Technology	January 2023	Administration Accountt	Dec. 20, 2022	44	<a href="#">Edit</a> <a href="#">More</a>

**Figure 62.** Manage Approved Thesis

## Updating Thesis Project

In relation to the previous figure, the Figure 63 shows the admin page of updating the thesis project after selecting a thesis to edit from the approved table shown in figure 62.

This page contains the form for updating the thesis project. As shown the forms have the same fields such as the title, author, published date, adviser, course, keywords, abstract and pdf file are automatically entered with the existing data of the thesis.

These fields can be updated accordingly. The admin can remove an excess author from the author field by checking on the corresponding delete checkbox on the said field. The pdf field, on the other hand, shows the current pdf file of the thesis which can be updated to a new one.

Meanwhile the preview pdf file button allows the admin to preview the new pdf file entered on the pdf field which can be displayed alongside the form. Lastly, below this form are the update and reset buttons. The update button would submit and update the thesis whilst the reset button would return the form to its unedited version.

**TUPC Digital Thesis Archive**

Dashboard Repository ▾ Community ▾ Department ▾ My Account ▾

### Update Manuscript

The thesis manuscripts uploaded by the admin account would automatically be accessible to the system.

#### Submission Form

Please fill the required information below

#### Describe the thesis

Define the thesis project

Title	A Study on Concrete Roof Tile with Granulated Glass
Adviser	Rebecca R. Dela Cuesta
Published year	2023
Published month	January
Course	Bachelor of Engineering Technology
Keywords	Concrete, Glass
A comma-separated list of tags.	
Abstract	
The researchers develop a new variety of concrete roof tile, by combining granulated glass from recycled bottles, into a concrete mixture. The group aimed to produce a design of concrete in the form of roof tile having varied amount of glass with the goal of extending the use of glass and to promote recycling of garbage in the field of building construction. By obtaining procedural operations the group obtains mix designs having varied amount of glass and specimen are subjected to physical test such as density test, moisture content and water absorption test and mechanical test such as modulus of rupture. At the end of the tests and analysis, the researchers concluded that it is possible to combine glass to concrete to form a new variety of material use for construction industry.	

#### Document File

Upload the softcopy of the thesis

Pdf
Currently: pdf/2008 - A STUDY ON CONCRETE ROOF TILE WITH GRANULATED GLAS 1 1 wlsFOvZ.pdf
<input type="checkbox"/> Clear
Change: <input type="button" value="Choose File"/>
No file chosen

[Preview PDF File](#)

---

#### Add Authors

Enter the authors of the thesis

First Name	Last Name	Delete?
Joseph	Advincula	<input type="checkbox"/>
Alma Riz	Cuenca	<input type="checkbox"/>
Mabel	Braga	<input type="checkbox"/>
Crystal	Dizon	<input type="checkbox"/>
Joan	Sarmiento	<input type="checkbox"/>

[Add Author](#)

[Reset](#) [Update](#)

**Figure 63.** Updating Thesis Project

## View Approved Thesis Project Information

Meanwhile, the Figure 64 below shows the page for admin viewing the thesis project. This page displays after clicking the ‘more’ action from the approved table in the managing approved thesis page. This page contains the further information of the thesis project including its adviser, abstract, the date it is uploaded, the uploader, number of views, and the recommended citation. Moreover, the ‘view pdf file’ button allows the admin to view the pdf file of the thesis project.

The screenshot shows a web interface for the TUPC Digital Thesis Archive. At the top, there is a red header bar with the text "TUPC Digital Thesis Archive". To the right of the header are navigation links: "Dashboard", "Repository", "Community", "Department", and "My Account". Below the header, there is a red button labeled "Back to previous page". The main content area displays a thesis project titled "An Experimental Study Of Using Waste Fiber Cement Board As Partial Replacement Of Fine Aggregates For 4" Non-Load Bearing Concrete Hollow Block". The status of the project is "Approved". Below the title, there is a list of details: "By John Oscar Begueras", "Adviser: Ramon Christopher Escalona", "Course: Bachelor of Engineering Technology", "Published Date: Feb. 28, 2022", "Date Uploaded: Dec. 18, 2022", "Uploader: Admin Account", "Views: 3", "Keywords: waste Fine Aggregates CHB FCB Replacement", and a "View PDF File" link. There is also a "Abstract" section containing a detailed description of the study. At the bottom of the page, there are sections for "Recommended Citations" in APA, MLA, and Chicago styles, along with a copyright notice for the TUPC Digital Thesis Archive.

**Figure 64.** Viewing of Approved Thesis Project Information

## Manage Pending Thesis Projects

In order to manage pending thesis projects submitted by the students in the system, the page in Figure 65 below is shown consists of graph and table. The graph shows the number of pending theses in every course and the table shows the tabulated data of the pending theses. The table contains the thesis title, author, course major, published date and its date submitted to the system. The admin can search in this table across the data columns and sort either by ascending or descending order.

Moreover, there is an action the admin can conduct among the pending projects. The evaluate action allows the admin to evaluate a certain pending thesis which redirects to another page showing the full entered information of the thesis by the student.

The screenshot displays the TUPC Digital Thesis Archive interface. At the top, a dark red header bar contains the text "TUPC Digital Thesis Archive" on the left and navigation links "Dashboard", "Repository", "Community", "Department", and "My Account" on the right.

The main content area is divided into two sections:

- Pending Projects:** A dark blue box containing the text "Pending Projects" and "This is the management repository for pending thesis manuscripts in the system". To the right is a small illustration of a person sitting at a desk with a lamp and a plant.
- Graph Data:** A chart titled "Pending Projects" showing a single data point at 1.0. The x-axis is labeled "Bachelor of Engineering Technology".
- Pending Manuscripts:** A table titled "Pending Manuscripts" showing one entry. The table has columns: Title, Author, Course, Published Date, Uploaded by, Date Uploaded, and Actions. The data is as follows:
 

Title	Author	Course	Published Date	Uploaded by	Date Uploaded	Actions
A Study of Particle Board	Corpuz, Jinky Mae	Bachelor of Engineering Technology	December 2023	Dante Tiagan	Jan. 16, 2023	<button>Evaluate</button>

At the bottom of the table section, there are buttons for "Previous", "Next", and a page number "1".

**Figure 65.** Manage Pending Thesis Projects

## Evaluate Thesis Project

In relation to managing of pending thesis projects, the Figure 66 shows the page for evaluating the selected pending thesis project. This page displays after clicking the evaluate action from manage pending project page as shown in the Figure 65. This allows the admin to evaluate the thesis project either to approve or reject.

The left side of the page shows the thesis information of the thesis entered by the student such as its title, author, course major, published date, keywords, and the abstract. It can also be seen the student who submitted the project.

Meanwhile, on the right side of the page shows the pdf file content of the thesis project submitted by the student. This way, the admin can compare the details of the entered data and content of the pdf file side to side to easily evaluate if they match or not.

Under these is the evaluation form with which the admin can select from either to approve or reject the project with a corresponding reason. The confirm button submits the evaluation whilst the reset button returns the fields of the form to their default value.

The screenshot shows a web-based digital thesis archive interface. At the top, a red header bar displays "TUPC Digital Thesis Archive". To the right of the header are several icons: a magnifying glass, a refresh symbol, a search bar placeholder "Search", a user profile icon, and a sign-in button. Below the header, the main content area has a dark blue header section with the title "DEVELOPMENT OF BOKASHI MIXER AND MOLDING MACHINE" and the subtitle "A Research Project".

**Evaluate Project**

Evaluate submitted thesis project in the system here

[Back to previous page](#)

**A Study of Particle Board**

- Author: Jinny Mae Cornuz
- Adviser: Roberto Tomas
- Course: Bachelor of Engineering Technology
- Published Date: December 2023
- [View PDF](#)
- Submitted Date: Jan. 16, 2023
- Submitted by: Dante Tiagan
- Keywords: binder

**Abstract**

A particle board that is composed of rice hull ash, sawdust, egg shell, corn fiber and plastic resin glue or known on its second name urea-formaldehyde which is in a dry form is used as a binder. The rice hull ash that is used in this specimen is obtained after carbonizing the rice hull within 4 hours with the use of the carbonizer.

**Evaluate**

Decision\*

Reason\*

[Reset](#) [Confirm](#)

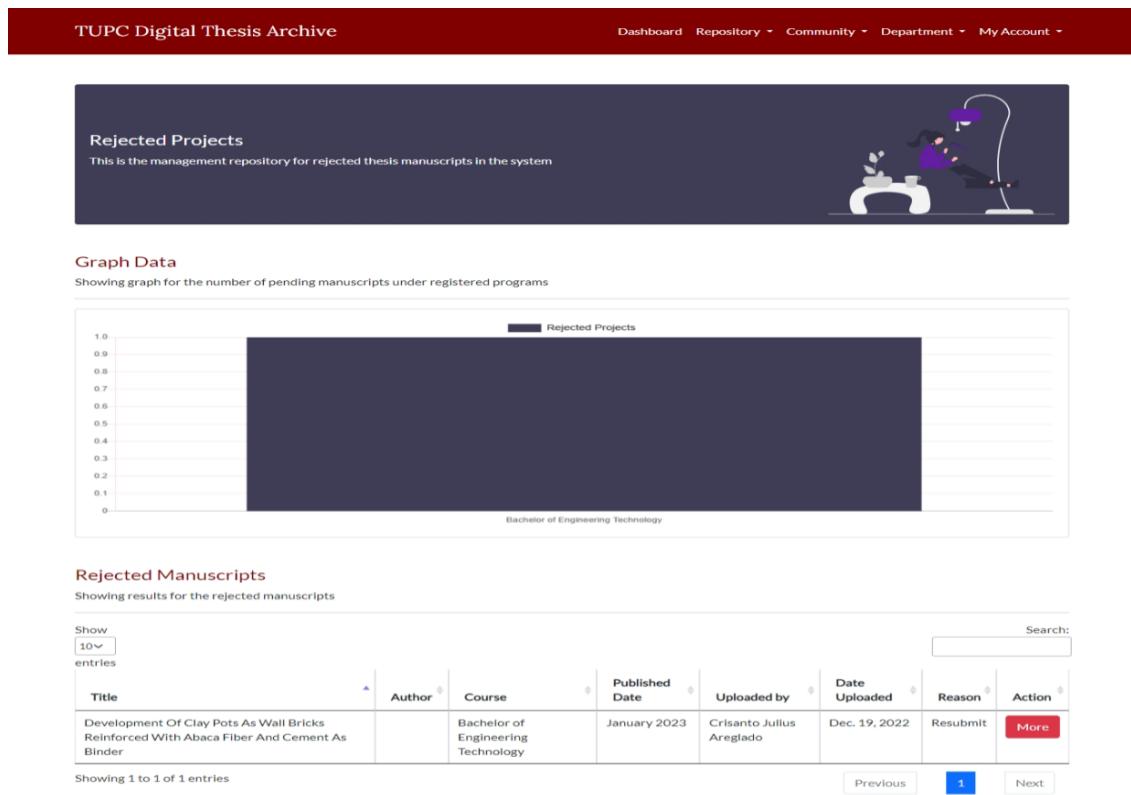
**Figure 66.** Evaluate Pending Thesis Project Page

## Manage Rejected Thesis Projects

For managing rejected thesis projects, the page shown in the Figure 67 below is consists of graph and table. The graph shows the number of pending theses in every course major and the table shows the tabulated data of the rejected theses.

The table contains the thesis title, course major, the uploader, and the reason for its rejection. The admin can search in the table across its data columns and sort by ascending or descending order.

Meanwhile, the ‘more’ action is provided in the table to allow the admin view the full information of the rejected thesis project which will be displayed in the other page.



**Figure 67.** Manage Rejected Thesis Projects

## View Rejected Thesis Project Information

After the admin selects a thesis to view from the rejected table shown in Figure 67, the figure below shows the page displaying the information of the selected thesis project. This page shows the full details of the thesis project including the reason as to why it is rejected. The title, author, course, published date, date uploaded, uploaded by, keywords, and abstract are included in the display.

Meanwhile, the view-pdf-file button allows the admin to view the pdf file of the rejected thesis project in other page.

The screenshot displays a web interface for a 'Thesis Archive'. At the top, there is a dark red header bar with the text 'Thesis Archive' on the left and navigation links 'Dashboard', 'Repository', 'Community', 'Department', and 'My Account' on the right. Below the header, a red button labeled '(+) Back to previous page' is visible. The main content area shows a thesis entry titled 'Development Of Clay Pots As Wall Bricks Reinforced With Abaca Fiber And Cement As Binder'. To the right of the title is a red rectangular button with the word 'Rejected' in white. Below the title, there are several metadata fields: 'Author: Conversion, E. et al', 'Course: Bachelor of Engineering Technology', 'Published Date: Sept. 15, 2011', 'Date Uploaded: Dec. 19, 2022', 'Uploader: Crisanto Julius Areglado', and 'Keywords: Development bricks abaca reinforced cement binder'. A 'View PDF File' link is also present. A large text box under the title contains the abstract: 'The general objective of this study is to develop a wall brick from crushed clay pots reinforced with abaca fiber and cement as binder. Abaca fiber acts as reinforcement and clay pots is introduced as a substitute aggregate. With the use of this materials would help reduce the waste in our environment and this organic waste will be more beneficial to humans.' Below the abstract, there is a section titled 'Reason for Rejection: Resubmit' and another titled 'Recommended Citation' which provides a detailed citation for the work.

**Figure 68.** View Rejected Thesis Project Information

## Manage Department Page

Meanwhile, the Figure 69 below shows the page for managing departments in the system. This page allows the admin to register a department and view all the registered departments in the system in tables, respectively.

The page consists of a form and a table. The form is provided for creating a new department in the system. The form only has two fields: the department name and its abbreviation. Both fields are unique. The submit button in the form creates and saves the new department whilst the reset button returns the form to its empty fields.

Meanwhile, the table contains all the registered departments in the system. From this table, the admin can search and sort the data columns. The edit and delete actions are also provided. The edit action allows the update on registered department's information. Meanwhile, the delete action allows the deletion of the registered department from the system given there are no programs registered under it.

TUPC Digital Thesis Archive

Dashboard Repository ▾ Community ▾ Department ▾ My Account ▾

### Department Management

This is the management for departments in the system



### Department Registrations

Try to register a department here

Department

Department Name

Department abbreviation

Department abby.

Register Reset

### Registered Courses

Here shows the registered courses in the system

Show  
10▼ entries

Search:

Department	Department Abbrv.	Action
Department of Industrial Technology	DIT	Edit Delete

Showing 1 to 1 of 1 entries

Previous 1 Next

**Figure 69.** Manage Department Page

## Edit Department Page

In relation to Figure 69, the page for updating the department information is shown in Figure 70. The page contains a form that has the existing details of the department with which can be updated by the admin.

The department name and its abbreviation are both unique fields. Meanwhile, the three buttons under these field are the cancel, update and reset button. The update button submits the form and updates the information to the system whilst the reset button returns the form to its unedited version. Lastly, the cancel button cancels the update and would navigate back to the page shown in Figure 69.

The screenshot shows a web page titled "Edit Department". At the top, there is a dark red header bar with the text "TUPC Digital Thesis Archive" on the left and a navigation menu on the right containing "Dashboard", "Repository", "Community", "Department", and "My Account". The main content area has a white background. The title "Edit Department" is centered at the top of the content area. Below it, a sub-header says "Edit department here.". There are two input fields: one for "Department" containing "Department of Industrial Technology" and another for "Department abbreviation" containing "DIT". At the bottom of the form are three buttons: "Cancel" (gray), "Reset" (gray), and "Update" (red).

**Figure 70.** Edit Department Page

## Manage Program Page

The Figure 71 below show the page for managing programs in the system. This page allows the admin to register a program and view all the registered course majors in the system in tables, respectively.

In order to register a program, a form is provided as shown in the said figure. The form asks for the unique program name and the department it is under. The register button submits and save the program information in the system.

Meanwhile, the table shows all the registered program in the system. The admin can search and sort across this table by its data columns such as the department and program name. Moreover, the admin can update the registered program's information by clicking on the edit button. The program can also be deleted by clicking on the delete button given that the program has no uploaded theses registered under it.

TUPC Digital Thesis Archive Dashboard Repository ▾ Community ▾ Department ▾ My Account ▾

### Program Management

This is the management for programs in the system



### Program Registration

Register a program here under a particular registered department.

---

Department  
-----

Program  
 Program Name

Reset Register

### Registered Programs

Here shows the registered programs in the system.

---

Show  
10▼ entries Search:

Department	Program Name	Action
Department of Industrial Technology (DIT)	Bachelor of Engineering Technology	<span style="border: 1px solid blue; padding: 2px;">Edit</span> <span style="background-color: red; color: white; border: 1px solid black; padding: 2px;">Delete</span>

Showing 1 to 1 of 1 entries Previous 1 Next

**Figure 71.** Manage Program Page

## Edit Program Page

The Figure 72 shows the page for updating the information of the program by the admin. This page displays as the admin clicks the edit action from the program table in the previous Figure 71.

The page contains a form with the existing information of the program such as its name and department. The program name is a unique field. Meanwhile, under this form are the three buttons: the cancel, update and reset button. The update button submits the form and updates the information to the system whilst the reset button returns the form to its unedited version. Lastly, the cancel button cancels the update and would navigate back to the page shown in Figure 71.

The screenshot shows a web application interface for editing a program. At the top, there is a dark red header bar with the text "TUPC Digital Thesis Archive" on the left and navigation links "Dashboard", "Repository", "Community", "Department", and "My Account" on the right. Below the header, the main content area has a white background. The title "Edit Course" is displayed in a purple font. Below the title, there is a text input field with the placeholder "Edit course here.". Underneath this, there are two dropdown menus. The first dropdown is labeled "Department" and contains the option "Department of Industrial Technology (DIT)". The second dropdown is labeled "Program" and contains the option "Bachelor of Engineering Technology". At the bottom of the form, there are three buttons: "Cancel" (gray), "Reset" (gray), and "Update" (red). The "Update" button is positioned to the right of the "Reset" button.

**Figure 72.** Admin Edit Program Page

## Registered Accounts Page

In order to manage the registered accounts in the system, the Figure 73 shows the page for registered accounts in the system. This page contains a table that shows the students' information such as their username, first name, last name, email address and the date they registered which all can be sorted or browsed by.

Moreover, the export-to-CSV button generates a CSV file for the registered accounts while the more action in the table allows the admin to view the further information of the student including their submitted thesis projects in the system.

Username	First Name	Last Name	Email Address	Date Joined	Actions
Admin_DigitalArchive	Administration	Accountt	adminexample@gmail.com	Jan. 1, 2023, 3:53 p.m.	<button>More</button>
alliahfaith	Alliah	Nazaire	alliahfaith.nazaire@gsfe.tupcavite.edu.ph	Dec. 20, 2022, 2:31 p.m.	<button>More</button>
angeleneborjal	Angelene	Borjal	angelene.borjal@gsfe.tupcavite.edu.ph	Jan. 3, 2023, 2:54 p.m.	<button>More</button>
Arjill	Arjill Joven	Eusebio	arjilljoven.eusebio@gsfe.tupcavite.edu.ph	Dec. 19, 2022, 10:29 a.m.	<button>More</button>
DanteTheGreat	Dante	Tiagan	dante.tiagan@gsfe.tupcavite.edu.ph	Dec. 18, 2022, 10:12 p.m.	<button>More</button>
daryl	daryl	enoslay	daryl.enoslay@gsfe.tupcavite.edu.ph	Dec. 20, 2022, 2:54 p.m.	<button>More</button>
Franzes_delacruz0717	Franzes Klair	De La Cruz	franzeskclair.delacruz@gsfe.tupcavite.edu.ph	Dec. 19, 2022, 10:29 a.m.	<button>More</button>
genesis047	Genesis	Mislos	genesis.mislos@gsfe.tupcavite.edu.ph	Dec. 19, 2022, 4:40 p.m.	<button>More</button>
JOHONO	John Ray	Fetalvero	johnray.fetalvero@gsfe.tupcavite.edu.ph	Dec. 19, 2022, 10:16 a.m.	<button>More</button>
Jhay	Crisanto Julius	Areglado	crisantojulius.areglado@gsfe.tupcavite.edu.ph	Dec. 18, 2022, 11:15 a.m.	<button>More</button>

**Figure 73.** Registered Accounts Page

## **View Account Details**

The Figure 74 below shows the page for displaying the further details of a particular registered account. The page shows the complete account's personal information including its activeness and email verification status.

Meanwhile, it also displays the list of projects submitted by the student with their corresponding status in the system. The view more button on the projects with either approved or rejected status when clicked redirects to a page that displays their full information saved in the system. Meanwhile, clicking the view more button on projects with pending status redirect to the evaluation of thesis page.

There is also a provided deactivation/reactivation button to either deactivate or reactivate the account in the system. The admin can reactivate the account that has been deactivated but not those of unverified email address. Likewise, the admin can deactivate the account with an active status.

TUPC Digital Thesis Archive

Dashboard Repository ▾ Community ▾ Department ▾ My Account ▾



### Account's Information

The personal information of registered user account shows here.

[Back to previous page](#)

**Account's Information**

Name: Dante Tlagan  
 Email: [dante.tlagan@gsfe.tupcavite.edu.ph](mailto:dante.tlagan@gsfe.tupcavite.edu.ph)  
 Date Joined: Dec. 18, 2022, 10:12 p.m.  
 Activeness Status: **Active** ✓  
 Email Verification Status: **Verified** ✓

Deactivating account means disallowing user to login and access the system anymore. However, the account itself, its uploaded manuscripts and pdf access requests would not be removed.

[Deactivate account](#)

### Projects

Shows the account's submitted projects in the system with corresponding status

Development Of Soil Sampling Device With Moisture Content Determiner	<a href="#">View more »</a>	Approved
Development Of Sport Materials Borrower System For Tupc	<a href="#">View more »</a>	Approved
A Study on Concrete Roof Tile with Granulated Glass	<a href="#">View more »</a>	Approved
Study Of Paper Cornice With Waterproofing Admixture	<a href="#">View more »</a>	Approved

**Figure 74.** View Account Details Page

## Manage PDF Access Requests

For managing the pdf access requests from the students, the page in Figure 75 is shown. The page for managing pdf access requests have three tables: the pending, approved, and rejected table. Both of these tables can be browsed and sorted by according to their data columns.

The pending table shows the pending requests from the students waiting for evaluation. In order to evaluate these requests, the more button is provided in the table. Upon clicking this, the admin would be navigated to another page with which she/he could evaluate the request.

Meanwhile, the approved table shows the approved requests from the students. The thesis title in the table serves as a link which if clicked redirects to a page displaying the thesis information. Similarly, the requestor in the table also serves as a link that navigates to the account details page. The date requested and email address of the student, and reason are also shown in the table.

On the other hand, the rejected table shows the rejected requests from the students. Also, the thesis titles and the requestors in this table serve as links to displaying their information to another page. The reason, email address of the student and date requested are shown as well in the rejected table.

**TUPC Digital Thesis Archive**

Dashboard Repository Community Department My Account

### PDF Access Requests

This is the management page for pdf access requests



**Pending Access Requests**

Showing results for the pending access requests  
Note: You cannot evaluate pending requests from deactivated accounts

Show 10 entries	Requestor	Email	Thesis	Date Requested	Actions
Dante Tiagan	dante.tiagan@gsfe.tupcavite.edu.ph	Development Of A Prototype Biometric Prepaid Energy System Utilizing Sms Module	Jan. 9, 2023, 7:43 a.m.	<a href="#">Evaluate</a>	
Ryan Angelo Dela Cruz	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	Development Of Sport Materials Borrower System For Tupc	Jan. 10, 2023, 11:54 a.m.	<a href="#">Evaluate</a>	

Showing 1 to 2 of 2 entries

Previous 1 Next

**Approved Access Requests**

Showing results for the approved access requests

Show 10 entries	Requestor	Email	Thesis	Date Approved	Reason for access
Allen Baybay	nedrickallen.baybay@gsfe.tupcavite.edu.ph	Development of Automated Personnel Tracker With Thermal Scanning And Qr Code As Contact Tracing System	Jan. 6, 2023, 3:05 p.m.	For research purposes	
Crisanto Julius Areglado	crisantojulius.areglado@gsfe.tupcavite.edu.ph	Development Of Electronic Logbook (E-Logbook)	Dec. 19, 2022, 7:07 p.m.	Academic purposes	
Crisanto Julius Areglado	crisantojulius.areglado@gsfe.tupcavite.edu.ph	Development of Automated Personnel Tracker With Thermal Scanning And Qr Code As Contact Tracing System	Jan. 3, 2023, 8:24 p.m.	Academic purpose	
Crisanto Julius Areglado	crisantojulius.areglado@gsfe.tupcavite.edu.ph	Automatic Strainer Removal Of Waste Drainage System	Jan. 4, 2023, 4:13 p.m.	Academic purpose	
Crisanto Julius Areglado	crisantojulius.areglado@gsfe.tupcavite.edu.ph	The Development of Thesis Archive Management System	Jan. 9, 2023, 5:43 p.m.	for thesis	
Dante Tiagan	dante.tiagan@gsfe.tupcavite.edu.ph	Automatic Strainer Removal Of Waste Drainage System	Jan. 8, 2023, 2:12 p.m.	For Research purpose	
daryl enoslay	daryl.enoslay@gsfe.tupcavite.edu.ph	Development Of Electronic Medicine Cabinet With Expiration Date Notification	Dec. 25, 2022, 1:03 p.m.	A	
John Ray Fetalvero	johnray.fetalvero@gsfe.tupcavite.edu.ph	Innovation Of A Bender For Rigid Non-Metallic Conduit	Dec. 19, 2022, 10:19 a.m.	For research purposes	
Ryan Angelo Dela Cruz	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	Automatic Strainer Removal Of Waste Drainage System	Dec. 18, 2022, 2:38 p.m.	Another Test 12-18-2022	
Ryan Angelo Dela Cruz	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	Combination Of Acacia Bark Extract And Cornstarch As Natural Binder In The Development Of Medium Density Abaca Fiberboards	Dec. 25, 2022, 1:04 p.m.	I want to research something	

Showing 1 to 10 of 13 entries

Previous 1 2 Next

**Declined Access Requests**

Showing results for the declined access requests

Show 10 entries	Requestor	Email	Thesis	Date Declined	Reason for access
Dante Tiagan	dante.tiagan@gsfe.tupcavite.edu.ph	Development Of Sport Materials Borrower System For Tupc	Dec. 31, 2022, 1:09 p.m.	For my thesis reference	
Genesis Mislos	genesis.mislos@gsfe.tupcavite.edu.ph	Combination Of Acacia Bark Extract And Cornstarch As Natural Binder In The Development Of Medium Density Abaca Fiberboards	Dec. 31, 2022, 3:43 p.m.	For school purposes	
Ryan Angelo Dela Cruz	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	Development of Automatic Watering System For Vertical Coco Peat Based Farming	Dec. 31, 2022, 1:06 p.m.	I want to try	
Ryan Angelo Dela Cruz	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	Development Of Multi-Purpose Road Sweeper For Custodial At Technological University Of The Philippines Cavite	Jan. 4, 2023, 10:20 p.m.	try	
Ryan Angelo Dela Cruz	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	A Study on Concrete Roof Tile with Granulated Glass	Jan. 8, 2023, 5:32 p.m.	I want to research something	

Showing 1 to 5 of 5 entries

Previous 1 Next

**Figure 75.** Manage PDF Access Requests Page

## Evaluate PDF Access Request Page

Meanwhile, the Figure 76 shows the page for evaluating a pdf access request. This page displays after clicking the evaluate button from the Figure 75. The page is divided into three sides: the left, the right, and the bottom side.

On the left side is the student's information who sent the request. The student's name, email address, date requested and his/her reason are shown. The more button navigates to account details page displaying the account's full information in the system.

Meanwhile, on the right side shows the thesis he/she wants to access. Here shows the thesis title, author, published date, number of views, date uploaded, and the like. As well as the abstract of the thesis is shown.

Moreover, on the bottom side is the evaluation form for approving the pdf access request of the student. With this form, the admin can either approve or reject the request in the system.

TUPC Digital Thesis Archive

Dashboard Repository Community Department My Account



### Evaluate PDF Access Request

Evaluate requested access for PDF here

[Back to previous page](#)

**Requestor's Information**

Name: Dante Tiagan  
 Email: [dante.tiagan@gsfe.tupcavite.edu.ph](mailto:dante.tiagan@gsfe.tupcavite.edu.ph)  
 Date Requested: Jan. 9, 2023, 7:43 a.m.  
 Student's Reason: Research Purpose  
[View more >](#)

**Development Of A Prototype Biometric Prepaid Energy System Utilizing Sms Module**

Author: Kristine Eiline Embang Sheila Tined Shermaine Urbano  
 Adviser: Jay Victor G. Gumbooc  
 Course: Bachelor of Engineering Technology  
 Published Date: January 2023  
 Views: 15  
 PDF File: [View PDF](#)  
 Submitted Date: Dec. 18, 2022  
 Submitted by: Administration Account  
 Keywords: Microcontroller Arduino Prototype Biometric SMS

[Abstract ▾](#)

**Evaluate**

Decision\*

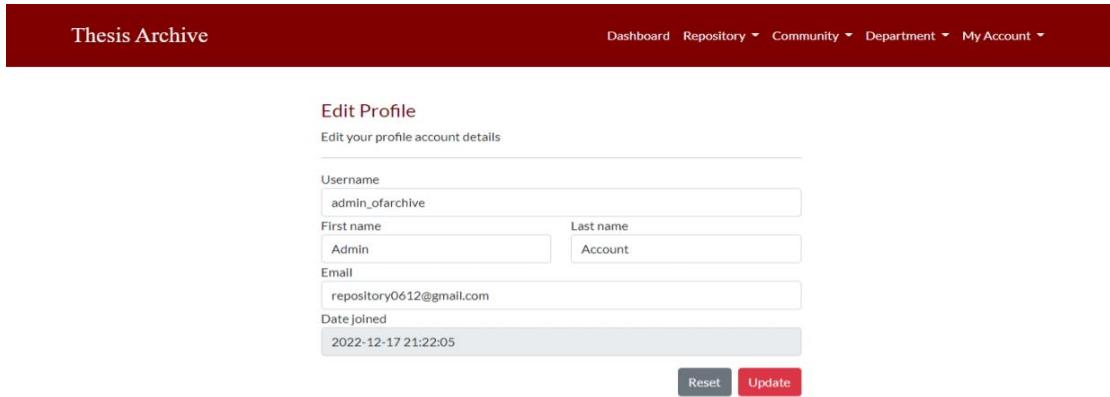
[Reset](#) [Confirm](#)

**Figure 76.** Evaluate PDF Access Request Page

## Admin Edit Profile

The edit profile page for the admin is shown in the Figure 77. This page allows the admin to update his/her information in the system such as the username, first and last name as well as the email address.

Moreover, as shown, the field for date joined is also non-editable. The reset button resets the entries and the update button allows the admin to save the updated information.



The screenshot shows the 'Edit Profile' page of a Thesis Archive application. At the top, there is a dark red header bar with the text 'Thesis Archive' on the left and navigation links 'Dashboard', 'Repository', 'Community', 'Department', and 'My Account' on the right. Below the header, the main content area has a light gray background. It features a title 'Edit Profile' and a subtitle 'Edit your profile account details'. There are several input fields: 'Username' (admin\_ofarchive), 'First name' (Admin) and 'Last name' (Account), both in separate input boxes; 'Email' (repository0612@gmail.com) in another input box; and 'Date joined' (2022-12-17 21:22:05) which is displayed in a grayed-out input box. At the bottom right, there are two buttons: a dark gray 'Reset' button and a red 'Update' button.

**Figure 77.** Admin Edit Profile Page

## Admin Change Password Page

Lastly the figure 78 below shows the page for updating the password of the admin account. The form requires the old password of the admin and the new password.

The screenshot shows a web page titled "Change Password" under the "My Account" section of the Thesis Archive. The page has a dark red header bar with the "Thesis Archive" logo and navigation links for Dashboard, Repository, Community, Department, and My Account. The main content area has a white background and contains the following elements:

- A title "Change Password" with a subtitle "You can change your password here".
- An "Old password" input field.
- An "New password" input field.
- An "New password confirmation" input field.
- A list of password requirements:
  - Your password can't be too similar to your other personal information.
  - Your password must contain at least 8 characters.
  - Your password can't be a commonly used password.
  - Your password can't be entirely numeric.
- Two buttons at the bottom: "Reset" (gray) and "Update" (red).

**Figure 78.** Admin Change Password

## Project Test Results

This shows the following results of the tests conducted in terms of Functionality, Accuracy and Reliability for storing and displaying thesis projects in the system.

### Testing Results for Functionality

**Table 3.**

*Functionality Test for Admin Account Registration Process*

Trial No.	User	Expected Output	Actual Output
1	Admin Account	Admin account will be created and the link to create admin account is no longer accessible.	Admin account is created and the link to create admin account is no longer accessible.
2	Admin Account	Admin account will be created and the link to create admin account is no longer accessible.	Admin account is created and the link to create admin account is no longer accessible.
3	Admin Account	Admin account will be created and the link to create admin account is no longer accessible.	Admin account is created and the link to create admin account is no longer accessible.

The results for the functionality of admin account registration shown in Table 3 above. The web app is able to create an account using inputs from the user such as username, first and last name, gsfe email and a password. The web app is programmed to collect and store this information in the database for records of accessing and submitting projects in the system.

**Table 4.***Functionality Test for Account Registration Process*

<b>Trial No.</b>	<b>Students</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Ryan Angelo Dela Cruz	Account registered but requires email verification.	Account registered but requires email verification
2	Crisanto Julius Areglado	Account registered but requires email verification	Account registered but requires email verification
3	Dante Tiagan	Account registered but requires email verification	Account registered but requires email verification
4	Genesis Mislos	Account registered but requires email verification	Account registered but requires email verification

The table 4 shows the result of account registration testing. The web app must be able to create an account using inputs from the user such as username, first and last name, gsfe email and a password. The web app is programmed to collect and store this information in the database for records of accessing and submitting projects in the system.

**Table 5.***Functionality Test for Updating Account Information*

<b>Trial No.</b>	<b>User</b>	<b>User type</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Ryan Angelo Dela Cruz	Student	Account information will be updated.	Account information is updated.
2	Crisanto Julius Areglado	Student	Account information will be updated.	Account information is updated.
3	Dante Tiagan	Student	Account information will be updated.	Account information is updated.
4	Genesis Mislos	Student	Account information will be updated.	Account information is updated.
5	Admin Account	Admin Account	Account information will be updated.	Account information is updated.

As shown in Table 5, the results of the test match the expected outputs for updating account information. The web app is able to update account's information such as the username, first and last name, and email. Meanwhile, for student accounts, the email address is displayed to be non-editable.

**Table 6.***Functionality Test for Forgot Password Process in Student Account*

<b>Trial No.</b>	<b>Email</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	An email for password reset link will be sent for updating password.	An email for password reset link is sent and password is updated after it is reset.
2	crisantojulius.areglado@gsfe.tupcavite.edu.ph	An email for password reset link will be sent for updating password.	An email for password reset link is sent and password is updated after it is reset.
3	dante.tiagan@gsfe.tupcavite.edu.ph	An email for password reset link will be sent for updating password.	An email for password reset link is sent and password is updated after it is reset.
4	genesis.mislos@gsfe.tupcavite.edu.ph	An email for password reset link will be sent for updating password.	An email for password reset link is sent and password is updated after it is reset.

The testing results for the forgot-password are shown in the Table 6 above. The user must input his registered email in the forgot-password form in order to receive a password reset link for changing of password. The web app is able to update successfully the password of the user in the database after setting a new password.

**Table 7.**

*Functionality Test for Thesis Project Uploading Process in Admin side*

Trial No.	Thesis Projects	Expected Output	Actual Output
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Thesis project created with approved status.	Thesis project created with approved status.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Thesis project created with approved status.	Thesis project created with approved status.
3	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	Thesis project created with approved status.	Thesis project created with approved status.

In Table 7, the test result for the functionality of admin uploading thesis projects is shown. The thesis project must be successfully uploaded and stored to the database with approved status. Selected three samples of thesis projects are successfully stored in the database with the status of approved.

**Table 8.**

*Functionality Test for Thesis Project Updating Process in Admin side*

Trial No.	Thesis Projects	Expected Output	Actual Output
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Thesis project will be updated with approved status.	Thesis project is updated with approved status.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Thesis project will be updated with approved status.	Thesis project is updated with approved status.
3	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	Thesis project will be updated with approved status.	Thesis project is updated with approved status.

The expected outputs of the test are obtained for updating of thesis projects in the admin side as shown in the table 8 above. The three samples of the uploaded thesis of the admin are successfully updated to the database with the same approved status.

**Table 9.**

*Functionality Test for Thesis Project Uploading Process in Student's Side*

Trial No.	Thesis Projects	Expected Output	Actual Output
1	Development of Electronic Toilet Bowl System	Thesis project will be created with pending status.	Thesis project created with pending status.
2	Development of Automobile Glass Window Protector	Thesis project will be created with pending status.	Thesis project created with pending status.
3	Innovation of a Bender for Rigid Non-metallic Conduit	Thesis project will be created with pending status.	Thesis project created with pending status.

The test results in student submitting thesis projects are tabulated in the table above.

A student account is able to successfully upload and store a thesis to the database with the status of pending.

**Table 10.**

*Functionality Test for Thesis Project Resubmitting Process in Student's Side*

Trial No.	Thesis Projects	Expected Output	Actual Output
1	Development of Electronic Toilet Bowl System	Thesis project will be resubmitted with pending status.	Thesis project resubmitted with pending status.
2	Development of Automobile Glass Window Protector	Thesis project will be resubmitted with pending status.	Thesis project resubmitted with pending status.
3	Innovation of a Bender for Rigid Non-metallic Conduit	Thesis project will be resubmitted with pending status.	Thesis project resubmitted with pending status.

In table 10, the test results for the functionality of student resubmitting pending and rejected thesis projects are shown. The thesis projects are successfully resubmitted by the student account and updated to the database with the status of pending.

**Table 11.***Functionality Test for Student Submitting Pdf Access Request*

<b>Trial No.</b>	<b>Thesis Projects</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	A request for pdf access will be created with pending status.	A request for pdf access is created with pending status.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	A request for pdf access will be created with pending status.	Thesis project is updated with approved status.
3	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	A request for pdf access will be created with pending status.	A request for pdf access is created with pending status.

It is proven that the submission for request of pdf access to thesis projects is working as expected based on its functionality test results above. Student accounts are able to submit a pdf access request to a pdf file which he has no authorized access to yet. The request is successfully created and stored to the database with pending status.

**Table 12.**

*Functionality Test for Admin Adding/Updating Department*

<b>Trial No.</b>	<b>Department</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	College of Industrial Technology	Created/ updated successfully.	Created/ updated successfully.
2	College of Engineering	Created/ updated successfully.	Created/ updated successfully.

In Table. 12, the test results for the functionality of adding/updating department/s by admin are shown. The web app is able to store or update the information of the department to the database.

**Table 13.**

*Functionality Test for Admin Adding/Updating Program*

<b>Trial No.</b>	<b>Department</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Bachelor of Engineering Technology	Created/ updated successfully.	Created/ updated successfully.
2	Bachelor of Science	Created/ updated successfully.	Created/ updated successfully.

On the other hand, the Table 13 shows the test results for the functionality of adding/updating programs by the admin. The web app is able to store/update the information of the course major to the database.

## Testing Result for Accuracy

**Table 14.**

*Accuracy Test for Admin Approving Thesis Projects*

Trial No.	Thesis Projects	Expected Output	Actual Output
1	Innovation of Electric Folding Creeper	Thesis project status will be approved and send email notification.	Thesis project status is set ‘approved’ and email notification is sent.
2	Development of Electronic Logbook	Thesis project status will be approved and send email notification.	Thesis project status is set ‘approved’ and email notification is sent.
3	Development of Sport Materials Borrower System for TUP-C	Thesis project status will be approved and send email notification.	Thesis project status is set ‘approved’ and email notification is sent.

The results for accuracy test of approving thesis projects submitted by students are shown in Table. 14. The thesis project’s status is successfully updated to ‘approved’ to the database as the admin approves the thesis. Furthermore, a notification email to the uploader is successfully sent.

**Table 15.**

*Accuracy Test for Admin Rejecting Thesis Projects*

Trial No.	Thesis Projects	Expected Output	Actual Output
1	Development of Electronic Toilet Bowl System	Thesis project will be rejected and send email notification.	Thesis project status is set ‘rejected’ and email notification is sent.
2	Development of Automobile Glass Window Protector	Thesis project will be rejected and send email notification.	Thesis project status is set ‘rejected’ and email notification is sent.
3	Innovation of a Bender for Rigid Non-metallic Conduit	Thesis project will be rejected and send email notification.	Thesis project status is set ‘rejected’ and email notification is sent.

In Table 15, the test results for the accuracy of rejecting thesis projects submitted by students are shown. The thesis project’s status is successfully updated to ‘rejected’ to the database as the admin rejects the thesis in the system. Furthermore, an email notification is successfully sent to the uploader.

**Table 16.**

*Accuracy Test for Admin Approving PDF Access Requests*

Trial No.	Students	Requested PDF Access of Thesis Projects	Expected Output	Actual Output
1	Ryan Angelo Dela Cruz	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Request will be updated with approved status and send email notification	Request is updated with approved status and an email notification is sent.
2	Crisanto Julius Areglado	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Request will be updated with approved status and send email notification	Request is updated with approved status and an email notification is sent.
3	Dante Mar Tiagan	Development of Automated Personnel Tracker with Thermal Scanning and Qr Code as Contact Tracing System	Requests will be updated with approved status and send email notification.	Request is updated with approved status and an email notification is sent.

The results for the accuracy of admin approving pdf access requests of students for particular thesis projects are shown in Table 16 above. The pdf access request's status is updated to 'approved' to the database as the admin approves the pdf request. Then, an email notification is successfully sent to the student.

**Table 17.***Accuracy Test for Admin Declining PDF Access Requests*

<b>Trial No.</b>	<b>Students</b>	<b>Requested PDF Access of Thesis Projects</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Crisanto Julius Areglado	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Request will be updated with declined status and send email notification	Request is updated with declined status and an email notification is sent.
2	Dante Mar Tiagan	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Request will be updated with declined status and send email notification	Request is updated with declined status and an email notification is sent.
3	Genesis Mislos	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	Request will be updated with declined status and send email notification	Request is updated with declined status and an email notification is sent.

Meanwhile, Table. 17 shows the test result for the accuracy of admin declining pdf access requests of students for particular thesis project. The pdf access request's status is successfully updated to 'declined' to the database as the admin declines the pdf access request. Then, an email notification is successfully sent to the student.

**Table 18.**

*Accuracy Test for Displaying and Accessing Thesis Projects to Students*

Trial No.	Thesis projects	Status	Expected Output	Actual Output
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Approved	Display thesis project	Thesis project is displayed successfully.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Approved	Display thesis project	Thesis project is displayed successfully.
3	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	Approved	Display thesis project	Thesis project is displayed successfully.
3	Development of Electronic Logbook	Pending	Raise 404 Not Found	Raise 404 Not Found
4	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Pending	Raise 404 Not Found	Raise 404 Not Found
5	Development of Electronic Toilet Bowl System	Rejected	Raise 404 Not Found	Raise 404 Not Found
6	Innovation of a Bender for Rigid Non-metallic Conduit	Rejected	Raise 404 Not Found	Raise 404 Not Found

The actual outputs match the expected outputs during the testing for the accuracy of displaying accessible thesis projects in the system. The student accounts are able to access only the approved thesis projects, while the rejected and pending thesis projects are not yet accessible.

**Table 19.**

*Accuracy Test for Displaying Thesis Projects in Admin's Side*

Trial No.	Tables	Expected Output	Actual Output
1	Approved Table	Approved thesis projects will be displayed in the approved table.	Approved thesis projects successfully displayed in the approved table.
2	Pending Table	Pending thesis projects will be displayed in the pending table.	Pending thesis projects successfully displayed in the pending table.
3	Rejected Table	Rejected thesis projects will be displayed in the rejected table.	Rejected thesis projects successfully displayed in the rejected table.

It is presented in Table 19 the test results for the accuracy of displaying the thesis projects on the admin's side. The system fetches the list of thesis projects in the database and displays them in tables according on their status: approved, pending and rejected. The approved thesis projects are displayed in the approved table. The pending thesis projects are displayed in the pending table. And lastly, the rejected thesis projects are displayed in the rejected table.

**Table 20.**

*Accuracy Test for Displaying Pdf Access Requests in Admin's side*

<b>Trial No.</b>	<b>Tables</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Approved Table	Approved requests will be displayed in the approved table.	Approved requests successfully displayed in the approved table.
2	Pending Table	Pending requests will be displayed in the pending table.	Pending requests successfully displayed in the pending table.
3	Declined Table	Declined requests will be displayed in the rejected table.	Declined requests successfully displayed in the rejected table.

The accuracy test result of displaying the pdf access requests on the admin's side is shown in the table above. The system fetches the list of pdf access requests in the database and displays it in tables depending on the status: approved, pending and declined.

**Table 21.**

*Accuracy Test for Students Accessing Pdf file with Pending Access*

Trial No.	Thesis projects	Access Status	Expected Output	Actual Output
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Pending	Display page that says request is currently pending.	The page that says request is currently pending is successfully displayed.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Pending	Display page that says request is currently pending.	The page that says request is currently pending is successfully displayed.
3	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	Pending	Display page that says request is currently pending.	The page that says request is currently pending is successfully displayed.

In Table 21, the test results for the accuracy of displaying the pdf files of thesis projects which the student has pending requests to access with are shown. The student account must be able to be informed that his access to the pdf files of the thesis projects is pending.

**Table 22.***Accuracy of Students Accessing Pdf file with Declined Access*

<b>Trial No.</b>	<b>Thesis projects</b>	<b>Access Status</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Declined	Show modal that request is declined and display form to submit new request.	The modal is successfully shown and the new request form.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Declined	Show modal that request is declined and display form to submit new request.	The modal is successfully shown and the new request form.
3	Development of Automated Personnel Tracker with Thermal Scanning and Qr Code as Contact Tracing System	Declined	Show modal that request is declined and display form to submit new request.	The modal is successfully shown and the new request form.

In regards with the accuracy test for displaying the pdf files of thesis projects for the student with declined access requests, the results are shown in the table above. The student account must be able to be informed that his access to the pdf files of the thesis projects is declined and allowed to submit new requests for access.

**Table 23.**

*Accuracy Test for Students Accessing Pdf file with Approved Access*

Trial No.	Thesis projects	Access Status	Expected Output	Actual Output
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Approved	Display PDF file content	The content of the pdf file is successfully displayed.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Approved	Display PDF file content	The content of the pdf file is successfully displayed.
3	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	Approved	Display PDF file content	The content of the pdf file is successfully displayed.

On the other hand, the Table 23 shows the test results for the accuracy of displaying the pdf files of thesis projects which the student has approved requests to access with. The student account is able to view the pdf content of the thesis project given that the student has access to it.

**Table 24.***Accuracy Test for Admin Accessing Pdf file with Approved Access*

<b>Trial No.</b>	<b>Thesis projects</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	Display PDF file content	The content of the pdf file is successfully displayed.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	Display PDF file content	The content of the pdf file is successfully displayed.
3	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	Display PDF file content	The content of the pdf file is successfully displayed.

It is shown in the test results for the accuracy of displaying the pdf files of thesis projects to the admin account that the admin account is able to view the pdf content of the thesis project

**Table 25.**

*Accuracy Test for Viewing the Details of Approved Thesis Projects in Admin Side*

Trial No.	Thesis Projects	Expected Output	Actual Output
1	Combination of Acacia Bark Extract and Cornstarch as Natural Binder in The Development of Medium Density Abaca Fiberboard	The exact information of the project will be displayed with its status.	The exact information of the project is displayed successfully with its approved status.
2	Development of a Prototype Biometric Prepaid Energy System Utilizing SMS Module	The exact information of the project will be displayed with its status.	The exact information of the project is displayed successfully with its approved status.
3	Development of Automated Personnel Tracker with Thermal Scanning and or Code as Contact Tracing System	The exact information of the project will be displayed with its status.	The exact information of the project is displayed successfully with its approved status.

The test results for the accuracy of displaying the details of approved thesis projects in the admin are shown in Table 25. The web app is able to display the data of the approved thesis project together with its status in the system, upon selecting from the approved table.

**Table 26.**

*Accuracy Test for Viewing the Details of Rejected Thesis Projects in Admin Side*

<b>Trial No.</b>	<b>Thesis Projects</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Development of Electronic Toilet Bowl System	The exact information of the project will be displayed with its status.	The exact information of the project is displayed successfully with its rejected status.
2	Development of Automobile Glass Window Protector	The exact information of the project will be displayed with its status.	The exact information of the project is displayed successfully with its rejected status.
3	Innovation of a Bender for Rigid Non-metallic Conduit	The exact information of the project will be displayed with its status.	The exact information of the project is displayed successfully with its rejected status.

The outputs in Table 26 for the accuracy test of displaying the details of rejected thesis projects in the admin shows the web app is able to display the data of the rejected thesis project together with its status in the system, upon selecting from the rejected table.

**Table 27.**

*Accuracy Test for Viewing the Details of Pending Thesis Projects in Admin Side*

<b>Trial No.</b>	<b>Thesis Projects</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Innovation of Electric Folding Creeper	The exact information of the project, the uploader and evaluation form will be displayed.	The information of the project, uploader and evaluation form are displayed successfully.
2	Development of Electronic Logbook	The exact information of the project, the uploader and evaluation form will be displayed.	The information of the project, uploader and evaluation form are displayed successfully.
3	Development of Sport Materials Borrower System for TUPC	The exact information of the project, the uploader and evaluation form will be displayed.	The information of the project, uploader and evaluation form are displayed successfully.

Meanwhile, the test results in Table 27 for the accuracy of displaying the details of pending thesis projects and allowing admin to evaluate the projects shows the web app is able to display the data of the pending thesis project such as the information of the uploader, and the evaluation form to evaluate the project, upon selecting from the pending table.

**Table 28.**

*Accuracy Test for Displaying Registered Accounts in Admin Side*

<b>Trial No.</b>	<b>Account</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	Ryan Angelo Dela Cruz	Account information and projects will be displayed.	The information and uploaded projects of the account is displayed.
2	Crisanto Julius Areglado	Account information and projects will be displayed.	The information and uploaded projects of the account is displayed.
3	Dante Mar Tiagan	Account information and projects will be displayed.	The information and uploaded projects of the account is displayed.

In Table 28, shows the test results for the accuracy of displaying the registered accounts in the system. The web app is able to display the table of registered accounts in the system alongside their stored information and uploaded thesis projects.

## Testing Result for Reliability

**Table 29.**

*Reliability Test for Logging in of Registered Account with Verified Email Address*

Trial No.	Account's Registered Email Address	Verification Status	Expected Output	Actual Output
1	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	Verified	Login success and display repository page.	The user is able to login and is navigated to the repository page.
2	crisantojulius.areglado@gsfe.tupcavite.edu.ph	Verified	Login success and display repository page.	The user is able to login and is navigated to the repository page.
3	dante.tiagan@gsfe.tupcavite.edu.ph	Verified	Login success and display repository page.	The user is able to login and is navigated to the repository page.

The testing results for logging in are shown in the table above. The web app successfully accepted the username and password of the accounts with verified email addresses by performing authentication and successfully login.

**Table 30.**

*Reliability Test for Logging in with Unregistered Account, Incorrect Credentials*

Trial No.	Case	Expected Output	Actual Output
1	Unregistered account	Login Denied	Login Denied
2	Incorrect / Invalid Username or Password	Login Denied	Login Denied
3	Unverified Email Address	Login Denied	Login Denied

In Table 30, shows the test results in testing the reliability of logging in while using an unregistered account, invalid credential, and unverified email. The web app doesn't allow login from an unregistered account, invalid credentials and unverified email address.

**Table 31.**

*Reliability Test for the Registration of the Web App*

Trial No.	No. of Registered Accounts	Expected Output	Actual Output
1	1	Working	Working
2	6	Working	Working
3	11	Working	Working

Meanwhile, the Table 31 shows the results of the reliability test of the web app. The web application is tested by creating several user accounts to test the reliability to cater a specific number of users at the same time. The web app continues to operate without problem after the test.

**Table 32.**

*Reliability Test for Uploading and Storing Multiple Thesis Projects*

<b>Trial No.</b>	<b>No. of Thesis Uploaded</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	10	Working	Working
2	20	Working	Working
3	30	Working	Working

The test results for the reliability of the application to store multiple number of thesis projects are displayed in Table 32. The web app passed the test conducted by uploading and storing multiple number of thesis projects and observing if it will still be working properly.

**Table 33.**

*Reliability Test for Creating and Storing Multiples Requests*

<b>Trial No.</b>	<b>No. of Requests</b>	<b>Expected Output</b>	<b>Actual Output</b>
1	5	Working	Working
2	10	Working	Working
3	15	Working	Working

On the other hand, the Table 33 shows the test results reliability of the application to store multiple access requests for pdf files are shown. The web app passed the test conducted by creating and storing multiple requests for different thesis projects and observing if it will still be working properly

**Table 34.**

*Reliability Test for Unauthorized Account Accessing Admin-Authorized Pages*

Trial No.	Case	Expected Output	Actual Output
1	Manipulating URL to access admin dashboard page	Denied successful	Denied successful
2	Manipulating URL to access admin's thesis project management pages	Denied successful	Denied successful
3	Manipulating URL to access admin's pdf access request management page	Denied successful	Denied successful
4	Manipulating URL to access admin's registered account management page	Denied successful	Denied successful
5	Manipulating URL to access admin's department management page	Denied successful	Denied successful
6	Manipulating URL to access admin's course major management page	Denied successful	Denied successful
7	Manipulating URL to access admin's update profile page	Denied successful	Denied successful
8	Manipulating URL to access admin's change profile page	Denied successful	Denied successful

The results of testing as shown in Table 34 meet the expected outcome in terms of the reliability of accessing the only-admin-authorized pages by using an unauthorized account. The account is not able to access the only-admin-authorized pages by manipulating or changing the URL. The web app will automatically redirect the account to its respective index page by doing so.

**Table 35.**

*Reliability Test for Unauthorized Account Accessing Student-Authorized Pages*

Trial No.	Case	Expected Output	Actual Output
1	Manipulating URL to access repository pages	Denied successful	Denied successful
2	Manipulating URL to access personal repository page	Denied successful	Denied successful
3	Manipulating URL to access student update account information page	Denied successful	Denied successful

In Table 35, the results of the reliability test in accessing the only-student-authorized pages by using an unauthorized account are shown. The account is not able to go to only-student-authorized pages by manipulating or changing the URL. The web app will automatically redirect the account to its respective index page by doing so.

**Table 36.**

*Reliability Test for Unauthorized Account Accessing PDF Media URL*

Trial No.	Case	Expected Output	Actual Output
1	Admin account accessing pdf media URL	Approve access	Access is approved.
2	Uploader of the file accessing its pdf media URL	Approve access	Access is approved.
3	User account with approved pdf access accessing its pdf media URL	Approve access	Access is approved.
4	User account with pending pdf access accessing its pdf media URL	Deny access	Access is denied.
5	User account with declined pdf access accessing its pdf media URL	Deny access	Access is denied.
6	Unregistered user accessing pdf media URL	Deny access	Access is denied.

Lastly, the Table 36 above shows the results of the reliability tests in accessing the media pdf files of the system. The account with no access to these pdf media are not be able to access and view the pdf files by manipulating the media URL of the system. The web app will automatically restrict the authorized account in accessing the media folder for pdf files.

## **Project Capabilities and Limitations**

This section discusses and presents the capabilities and limitations of the web application. With this, the future researchers will be informed about the limits and boundaries of the study which can acquire their interest for further development of the project.

### **Capabilities**

1. The thesis archive management system is a web-based application that stores, updates and displays the thesis projects in the system online; sorts these thesis projects by course major and keywords and allows browsing across all or within a particular collection.
2. The web application can store the information of the thesis project alongside its soft copy in pdf file format. Also allowing to store multiple authors for a single thesis project.
3. The web application automatically generates citation formats for the thesis project upon its creation and updating in the system.
4. The web application automatically counts the number of views for a thesis project through the IP address of the device used to access the project.
5. The web application allows registrations, email verification, reset and update password, and updating the profile information for users.
6. The web application has email notification for students about the results of their submitted pdf access requests and thesis projects.
7. The web application also has a restriction to PDF media URL set to avoid unauthorized access to pdf files.

## **Limitations**

1. The hosting of the web application is not permanent and is only based on a subscription on a third-party provider.
2. The web application needs an internet connection to access the system and its functionalities.
3. The uploading of a thesis project is done through manual inputting of project description such as its title, authors, adviser, published date, course, abstract and tags or keywords.
4. The existing pdf files in the web application as of this writing doesn't allow character recognition.

## **Project Evaluation Results**

The evaluation on the performance of the developed web application project is based on 5 different criteria included in the ISO's formulated evaluation instrument namely: performance efficiency, usability, security, maintainability.

The outcome of the evaluation shows that the end user and admins are satisfied with the performance of the project's outcome, as demonstrated by the evaluation overall mean 4.78 with a descriptive rating of "Outstanding". The table below presents the result of the evaluation, showing that usability aspect achieving the highest rating with 4.82 mean. Since the Thesis Archive Management System is exclusive only for TUP-C students that have gsfe email and all the transactions are under the supervision of the admin, from uploading of thesis up to accessing pdf files.

**Table 37.**

*Summary of Evaluation Result*

Criteria	Mean	Descriptive rating
Performance Efficiency	4.78	Outstanding
Usability	4.82	Outstanding
Security	4.81	Outstanding
Maintainability	4.71	Outstanding
Overall	4.78	Outstanding

**Legend:** 4.51 - 5.00 - Outstanding

3.51 - 4.50 - Very Satisfactory

2.51 - 3.50 - Satisfactory

1.51 - 2.50 - Fair

1.00 - 1.50 - Poor

In the performance efficiency aspect in the project evaluation, the respondents gave a mean rating for the performance efficiency of 4.78 which is equivalent to “Outstanding” in descriptive meaning. This means that the web application can perform its tasks and functionalities efficiently.

The evaluators give a 4.82 rating with a descriptive meaning of “Outstanding” in usability criteria. This shows that the evaluators are assured that they can easily use the web application without much trouble or difficulty.

On the other hand, the Security aspect gains the rating of 4.81 with “Outstanding” descriptive meaning. Which means that the security aspect of the web app is very much pleasing and guarantees high security as it shows outstanding results during the evaluation.

Lastly the Maintainability aspect receives a 4.71 rating. This means that the evaluators are extremely pleased by the web app in terms of its maintainability and its ability to store and retrieve soft copies of thesis documents.

The evaluation resulted in a 4.78 overall mean rating. Which shows that the web application passes the evaluation with an “Outstanding” overall performance.

## Chapter 5

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

This chapter will present and discuss the summary of findings, conclusions and recommendations based on the outcome of the conducted tests.

#### **Summary of Findings**

Based on the test that has been conducted by the researchers for the performance of **Thesis Archive Management System in Technological University of the Philippines – Cavite Campus**, these are the findings that have been observed:

- The required functionalities of the web app were developed according to the plan and standard.
- All the expectations for the web app and its features and functions are met. From uploading of thesis projects up to viewing and accessing, are all working properly.
- Testing of the web app's Functionality, Accuracy and Reliability shows acquisition of all expected results.
- The evaluation of the web app based on 4 different criteria shows Outstanding rating.

The corresponding test that was conducted for the Thesis Archive Management System in Technological University of the Philippines – Cavite Campus, the project shows capability of performing the expected functionalities. This represents that the project can be deployed to be used by the benefactors and for the benefits of the users.

## Conclusions

In consideration with the objectives of this study and the outcome of the testing, the researchers came up with the following conclusions:

1. The “Development of Thesis Archive Management System in Technological University of the Philippines – Cavite Campus” was developed successfully, which proves that the web app can be used in preservation of thesis projects in the library of Technological University of the Philippines – Cavite.
2. Accessing the thesis projects in the library online will be available for use by the students of TUP-C.
3. The application will help preserve the thesis projects and reduce space consumption of the thesis in the library of TUP-C.
4. The loss and unwanted damage or accident to the thesis projects in the TUP-C will be minimized as a result of electronically storing of the documents.
5. The evaluation of the web application resulted in a 4.65 overall mean rating which corresponds to Outstanding rating

## Recommendations

The web application Thesis Archive Management System is created to be able to digitally store and preserve the thesis projects in the library while allowing the students to gain easy access to these theses online. However, the web application can still be improved and furtherly enhanced with the help of recommendations that will be hereby endorsed:

1. It is recommended to use larger storage for the web application to cater the storing of a larger number of thesis projects in the future.
2. Usage of a computer that will serve as server for the web application for easier updating and maintenance of the web application.
3. Acquisition of a scanner that can be used by the library in the digitization of the remaining old thesis projects.
4. Continually perform updates and experiments to discover new features which can be added to keep up with the technological trend and further improve the security aspect of the application.
5. A development of functionality for the web application that will allow searching of the thesis projects using their reference list and viewing who else has cited the thesis project.
6. Adding a word counter in abstract input form for easier counting of word inputs as the system requires no less than 50 words.
7. Adding of time limit or expiration to pdf access, or automatic removal of permission after 5 days upon granting access.
8. Watermark for pdf copies of the manuscripts is also recommended by the panel for added security of the documents.

## REFERENCES

### The References

- Fineman, Y. (2003). *Electronic Theses and Dissertations in Music*. Retrieved from: [https://www.researchgate.net/publication/236705067\\_Electronic\\_Theses\\_and\\_Dissertations\\_in\\_Music](https://www.researchgate.net/publication/236705067_Electronic_Theses_and_Dissertations_in_Music)
- Thompson, L. (n.d.). *Electronic Theses and Dissertations at Virginia Tech: A Question of Access* [PDF]. Retrieved from: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiVw6X-2dH4AhXcgFYBHYyXCDgQFnoECAsQAQ&url=https%3A%2F%2Fvtechworks.lib.vt.edu%2Fhandle%2F10919%2F5534&usg=AOvVaw1yaFS4ns-ePwFxKYZE3whE&cshid=1656473052067078>
- Fox, E., Eaton, J., McMillan, G., Kipp, N., Weiss, L., Arce, E., and Guyer, S. (1996). *National Digital Library of Theses and Dissertations: A scalable and sustainable approach to unlock university resources*. D-Lib Magazine, September. Retrieved from: <http://www.dlib.org/dlib/september96/theses/09fox.html>
- Pez, A. (2020, 12 May). *What Browsers does PDF.js Support*. Retrieved from: <https://pdfjs.express/blog/what-browsers-does-pdf-js-support>
- Parfeni, L. (2012, 30 April). *PDF.JS and Download Manager Panel Pushed to Firefox 15*. Retrieved from: <https://news.softpedia.com/news/PDF-JS-and-Download-Manager-Panel-Pushed-to-Firefox-15-267154.shtml>
- Gilles, A. (2019). Abstract of Online Thesis Archiving System for University of Makati. Retrieved from: <https://idoc.pub/documents/abstract-of-online-thesis-archiving-system-for-university-of-makati-w11pk7mj51lj>
- Alpasan, B. (2022). Theses and Dissertations Abstract E-Archiving System with SMS Support. Retrieved June 29, 2022, from: <http://ijmra.in/v5i1/3.php>

- Alano, B., Pesimo, J., Quirequire, L., and Yalung, D. (2018, March 16). *Thesis Management System*. Polytechnic University of the Philippines, Sta. Mesa, Manila. Retrieved from: [https://www.academia.edu/36181799/Thesis\\_Management\\_System](https://www.academia.edu/36181799/Thesis_Management_System)
- Xiaoping, F., & Yan, Z. (1970, January 01). [PDF] *Design and Implementation of Graduation Thesis Management System: Semantic Scholar*. Retrieved from: <https://www.semanticscholar.org/paper/Design-and-Implementation-of-Graduation-Thesis-Xiaoping-Fanqi/e6fb06af44282bb441ca59cc32c84cda932c1a65>
- Montero, C. (2021, 13 December). *Online Thesis Archiving System using PHP/OOP with Free Source Code*. Retrieved from: <https://www.sourcecodester.com/php/15083/online-thesis-archiving-system-using-phpoop-free-source-code.html>
- Villanueva, J. (2018, 25 January). *Thesis Online Archiving System Using PHP*. Retrieved from: <https://itsourcecode.com/free-projects/php-project/thesis-online-archiving-system-using-php/>
- Database Management System (DBMS)*. (2020, 18 August). Techopedia. Retrieved from: <https://www.techopedia.com/definition/24361/database-management-systems-dbms>
- Smith, C. (2020, 31 March). *PDF.js: the 2020 Review*. Retrieved from: <https://developers.foxit.com/pdf/pdf-js-2020-review/>
- Mission, Goals, and History*. (n.d.). NDLTD Org. Retrieved from: <https://ndltd.org/mission-goals-and-history/>
- Steps in Submitting ETDS*. (n.d.). Digital Archives @ UP Diliman. Retrieved from: <https://digitalarchives.upd.edu.ph/steps>

## Appendix A

### SAMPLE EVALUATION INSTRUMENT

**Dear Respondents:**

We are the students of Bachelor of Engineering Technology in Computer Engineering Technology humbly asking for your participation in evaluating our project entitled "The Development of Thesis Archive Management System at Technological University of the Philippines - Cavite".

Your cooperation will be highly appreciated. Thank you very much.

Numerical Rating Range	Descriptive Rating
5	Excellent/Highly Acceptable
4	Very Good/Very Acceptable
3	Good/Acceptable
2	Fair/Fairly Acceptable
1	Poor/Not Acceptable

	Description	5	4	3	2	1
<b>A. Performance Efficiency</b>						
1. Resource Utilization	Degree to which the amounts and types of resources used by a product or system, when performing its functions, meet requirements.					
2. Time Behavior	Degree to which the response and processing times and throughput rates of a product or system, when performing its functions,					
<b>B. Usability</b>						
3. Learnability	Degree to which a product or system can be used by specified users to achieve specific goals of learning to use the product or system with effectiveness, efficiency, freedom from risk and satisfaction in a specified context of use.					
4. Accessibility	Degree to which a product or system can be used by people with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use.					
5. Operability	Degree to which a product or system has attributes that make it easy to operate and control.					
<b>C. Security</b>						
6. Confidentiality	Degree to which a product or system ensures that data are accessible only to those authorized to have access.					
7. Integrity	Degree to which a system, product or component prevents unauthorized access to, or modification of, computer programs or data.					
8. Authenticity	Degree to which the identity of a subject or resource can be proved to be the one claimed.					
<b>D. Maintainability</b>						
9. Modularity	Degree to which a system or computer program is composed of discrete components such that a change to one component has minimal impact on other components.					
10. Testability	Degree of effectiveness and efficiency with which test criteria can be established for a system, product or component and tests can be performed to determine whether those criteria have been met.					

**Comment and Suggestions:**

---



---

Signature

## Appendix B

## GANNT CHART

## Appendix C

### CORRESPONDENCE

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	<b>PANEL CONFORME</b>	Page 1/1

Date: January 9, 2023

**Prof. Jay Victor G. Gumboc,  
TUP-CAVITE**

Dear Sir:

You are hereby chosen as adviser of Areglado, Crisanto Julius (BET-COET), Dela Cruz, Ryan Angelo (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES- CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor G. Gumboc**  
 Department Head

**Conforme:**

  
**Prof. Jay Victor G. Gumboc**  
 Panel Member

\_\_\_\_\_  
 Date

**TUPC-F-OAA-DIT-005 ØØ (1.23.18)**

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: January 9, 2023

**Ms. Ma. Patria Juliet D. Escalona,  
TUP-CAVITE**

Dear Ma'am:

You are hereby chosen as adviser of Areglado, Crisanto Julius (BET-COET), Dela Cruz, Ryan Angelo (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES- CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor G. Gumboc**  
 Department Head

Conforme:

  
**Ms. Ma. Patria Juliet D. Escalona**  
 Panel Member

Date

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: January 9, 2023

**Ms. Beverly M. De Vega,  
TUP-CAVITE**

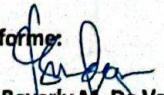
Dear Ma'am:

You are hereby chosen as adviser of Areglado, Crisanto Julius (BET-COET), Dela Cruz, Ryan Angelo (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES- CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

*J. Gumboc*  
**Prof. Jay Victor G. Gumboc**  
 Department Head

Conforme:  
  
**Ms. Beverly M. De Vega**  
 Panel Member  
1/09/23  
 Date

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: January 9, 2023

**Engr. Neil Jayson Narciso,  
TUP-CAVITE**

Dear Ma'am:

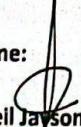
You are hereby chosen as adviser of Areglado, Crisanto Julius (BET-COET), Dela Cruz, Ryan Angelo (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES- CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor G. Gumboc**  
 Department Head

Conforme:

  
**Engr. Neil Jayson Narciso**  
 Panel Member

\_\_\_\_\_  
 Date

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: June 30, 2022

**Prof. Beverly De Vega,  
TUP-CAVITE**

Dear Ma'am:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "**THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE**" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

**Conforme:**

  
**Prof. Beverly De Vega**  
 Panel Member

**June 30, 2022**  
 Date

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	<b>PANEL CONFORME</b>	Page 1/1

Date: June 30, 2022

**Mr. John Paulo Diaz,**  
TUP-CAVITE

Dear Sir:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

**Conforme:**

  
**Mr. John Paulo Diaz**  
 Panel Member

**June 30, 2022**  
 Date

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmarinas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: June 30, 2022

**Prof. Jay Victor Gumboc,  
TUP-CAVITE**

Dear Sir:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

**Conforme:**

  
**Prof. Jay Victor Gumboc**  
 Panel Member

**June 30, 2022**  
 Date

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmarinas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	<b>PANEL CONFORME</b>	Page 1/1

Date: June 30, 2022

**Prof. Ma. Patria Juliet Escalona,  
TUP-CAVITE**

Dear Ma'am:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

Conforme:

  
**Prof. Ma. Patria Juliet Escalona**  
 Panel Member

**June 30, 2022**  
 Date

	<b>TECHNICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmarinas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: June 30, 2022

**Engr. Neil Jayson Narciso,  
TUP-CAVITE**

Dear Sir:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

**Conforme:**

  
**Engr. Neil Jayson Narciso**  
 Panel Member

**June 30, 2022**  
 Date

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmarinas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: May 12, 2022

**Prof. Beverly De Vega,  
TUP-CAVITE**

Dear Ma'am:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

Conforme:

  
**Prof. Beverly De Vega**  
 Panel Member

**May 12, 2022**  
 Date

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: May 12, 2022

**Mr. John Paulo Diaz,  
TUP-CAVITE**

Dear Sir:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

**Conforme:**

  
**Mr. John Paulo Diaz**  
 Panel Member

**May 12, 2022**  
 Date

TUPC-F-OAA-DIT-005 ØØ (1.23.18)

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: May 12, 2022

**Prof. Jay Victor Gumboc,  
TUP-CAVITE**

Dear Sir:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

Conforme:

  
**Prof. Jay Victor Gumboc**  
 Panel Member

**May 12, 2022**  
 Date

TUPC-F-OAA-DIT-005 ØØ (1.23.18)

	<b>TECHNICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: May 12, 2022

**Prof. Ma. Patria Juliet Escalona,  
TUP-CAVITE**

Dear Ma'am:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

*Jay Gumboc*  
**Prof. Jay Victor Gumboc**  
 Department Head

Conforme:

*(Signature)*  
**Prof. Ma. Patria Juliet Escalona**  
 Panel Member

**May 12, 2022**  
 Date

TUPC-F-OAA-DIT-005 ØØ (1.23.18)

	<b>TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES CAVITE CAMPUS</b> Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines Telefax: (046) 416-4920 Email: cavite@tup.edu.ph   Website: www.tup.edu.ph	
DIT	PANEL CONFORME	Page 1/1

Date: May 12, 2022

**Engr. Neil Jayson Narciso,  
TUP-CAVITE**

Dear Sir:

You are hereby chosen as panel member of Areglado, Crisanto Julius J. (BET-COET), Dela Cruz, Ryan Angelo B. (BET-COET), Mislos, Genesis M. (BET-COET), Tiagan, Dante Jr. M. (BET-COET), who proposed to work on a project entitled "THE DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES-CAVITE" as a partial fulfillment of the requirements for the degree, Bachelor of Engineering Technology.

It is hoped that through your expertise the project will be finished, and accompanying papers be submitted accordingly.

Very Truly Yours,

  
**Prof. Jay Victor Gumboc**  
 Department Head

Conforme:

  
**Engr. Neil Jayson Narciso**  
 Panel Member

**May 12, 2022**  
 Date

TUPC-F-OAA-DIT-005 ØØ (1.23.18)

## Appendix D

### PROFILE OF RESPONDENTS

<b>Respondent s No.</b>	<b>Name</b>	<b>Company / Institution</b>	<b>Position / Designation</b>
1	Respondent 1	Course 1	Student
2	Respondent 2	Course 2	Student
3	Respondent 3	Course 2	Student
4	Respondent 4	Course 1	Student
5	Respondent 5	Office 1	Staff
6	Respondent 6	Office 2	Head
7	Respondent 7	Office 2	Staff
8	Respondent 8	Course 1	Student
9	Respondent 9	Course 1	Student
10	Respondent 10	Course 1	Student
11	Respondent 11	Office 3	Staff
12	Respondent 12	Course 3	Student
13	Respondent 13	Course 3	Student
14	Respondent 14	Course 3	Student
15	Respondent 15	Course 3	Student
16	Respondent 16	Course 2	Student
17	Respondent 17	Course 2	Student
18	Respondent 18	Course 2	Student
19	Respondent 19	Course 4	Student
20	Respondent 20	Course 4	Student
21	Respondent 21	Course 4	Student
22	Respondent 22	Course 4	Student
23	Respondent 23	Course 1	Student
24	Respondent 24	Course 4	Student
25	Respondent 25	Course 4	Student
26	Respondent 26	Course 4	Student
27	Respondent 27	Course 5	Student
28	Respondent 28	Course 5	Student
29	Respondent 29	Course 5	Student
30	Respondent 30	Course 5	Student

**Appendix E**  
**TOTAL BUDGETARY REQUIREMENTS**

<b>Materials</b>	<b>Description</b>	<b>Price</b>	<b>Subscription</b>	<b>TOTAL</b>
Web Hosting	10gb of Disk Space, 2000 sec. CPU time per day, HTTPS certificate	P398.75	1 year	P 4,785
Domain	SSL Certificate, 1 year period, WHOIS Privacy	P50.50	1 year	P 50.50
<b>Total</b>				<b>P 4,835.50</b>

**Appendix F**

**TOOLS AND EQUIPMENTS USED**

**Tools**

<b>Tools</b>	<b>Specification</b>
1. Camscanner	<i>Version:</i> 6.24.0.2208250000
2. Sublime Text Editor	<i>Version:</i> Build 4143
3. PDFjs	<i>Version:</i> 2.0; It supports all HTML5 compliant browsers

## Appendix G

### PICTURES TAKEN DURING DEVELOPMENT, TESTING AND EVALUATION



This image was taken during the scanning of the thesis manuscripts by the researchers in the library. The researchers use a mobile application (CamScanner) in order to digitize the hardcopy of manuscripts and store it digitally in the web application for preservation of the thesis documents and for easy access of soft copies.



This image was also taken during the development of the project. It shows here that one of the researchers is testing the web application by trying to upload some of the thesis scanned by the other members to ensure that it would work properly when used by the users.

## Appendix H

### SUMMARY OF MEAN SCORE FROM THE EVALUATION

**Dear Respondents:**

We are the students of Bachelor of Engineering Technology in Computer Engineering Technology humbly asking for your participation in evaluating our project entitled “The Development of Thesis Archive Management System at Technological University of the Philippines - Cavite”.

**5 - Excellent / Highly Acceptable**

**2 - Fair / Fairly Acceptable**

**4 - Very Good / Very Acceptable**

**1 - Poor / Not Acceptable**

**3 - Good / Acceptable**

	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>Mean</b>
<b>A. Performance Efficiency</b>						
1. Resource Utilization -Degree to which the amounts and types of resources used by a product or system, when performing its functions,	26	3	1	0	0	<b>4.8</b>
2. Time Behavior -Degree to which the response and processing times and throughput rates of a product or system, when performing its functions, meet requirements.	25	2	3	0	0	<b>4.7</b>
<b>B. Usability</b>						
1. Learnability -Degree to which a product or system can be used by specified users to achieve specific goals of learning to	27	2	1	0	0	<b>4.9</b>
2. Accessibility -Degree to which a product or system can be used by people with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use.	25	4	1	0	0	<b>4.8</b>
3. Operability -Degree to which a product or system has attributes that make it easy to operate and control.	24	6	0	0	0	<b>4.8</b>

<b>C. Security</b>						
1. Confidentiality -Degree to which a product or system ensures that data are accessible only to those authorized to have access.	26	4	0	0	0	<b>4.9</b>
2. Integrity -Degree to which a system, product or component prevents unauthorized access to, or modification of, computer programs or data.	25	5	0	0	0	<b>4.8</b>
3. Authenticity – Degree to which the identity of a subject or a resource can be proved to be the one claimed.	25	5	0	0	0	<b>4.8</b>
<b>D. Maintainability</b>						
1. Modularity -Degree to which a system or computer program is composed of discrete components such that a change to one component has minimal impact on other components.)	26	2	1	1	0	<b>4.8</b>
2. Testability -Degree of effectiveness and efficiency with which test criteria can be established for a system, product or component and tests can be performed to determine whether those criteria have been met.	24	3	2	1	0	<b>4.7</b>

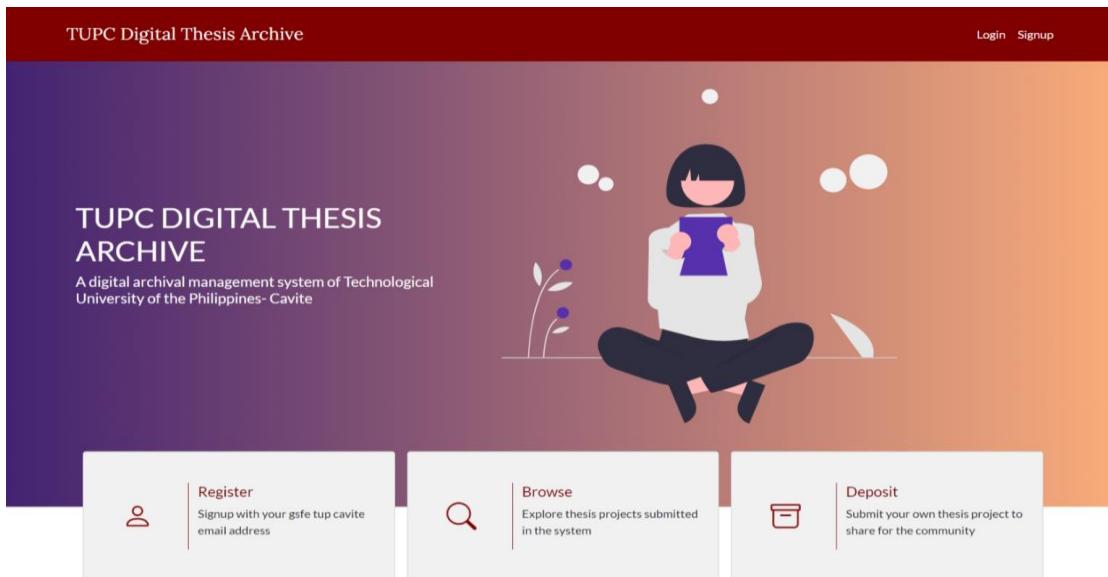
**Overall Mean    4.79**

## Appendix I

### USER MANUAL

#### User Registration

**Step 1.** Navigate to the website and click signup.

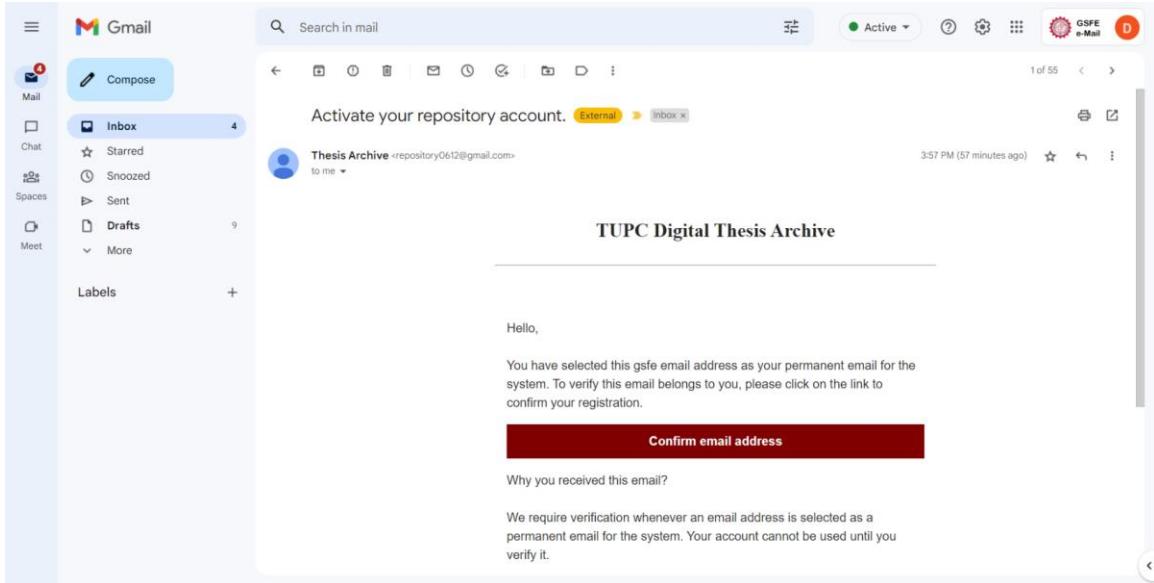


**Step 2.** Create an account with a gsfe email address.

**Create Account**

Already have an account? Login [here](#).

Username	<input style="width: 100%;" type="text"/>
First name	<input style="width: 100%;" type="text"/>
Last name	<input style="width: 100%;" type="text"/>
Email	<input style="width: 100%;" type="text"/>
Use only valid TUP Cavite gsfe account	
Password	
<input style="width: 100%;" type="password"/>	
<ul style="list-style-type: none"> <li>Your password can't be too similar to your other personal information.</li> <li>Your password must contain at least 8 characters.</li> <li>Your password can't be a commonly used password.</li> <li>Your password can't be entirely numeric.</li> </ul>	
Password confirmation	
<input style="width: 100%;" type="password"/>	
Enter the same password as before, for verification.	
<b><a href="#">Signup »</a></b>	

**Step 3.** Verify and confirm gsfe email address. Then login.

## Login and Browse Uploaded Theses

### Step 1. Login to the website.

**ABOUT**  
A Thesis Archive Management System for Technological University of The Philippines- Cavite for the digital preservation and management of thesis documents of the university.

**GET IN TOUCH**  
C.Q.T. Avenue Salawag, Dasmariñas City, Cavite  
repository0612@gmail.com  
Mon - Fri, 8AM - 7PM

**QUICK LINKS**  
[Login](#)  
[Signup](#)

All rights reserved @ 2023

### Step 2. Navigate to the main repository page.

**Collection by Disciplines**  
Thesis paper collection submitted by the students of different major courses

**Bachelor of Engineering Technology (165)**  
Thesis papers under the Bachelor of Engineering Technology

**Recent Submissions**  
Recently submitted thesis projects in the system

- [Development of IOT and SMS Based Electrical Appliances Control System](#)  
By [Jherome Alcantara](#) [Chrisign Dalandon](#) [Ronnel Norte](#)
- [Innovation of Filtration and Ventilation System Power Plant Technology \(PPT\) Welding Shop](#)  
By [Franz Kennedy Vasquez](#) [Charles Kim Medrano](#) [Annalee Boria](#) [Joab Titular](#)
- [Motorcycle Safety Side Stand: An Innovation](#)  
By [Gi Garsie Genese](#) [Edward Joseph Legado](#) [Edwin Malumay](#)
- [Innovation of Leak Detector for LPG with Automatic Shut-Off Breaker](#)  
By [Rosen Joshua Allian](#) [Erlyn Bueno](#) [Arcelyn Jane Hermoso](#) [Lawrence Romero](#)
- [Innovation of Single Overhead Valve Tappet Lifter](#)  
By [John Rodgie Alarcon](#) [Joseph Frando](#) [Aldrien Garcia](#)

### Step 3. Browse theses by collections or search bar.

TUPC Digital Thesis Archive Home My Account ▾ Logout

[Home](#) > Search for '2022'

Search for across the entire repository... Search

Q Showing results for '2022'

---

**Innovation of Motorized Green Mussel Cleaning Machine on Horizontal Spindle Axis with Timer**

By Lance John Abuloc, Arem Aeuirie, Tony Boy Barroso, Mark Joshua Chan Thesis Advisor Isagani Maliksi Published in January 2022 0 views Timer Cleaning Machine

"Motorized Green Mussel Cleaning Machine" is a machine that can remove the barnacles attached to green mussels. The main objective of the machine is to remove the barnacles attached to the green mussels. The features of the machine are inspired by the vertical washing machine. The rotation mechanism of the machine causes the green mussels to collide with each other. The water supplied during the operation is continuously running and being drained after the process. It measures 3.75 feet in height and a width of 2.75 feet. It is powered by a 2 Hp Electric Motor and a 1.5 Hp...

---

**Development of Helmet Rack with QR Code Scanner and Security Camera in TUP-CAVITE**

By Hennelyn Cajando, Hazel Ann Kato, Jerico Plaza, Marvin Timbal Thesis Advisor Jonathan Mark Ricerra Published in January 2022 0 views QR code Security Camera tucp Scanner

For safety reasons, motorcyclists and even bicyclists are now required to wear helmets. Students of the Technological University of the Philippines - Cavite Campus (TUP-C) commute to school by motorcycle or bicycle. The significance and usefulness of a helmet for safety considerations are emphasized in light of the aforementioned statements. The frequent loss of helmets in the region of TUP-C has been identified as a severe issue by the researchers, as it contributes to risky driving. It also raises the likelihood of accidents on public highways. The Helmet Rack with QR Codes and Security Camera was created by the researchers ...

---

**Development of Organic Waste Carbonizer such as Dried Leaves, Rice Hull, and Wood Chips for TUP-Cavite**

By Elmer James Cardenas, Enishi Yamashita, John Christian Cavaco, Shari Faith Reyes Thesis Advisor Marvin Adonis S. Naron Published in January 2022 0 views tupc Organic Waste Rice Hull Dried Leaves Wood Chips

The study, Development of Organic Waste Carbonizer for the Technological University of the Philippines aims to create a tool for carbonizing light organic wastes such as rice husk, dried leaves, and wood chips. The purpose of this project is to make use of the wastes to be repurposed into soil conditioner and fertilizer by letting the organic wastes go through the carbonization process. The significance of this project is high since there are a lot of wastes building up throughout the years of humanity's existence and repurposing those said wastes helps to reduce it. The method of testing used in ...

### Step 4. Select a thesis by clicking its title.

TUPC Digital Thesis Archive Home My Account ▾ Logout

Q Back to previous page

**Automatic Strainer Removal Of Waste Drainage System**

By Karl Max Kilayko, Bart Dericson Laveña Thesis Advisor Stephen V. Villaruz Bachelor of Engineering Technology Published in January 2023 47 views

drainage waste automatic system View PDF File

**Abstract**

Improper waste disposal has always been a very big problem, not only in the Philippines but anywhere in the world. Due to this practice, people's lives become at stake and are prone to experiencing calamities. One of the most common is flooding. Flooding occurs in different bodies of water due to improper waste disposal. Wastes are being carried in waterways, piling up, polluting the water, and causing a blockage in the long run. As this happens, when the rain comes, flooding occurs and puts people's lives in jeopardy. In this project entitled, "Automatic Strainer Removal of Waste for Drainage System", an automatic waste removing machine is installed in a drainage system. It is timebased so that it will not have to consume power throughout the day. It is composed of a motor, a bucket for collecting waste materials, and a bin to where the waste materials are held. This project is designed in a very simple manner so that any user can easily get into it. According to findings, the results of the tests showed that this innovation can indeed collect waste materials from waterways and has exceeded the limitations of the present relative studies.

---

**Recommended Citation**

APA  
Copy citation  
Kilayko, K. and Laveña, B. (2023). Automatic Strainer Removal Of Waste Drainage System. Retrieved from technorepository.pythonanywhere.com/repository/view/automatic-strainer-removal-of-waste-drainage-system2023/

MLA  
Copy citation  
Kilayko, Karl Max, and Bart Dericson Laveña. "Automatic Strainer Removal Of Waste Drainage System." TUPC Digital Thesis Archive, 2023. Web.

Chicago  
Copy citation  
Karl Max Kilayko and Bart Dericson Laveña. 2023. "Automatic Strainer Removal Of Waste Drainage System." TUPC Digital Thesis Archive. January 2023. technorepository.pythonanywhere.com/repository/view/automatic-strainer-removal-of-waste-drainage-system2023/

**ABOUT**

A Thesis Archive Management System for Technological University of The Philippines- Cavite for the digital preservation and management of thesis documents of the university.

**GET IN TOUCH**

C.Q.T. Avenue Salawag, Dasmarias City, Cavite  
repository0612@gmail.com  
Mon - Fri, 8AM - 7PM

**QUICK LINKS**

[Home](#)  
[Account](#)  
[Logout](#)

All rights reserved @ 2023

**Step 5.** To access its pdf file with no authorized access yet, click ‘View PDF file’.

[Back to previous page](#)

## Automatic Strainer Removal Of Waste Drainage System

By Karl Max Kilayko Bart Dericson Laveña Thesis Advisor Stephen V. Villaruz

drainage waste automatic system [View PDF File](#)

**Step 6.** A request form will be displayed. Fill up the form then submit.

TUPC Digital Thesis Archive

Home My Account Logout

Hello, Dante!

It seems like you are trying to access the document file of the thesis entitled “Automatic Strainer Removal Of Waste Drainage System”, which unfortunately you are not yet authorized to access with.

To be able to access this file, you should submit a request first and wait for the confirmation. Below is the request form for accessing the document file.

### File Access Request Form

I am Dante Tiagan would like to request an access to the document file of the thesis entitled “Automatic Strainer Removal Of Waste Drainage System”. Below is my indicated reason for accessing this file.

Reason\*

Indicate reason for access

[Submit »](#)

#### ABOUT

A Thesis Archive Management System for Technological University of The Philippines- Cavite for the digital preservation and management of thesis documents of the university.

#### GET IN TOUCH

C.Q.T. Avenue Salawag, Dasmariñas City, Cavite  
repository0612@gmail.com  
Mon - Fri, 8AM - 7PM

#### QUICK LINKS

Home  
Account  
Logout

All rights reserved @ 2023

**Step 7.** Wait for the approval of the request.

**Step 8.** Go to ‘My Access’ page. Then, view pending and approved pdf access requests.

The screenshot shows the 'TUPC Digital Thesis Archive' website. At the top right, there is a dropdown menu with options: Home, My Account (with a dropdown arrow), Logout, Change Password, My Profile, My Repository, My Access Requests, and Submit Manuscript. The main content area has two sections: 'Approved PDF Requests' and 'Pending PDF Requests'. Under 'Approved PDF Requests', it says 'No approved requests yet'. Under 'Pending PDF Requests', it lists a thesis titled 'Automatic Strainer Removal Of Waste Drainage System' by Karl Max Kilayko Bart Dericson Laveña, with a link to 'View thesis ». The footer contains sections for 'ABOUT', 'GET IN TOUCH', and 'QUICK LINKS', along with copyright information: 'All rights reserved @ 2023'.

## Submit Manuscript and Manage Personal Repository

**Step 1.** To submit a manuscript, click ‘Submit Manuscript’. Then, a form will be displayed.

The screenshot shows the 'TUPC Digital Thesis Archive' website. At the top right, there is a dropdown menu with options: Home, My Account (with a dropdown arrow), Logout, Change Password, My Profile, My Repository, My Access Requests, and Submit Manuscript. The main content area features a search bar with the placeholder 'Search for across the entire repository...'. Below the search bar is a form field with a checkbox and the text 'Please check this if you agree to the terms above'.

**Step 2.** Read and agree to the consent and agreement.

The screenshot shows the 'TUPC Digital Thesis Archive' website. The form field from the previous screenshot now has a checked checkbox, indicating that the user has agreed to the terms and conditions.

**Step 3.** Fill up the form, then submit.

The screenshot shows a submission form divided into two main sections: 'Describe the thesis' and 'Document File'. The 'Describe the thesis' section contains fields for Title, Adviser, Published year, Published month, Course, and Keywords. It also includes a text area for Abstract. The 'Document File' section has a file input field for PDF files and a 'Preview PDF File' button. Below these, there's a 'Add Authors' section with fields for First Name and Last Name, and an 'Add Author' button. At the bottom right are 'Reset' and 'Submit' buttons.

**Step 4.** Click ‘My Repository’ to view uploaded theses with their corresponding status.

The screenshot shows the TUPC Digital Thesis Archive homepage. The top navigation bar includes links for Home, My Account (with a dropdown menu), and Logout. The dropdown menu for 'My Account' lists options: Change Password, My Profile, My Repository (which is highlighted with a red border), My Access Requests, and Submit Manuscript.

**Step 5.** To visit the link of the approved thesis, click the ‘access link’ action button.

To delete a pending/rejected thesis, click the ‘delete’ action button.

To resubmit a pending/rejected thesis, click the ‘resubmit’ action button.

## Update Profile and Password

**Step 1.** Click ‘My Profile’ to update the account's information.

**Step 2.** Update profile information by clicking the update button.

TUPC Digital Thesis Archive

Home My Account ▾ Logout

Edit Profile

Edit your profile account details

Username	ryan_123
First name	Ryan Angelo
Last name	Dela Cruz
Email	ryanangelo.delacruz@gsfe.tupcavite.edu.ph
Date joined	2022-12-17 23:22:01

Reset Update

**Step 3.** To update the password, click ‘Change Password’.

**Step 4.** Update the password by confirming the old and new one.

TUPC Digital Thesis Archive

Home My Account ▾ Logout

Change Password

You can change your password here

Old password	
New password	
<ul style="list-style-type: none"> <li>• Your password can't be too similar to your other personal information.</li> <li>• Your password must contain at least 8 characters.</li> <li>• Your password can't be a commonly used password.</li> <li>• Your password can't be entirely numeric.</li> </ul>	
New password confirmation	

Reset Update

## Admin Side

**Step 1.** Login to the Admin Account.

TUPC Digital Thesis Archive

Login Account

New to Thesis Archive? Create an account [here](#).

Username

Password

Forgot password?

**Signin »**

**ABOUT**  
A Thesis Archive Management System for Technological University Of The Philippines- Cavite for the digital preservation and management of thesis documents of the university.

**GET IN TOUCH**  
C.Q.T. Avenue Salawag, Dasmariñas City, Cavite  
repository0612@gmail.com  
Mon - Fri, 8AM - 7PM

**QUICK LINKS**  
[Login](#)  
[Signup](#)

All rights reserved @ 2023

**Step 2.** Go to the dashboard page.

The Thesis Archive

Dashboard Repository ▾ Community ▾ Department ▾ My Account ▾

**Dashboard**  
Welcome back Admin Account!

0  
Today's Projects

23  
Approved Projects

3  
Approved PDF Access Requests

■ Thesis Projects

Category	Value
Pending Projects	0.0
Rejected Projects	-0.5

■ Departments

2

■ Courses

1

■ Approved Requests   ■ Pending Requests

## Upload Manuscript and Manage Approved Theses

**Step 1.** To upload a manuscript, click ‘Add Manuscript’ from the ‘Repository’ in the navbar.

**Step 2.** Fill up the form, then click submit.

The screenshot displays the 'Upload Manuscript' interface of the TUPC Digital Thesis Archive. At the top, a dark red header bar contains the site's name 'TUPC Digital Thesis Archive' on the left and navigation links 'Dashboard', 'Repository', 'Community', 'Department', and 'My Account' on the right. The main content area is titled 'Upload Manuscript' and includes a sub-section 'Submission Form' with instructions: 'Please fill the required information below'. The form is divided into two main sections: 'Describe the thesis' and 'Document File'. The 'Describe the thesis' section contains fields for 'Title', 'Adviser', 'Published year' (set to 2023), 'Published month' (set to January), 'Course' (with a placeholder '-----'), and 'Keywords'. It also includes a note about comma-separated tags and a large text area for the 'Abstract'. The 'Document File' section has a 'Pdf' field with a 'Choose File' button and a message indicating 'No file chosen'. A red 'Preview PDF File' button is located below this field. Below these sections is another form titled 'Add Authors' with fields for 'First Name' and 'Last Name', and a 'Delete?' checkbox. A red 'Add Author' button is at the bottom of this section. At the very bottom of the page, there are 'Reset' and 'Upload' buttons.

**Step 3.** Then click the ‘Manage Approved Manuscripts’ and view the list of approved manuscripts in the system.

TUPC Digital Thesis Archive

Approved Manuscripts

This is the management repository for approved thesis manuscripts in the system



**Graph Data**

Showing graph for the number of approved manuscripts under registered programs



**Approved Manuscripts**

Showing results for the approved manuscripts

Show									Export to CSV	Search:	
10	v	entries									
Title	Author	Course	Published Date	Uploaded by	Date Uploaded	No. of Views	Actions				
A Study on Concrete Roof Tile with Granulated Glass	Advircula, Joseph Cuenca, Alma Riz Braga, Mabel Dizon, Crystal Sarmiento, Joan	Bachelor of Engineering Technology	January 2023	Dante Tiagan	Jan. 8, 2023	6	<a href="#">Edit</a>	<a href="#">More</a>			
An Experimental Study of Using Waste Fiber Cement Board as Partial Replacement of Fine Aggregates for 4" Non-Load Bearing Concrete Hollow Block	Begueras, John Oscar Orlain, Genivie Porcadilla, Christine Mae Tayag, Asherine Kristal	Bachelor of Engineering Technology	January 2023	Administration Accountt	Dec. 18, 2022	3	<a href="#">Edit</a>	<a href="#">More</a>			
Automatic Strainer Removal Of Waste Drainage System	Kilayko, Karl Max Laveria, Bart Dericson	Bachelor of Engineering Technology	January 2023	Administration Accountt	Dec. 20, 2022	44	<a href="#">Edit</a>	<a href="#">More</a>			

**Step 4.** To update the manuscript, select a thesis and click the ‘edit’ action button from the table.

Title	Author	Course	Published Date	Uploaded by	Date Uploaded	No. of Views	Actions
A Study on Concrete Roof Tile with Granulated Glass	Advincula, Joseph Cuenca, Alma Riz Braga, Mabel Dizon, Crystal Sarmiento, Joan	Bachelor of Engineering Technology	January 2023	Dante Tiagan	Jan. 8, 2023	6	<button>Edit</button> <button>More</button>

**Step 5.** Update the information, then submit.

TUPC Digital Thesis Archive
 Dashboard Repository Community Department My Account

**Update Manuscript**  
Thesis manuscripts uploaded by the admin account would automatically be accessible to the system.

**Submission Form**  
Please fill the required information below

<b>Describe the thesis</b> <small>Define the thesis project</small> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>Title</small>  <input type="text" value="A Study on Concrete Roof Tile with Granulated Glass"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>Adviser</small>  <input type="text" value="Rebecca R. Dela Cuesta"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>Published year</small>  <input type="text" value="2023"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>Published month</small>  <input type="text" value="January"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>Course</small>  <input type="text" value="Bachelor of Engineering Technology"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>Keywords</small>  <input type="text" value="Concrete, Glass"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>A comma-separated list of tags.</small>  <small>Abstract</small>  <div style="border: 1px solid #ccc; padding: 5px; height: 100px; overflow: auto;"> <p>The researchers develop a new variety of concrete roof tile, by combining granulated glass from recycled bottles, into a concrete mixture. The group aimed to produce a design of concrete in the form of roof tile having varied amount of glass with the goal of extending the use of glass and to promote recycling of garbage in the field of building construction. By obtaining procedural operations the group obtains mix designs having varied amount of glass and specimen are subjected to physical test such as density test, moisture content and water absorption test and mechanical test such as modulus of rupture. At the end of the tests and analysis, the researchers concluded that it is possible to combine glass to concrete to form a new variety of material use for construction industry.</p> </div> </div>	<b>Document File</b> <small>Upload the softcopy of the thesis</small> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>Pdf</small>  <small>Currently: pdf/2008 - A STUDY ON CONCRETE ROOF TILE WITH GRANULATED GLAS 1 1 wLsFOvZ.pdf</small> <input type="checkbox"/> Clear         </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <small>Change:</small> <input type="button" value="Choose File"/> No file chosen         </div> <div style="text-align: center; margin-top: 10px;"><a href="#" style="color: red; text-decoration: none;">Preview PDF File</a></div>
--	---

**Add Authors**  
Enter the authors of the thesis

First Name	Last Name	Delete?
Joseph	Advincula	<input type="checkbox"/>
Alma Riz	Cuenca	<input type="checkbox"/>
Mabel	Braga	<input type="checkbox"/>
Crystal	Dizon	<input type="checkbox"/>
Joan	Sarmiento	<input type="checkbox"/>

[Add Author](#)

Reset
Update

**Step 6.** To view the further detail of the manuscript, select a thesis and click the ‘more’ action button from the table.

Title	Author	Course	Published Date	Uploaded by	Date Uploaded	No. of Views	Actions
A Study on Concrete Roof Tile with Granulated Glass	Advincula, Joseph Cuenna, Alma Riz Braga, Mabel Dizon, Crystal Sarmiento, Joan	Bachelor of Engineering Technology	January 2023	Dante Tiagan	Jan. 8, 2023	6	<a href="#">Edit</a> <a href="#">More</a>

**Step 7.** Read the details of the uploaded manuscript.

TUPC Digital Thesis Archive
Dashboard
Repository
Community
Department
My Account

[Back to previous page](#)
An Experimental Study Of Using Waste Fiber Cement Board As Partial Replacement Of Fine Aggregates For 4" Non-Load Bearing Concrete Hollow Block
Approved

By John Oscar Begueras
Adviser: Ramon Christopher Escalona
Course: Bachelor of Engineering Technology
Published Date: Feb. 28, 2022

Date Uploaded: Dec. 18, 2022
Uploader: Admin Account
Views: 3
Keywords: waste Fine Aggregates CHB FCB Replacement
[View PDF File](#)

Abstract ▾

The study was conducted to lessen the consumption of sand in construction like concrete hollow blocks. Also, to find some alternative ways to use waste fiber cement boards. The researchers crushed the FCB into fine aggregates as a partial replacement for sand in the mixture to make non-load bearing CHB. In this research study, the crushed FCB was used as a partial replacement with 15%, 25%, and 35% of sand to determine if it can help to increase the fire resistance of the specimens and if the specimens' compressive strength will pass the desire compressive strength for non-load bearing hollow blocks. The study was an experimental quantitative study where the researchers showed the results with numerical data gathered after the specimens underwent specific gravity, water absorption test, compression test, and fire resistance test. The specimens that had crushed FCB replacement were lighter than the specimens with the controlled mix. The water-cement ratio used in this study increased when the amount of waste FCB percentage replacement increased. The water absorption of CHB with FCB was greater than the controlled mix. However, its water absorption does not affect the compressive strength of the CHB. The compressive strength increased when it had FCB as a replacement. Fire resistance test, the heat temperature that can be felt on the face shell of the specimens decreased as the percentage of the crushed waste FCB increased.

Recommended Citations

APA  
Begueras, J. (2022). An Experimental Study Of Using Waste Fiber Cement Board As Partial Replacement Of Fine Aggregates For 4" Non-Load Bearing Concrete Hollow Block.

MLA  
John Oscar Begueras. "An Experimental Study Of Using Waste Fiber Cement Board As Partial Replacement Of Fine Aggregates For 4" Non-Load Bearing Concrete Hollow Block." TUPC Digital Thesis Archive, 2022. Web.

Chicago  
Begueras, John Oscar. 2022. "An Experimental Study Of Using Waste Fiber Cement Board As Partial Replacement Of Fine Aggregates For 4" Non-Load Bearing Concrete Hollow Block." TUPC Digital Thesis Archive.

## Manage Pending Manuscripts

**Step 1.** Click the ‘Pending Manuscripts’.

The screenshot shows the TUPC Digital Thesis Archive dashboard. At the top, there is a red header bar with the text "TUPC Digital Thesis Archive". Below the header, there is a dark blue sidebar with the word "Dashboard" at the bottom. Above the sidebar, there is a navigation menu with several items: "Dashboard", "Repository", "Community", "Department", and "My Account". A dropdown menu is open over the "Repository" item, showing four options: "Upload Manuscript", "Approved Manuscripts", "Pending Manuscripts" (which has a small red box with the number "0" next to it), and "Rejected Manuscripts". In the background, there is a small illustration of a person sitting at a desk with a lamp.

**Step 2.** Select from the pending table to evaluate by clicking the ‘Evaluate’ action button from the table.

The screenshot shows the "Pending Projects" page. At the top, there is a red header bar with the text "TUPC Digital Thesis Archive". Below the header, there is a dark blue section titled "Pending Projects" with the sub-instruction "This is the management repository for pending thesis manuscripts in the system". To the right of the text is a small illustration of a person sitting at a desk with a lamp. Below this, there is a section titled "Graph Data" with the sub-instruction "Showing graph for the number of pending manuscripts under registered programs". A large, solid dark blue bar chart is displayed, representing the count of pending manuscripts. Below the chart, there is a note: "Bachelor of Engineering Technology". At the bottom, there is a table titled "Pending Manuscripts" with the sub-instruction "Showing results for the pending manuscripts". The table includes columns for "Title", "Author", "Course", "Published Date", "Uploaded by", "Date Uploaded", and "Actions". One entry is listed: "A Study of Particle Board" by "Corpuz, Jinky Mae" (Course: Bachelor of Engineering Technology, Published Date: December 2023, Uploaded by: Dante Tiagan, Date Uploaded: Jan. 16, 2023). An "Evaluate" button is located in the "Actions" column for this entry. There are also "Show" and "Search" filters at the top of the table, and pagination controls at the bottom.

**Step 3.** Compare entered information of the student with the pdf file side by side.

The screenshot shows a comparison between a thesis project summary on the left and its corresponding PDF file on the right. The summary includes the title 'Evaluate Project', author 'Jinky Mae Corpuz', advisor 'Roberto Tomas', course 'Bachelor of Engineering Technology', published date 'December 2023', and submitted date 'Jan. 16, 2023'. It also lists keywords like 'binder' and 'rice hull ash'. The PDF file on the right is titled 'DEVELOPMENT OF ROKASHU MIXER AND MOLDING MACHINE' and is categorized as a 'Research Project'. It contains the names of the authors: AGANA, MARK GERALD G., ALZABON, EMERSON T., MARQUEZ, JEDA MAE D., TOPACIO, GEM HANNAH C., and a note about partial fulfillment of requirements for a Bachelor of Technology degree in August 2020.

**Step 4.** Decide whether to approve or not with reason. Then, confirm.

The screenshot shows an 'Evaluate' form. It has fields for 'Decision\*' (set to 'Approve') and 'Reason\*' (a large text area). At the bottom are 'Reset' and 'Confirm' buttons.

## Manage Rejected Manuscripts

**Step 1.** Click the ‘Rejected Manuscripts’.

The screenshot shows the TUPC Digital Thesis Archive dashboard. At the top, there is a dark red header bar with the text "TUPC Digital Thesis Archive". Below the header, there is a navigation bar with links: "Dashboard", "Repository", "Community", "Department", and "My Account". A dropdown menu is open over the "Repository" link, showing options: "Upload Manuscript", "Approved Manuscripts" (with a red notification badge showing "0"), "Pending Manuscripts" (with a red notification badge showing "0"), and "Rejected Manuscripts". The main content area below the header has a dark blue background with a small purple cartoon character icon. The word "Dashboard" is visible at the bottom left of this area.

**Step 2.** Select a manuscript from the rejected table by clicking the ‘more’ action button.

**Step 3.** Read the details of the rejected manuscript will be displayed.

## Manage PDF Access Requests

**Step 1.** Click the ‘Pdf Access Request’.

The screenshot shows the TUPC Digital Thesis Archive dashboard. At the top, there is a dark red header bar with the text "TUPC Digital Thesis Archive". Below the header, there is a navigation bar with links: "Dashboard", "Repository", "Community", "Department", and "My Account". A dropdown menu is open over the "My Account" link, showing options: "PDF Access Requests" (with a red notification badge showing "1") and "Registered Accounts". The main content area below the header has a dark blue background with a small purple cartoon character icon.

**Step 2.** From the pending table, select a pdf access request to evaluate.

Pending Access Requests					
Showing results for the pending access requests					
Note: You cannot evaluate pending requests from deactivated accounts					
Show 10▼ entries	Requestor	Email	Thesis	Date Requested	Actions
	Dante Tiagan	dante.tiagan@gsfe.tupcavite.edu.ph	Automatic Strainer Removal Of Waste Drainage System	Jan. 20, 2023, 5:37 p.m.	<button>Evaluate</button>

Showing 1 to 1 of 1 entries

Search:

Previous 1 Next

**Step 3.** The information of the student who requested and the pdf of the thesis requested are displayed side by side.

The screenshot shows the TUPC Digital Thesis Archive interface. At the top, there is a dark red header bar with the text "TUPC Digital Thesis Archive" on the left and navigation links "Dashboard", "Repository", "Community", "Department", and "My Account" on the right. Below the header, there is a large, stylized illustration of a person sitting at a desk with a lamp and a coffee cup. The main content area contains two cards. The first card, titled "Evaluate PDF Access Request", has a sub-section "Requestor's Information" which lists the requester's name (Dante Tiagan), email (dante.tiagan@gsfe.tupcavite.edu.ph), date requested (Jan. 20, 2023, 5:37 p.m.), and reason (For research purposes). It also includes a "View more" button. The second card is for the thesis "Automatic Strainer Removal Of Waste Drainage System", listing the author (Karl Max Kilayko Bart Dericson Laveña), adviser (Stephen V. Villaruz), course (Bachelor of Engineering Technology), published date (January 2023), views (47), PDF file (View PDF), submitted date (Dec. 20, 2022), submitted by (Administration Account), and keywords (drainage waste automatic system). Below these cards is another card titled "Abstract" which contains a detailed description of the project's purpose and function.

**Step 4.** Decide whether to approve or decline the request.

The screenshot shows a modal window titled "Evaluate". It contains a section labeled "Decision\*" with a dropdown menu. The menu has a single option, "Approve". At the bottom right of the modal are two buttons: "Reset" and "Confirm".

## Manage Registered Accounts

**Step 1.** Click ‘Registered Accounts’.

The screenshot shows the TUPC Digital Thesis Archive interface. At the top, there's a dark red header bar with the site name 'TUPC Digital Thesis Archive'. Below it is a white navigation bar with links: 'Dashboard', 'Repository', 'Community', 'Department', 'My Account', and a user icon. A small red box with the number '1' is positioned above the 'My Account' link. A dropdown menu is open from the user icon, showing options: 'PDF Access Requests' and 'Registered Accounts'. A purple circular arrow icon is located in the bottom right corner of the page area.

**Step 2.** Then select a registered account from the table by clicking the ‘more’ button to view further details.

Username	First Name	Last Name	Email Address	Date Joined	Actions
Admin_DigitalArchive	Administration	Accountt	adminexample@gmail.com	Jan. 1, 2023, 3:53 p.m.	<button>More</button>
dante	Dante	Tiagan	dante.tiagan@gsfe.tupcavite.edu.ph	Jan. 20, 2023, 3:57 p.m.	<button>More</button>
genesis047	Genesis	Mislos	genesis.mislos@gsfe.tupcavite.edu.ph	Jan. 20, 2023, 3:59 p.m.	<button>More</button>
jhay	CRISANTO JULIUS	AREGLADO	crisantojulius.areglado@gsfe.tupcavite.edu.ph	Jan. 20, 2023, 7:17 p.m.	<button>More</button>
ryan_123	Ryan Angelo	Dela Cruz	ryanangelo.delacruz@gsfe.tupcavite.edu.ph	Jan. 20, 2023, 10:18 a.m.	<button>More</button>

**Step 3.** Click the deactivate button to deactivate the account or reactivate button to reactivate the account.

The screenshot shows the 'Account's Information' page for a specific user. The title 'Account's Information' is at the top. Below it, there are several input fields with placeholder text: 'Name: Ryan Angelo Dela Cruz', 'Email: ryanangelo.delacruz@gsfe.tupcavite.edu.ph', 'Date Joined: Jan. 20, 2023, 10:18 a.m.', 'Activeness Status: Active', and 'Email Verification Status: Verified'. A note below states: 'Deactivating account means disallowing user to login and access the system anymore. However, the account itself, its uploaded manuscripts and pdf access requests would not be removed.' At the bottom right is a red button labeled 'Deactivate account'.

## Manage Department

**Step 1.** To view registered departments, click the ‘Manage Department’.



**Step 2.** Register a new department by filling up the form.

**Step 3.** Edit a department. Select a department from the table and click ‘update’.

## Manage Program

**Step 1.** To view registered programs click the ‘Manage Program’.



**Step 2.** Register a new program by filling up the form.

**Step 5.** Edit a program. select a program from the table and click ‘update’.

## Manage Personal Account

**Step 1.** To update the password, click the ‘Change Password’ from the ‘My Account’.



**Step 2.** To update the profile, click the ‘Edit Profile’ from the ‘My Account’.

**Step 3.** To update the password, click the ‘Change Password’ from the ‘My Account’.

## Appendix J

### CERTIFICATE OF SIMILARITY INDEX USING TURNITIN



REPUBLIC OF THE PHILIPPINES  
**TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES**  
**CAVITE CAMPUS**

Carlos Q. Trinidad Avenue, Salawag, Dasmariñas City, Cavite, Philippines  
 Telefax: (046) 416-4920  
 Email: cavite@tup.edu.ph | Website: [www.tup.edu.ph](http://www.tup.edu.ph)



Management System  
 ISO 9001:2015  
 www.tuv.com  
 ID 910865218



#### OFFICE OF RESEARCH SERVICES

#### CERTIFICATE OF PLAGIARISM CHECK

This is to certify that the research entitled, **"DEVELOPMENT OF THESIS ARCHIVE MANAGEMENT SYSTEM IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES- CAVITE"**, of **Crisanto Julius J. Areglado, Ryan Angelo B. Dela Cruz, Genesis M. Mislos, and Dante M. Tiagan Jr.** advised by **Mr. John Paulo M. Diaz** was submitted to this office on **February 7, 2023**.

On verification using the **TURNITIN Software** for the purpose of plagiarism check, the uploaded research file of **152 pages (includes Abstract and Chapters 1-5)** contains lower than 20 percentage of similarity and is within the permissible standard for **student research projects** as per the university research policy.

Prepared by:

BEN JOSEPH S. ROMANILLOS

(Signature over printed name)

Staff, Office of Research Services

(Designation)

Reviewed by:

ENGR. MARCO U. FIGUEROA

(Signature over printed name)

Coordinator, Office of Research Services

(Designation)

**Appendix K**

**CERTIFICATE OF ENGLISH CRITIQUE**

**CERTIFICATION**

**Research Title:** "The Development of Thesis Archive Management System in Technological University of the Philippines - Cavite"

**Researchers:** Areglado, Crisanto Julius J., Dela Cruz, Ryan Angelo B., Mislos, Genesis M., Tiagan, Dante M.

**Name of Grammarian:** Maricris C. Rubia, LPT

**Position Hold/ Years of Service:** Head Faculty, / 5 years of service

**Field of Specialization:** Language and Research

**Signature:**   
MS. MARICRIS C. RUBIA, LPT

**Remarks:**

This is to certify that the research entitled "The Development of Thesis Archive Management System in Technological University of the Philippines – Cavite" prepared and submitted by Areglado, Crisanto Julius J., Dela Cruz, Ryan Angelo B., Mislos, Genesis M., Tiagan, Dante M. in partial fulfillment of their requirements of the research course leading to the Bachelor of Engineering Technology has been reviewed and evaluated grammatically.

This certification is issued upon the request of the above-mentioned names for whatever legal purposes may serve their best.

**Overall Rating**

Approved to be used as presented

Approved to be used with revision as indicated

## **RYAN ANGELO B. DELA CRUZ**

Blk 04, Lot 24 Ph 3 Mabuhay Homes 2000  
 Dasmariñas City, Cavite  
 09471054225  
 ryanangelo.delacruz@gsfe.tupcavite.edu.ph



### **EDUCATIONAL BACKGROUND**

Technological University of The Philippines- Cavite Campus                   **2019 - 2023**  
 C.Q.T. Ave. Salawag, Dasmariñas City, Cavite  
 Bachelor of Engineering Technology Major in Computer  
 Engineering Technology

Queen Anne School of Dasmariñas                   **2017 - 2019**  
 Mabuhay Homes 2000, Dasmariñas City, Cavite

Rafael Palma Elementary School                   **2012 - 2014**  
 Pasay City, Manila

### **WORK EXPERIENCES**

Support Health and Safety- Work Immersion                   **2019**  
 CREOTEC Philippines Inc. - Laguna Center  
 Biñan, Laguna

### **SKILLS AND QUALIFICATION**

- Web development using Django and NextJS
- Knowledge with HTML, CSS, Bootstrap, and JQuery.
- Knowledge with C++, Python and JavaScript Programming Languages.
- Basic networking using Cisco Packet Tracer.
- Proficient in designing tools such as Figma and Canva.
- Computer and English Literate
- Basic Database Management (MySQL, Firebase)

## **CRISANTO JULIUS J. AREGLADO**

Blk 27 Lot 22, Luzviminda II  
 Dasmariñas City, Cavite  
 09498359085  
 jhayareglado1@gmail.com



## **EDUCATIONAL BACKGROUND**

Technical University of the Philippines **2019 – Present**  
 C.Q.T. Ave. Salawag, Dasmariñas City, Cavite  
 Bachelor of Engineering Technology Major in Computer Engineering Technology

Asian Institute of Science and Technology - Dasmarias **2017-2019**  
 Emilio Aguinaldo Highway, Dasmariñas City, Cavite  
 ICT – Computer Programming and Animation

Dasmarias North National High School **2013-2017**  
 San Isidro Labrador I, Dasmariñas City, Cavite  
 Junior High School

Sampaloc Elementary School **2013-2010**  
 Barangay Sampaloc IV Dasmariñas City, Cavite  
 Primary School

San Nicolas Elementary School **2010-2007**  
 Barangay: San Nicolas I, Dasmariñas City, Cavite  
 Primary School

## **WORK EXPERIENCES**

Assistant Branch Head - Joshwen LPG Trading **2018 - Present**  
 Salitran III, Dasmarias City, Cavite

On the Job Training - Office and Marketing Staff **2019**  
 Prince and Princess Academy of Cavite  
 Agustin St. Agustin Village Panapaan VI, Bacoor, Cavite

## SKILLS AND QUALIFICATION

- Skills in Computer Programming (Python, Visual Basic, C++)
- Basic Database Management (MySQL, MS Access, Firebase)
- Basic Knowledge in Networking using Cisco Packet Tracer
- Mobile Application Development
- Basic Computer Troubleshooting
- Basic Knowledge in Electronics
- Animation and Game Development in Macromedia Flash
- Photo and Video Editing Skills
- Graphic Designing

**GENESIS MANANGHAYA MISLOS**

Blk 68 Lot 8 Phase 2 Paliparan III  
City of Dasmariñas, Cavite  
09756450283  
genesis.msls0410@gmail.com

**EDUCATIONAL BACKGROUND**

Technical University of the Philippines C.Q.T. Ave. Salawag, Dasmariñas City, Cavite Bachelor of Engineering Technology Major in Computer Engineering Technology	<b>2019 – Present</b>
Paliparan III Senior High School Phase 5, Paliparan III, Dasmariñas City, Cavite Senior High School	<b>2017-2019</b>
Paliparan National High School Phase 3, Paliparan III, Dasmariñas City, Cavite Junior High School	<b>2013-2017</b>

**SKILLS AND QUALIFICATION**

- Computer Literate
- Basic Electronics/Electrical
- Figma and Canva Design
- Editing Skills.
- Basic Computer Configuration
- Good Decisioning

**DANTE M. TIAGAN JR.**

B6 L3 Bulgaria St. Barcelona Ph1  
 Brgy. Buhay na Tubig, Imus City, Cavite  
 dante.tiagan@gsfe.tupcavite.edu.ph  
 09182597794

**EDUCATIONAL BACKGROUND**

Technological University of the Philippines – Cavite C.Q.T Ave. Salawag, Dasmariñas, Cavite Batchelor of Engineering Technology Major in Computer Engineering Technology	<b>2019 – Present</b>
Governor Juanito Remulla Reyes Senior High School Brgy. Toclong 2-B Imus,Cavite Shielded Metal Arc Welding	<b>2016 – 2018</b>
General Emilio Aguinaldo National High School Palico 4 Imus, Cavite	<b>2014 – 2016</b>
Our Lady of the Pillar Catholic School F.Tirona St., Poblacion 2-A, Imus,Cavite	<b>2012 – 2014</b>
Imus Pilot Elementary School Nueno Avenue, Poblacion 1-A Imus,Cavite	<b>2005 – 2012</b>

**WORK EXPERIENCE**

Telemarketer - Gencys Digital Trading Vista Verde Mambog 4 Bacoor, Cavite	<b>August 2022 – Oct 2022</b>
Sales Associate – Blessings Bread Vista Verde Mambog 4 Bacoor, Cavite	<b>May 2022 – August 2022</b>
Service Crew – Jollibee Bacoor Boulevard Bacoor, Cavite	<b>June 2019 – August 2019</b>

On The Job Training

**March 2018 – May 2018**

JACA Construction and Management Corporation

No.29 Jose Abad Santos Avenue, Salawag Dasmariñas, Cavite

## **SKILLS AND QUALIFICATIONS**

- Computer Literate (Microsoft Word, Excel, PowerPoint)
- Computer Programming
- Computer Maintenance
- Good Communication Skills
- Welding

## **CONFERENCES/ SEMINARS/ TRAININGS ATTENDED**

Shielded Metal Arc Welding NC II Holder (SMAW NC II)