**Chapter 1  
THE PROBLEM AND ITS BACKGROUND**

Resources or references are necessary in creating projects. Modern techniques in project making are absolutely in demand. In college, a project like thesis is produced by searching and initiating some theoretical ideas and technical skills. Thesis serves as one factor to train students in terms of their expertise, talent, critical thinking skill, attitude, performance and ability to solve problems.

Searching and data gathering help the researchers to make the project feasible. In addition, researchers seek for relevant information or related studies to deal with their project. On the other hand, the availability of those resources or references is difficult to find for quite some time. Students give lots of efforts to look for those and they are having a hard time looking for the data or inputs they needed. They encounter problems, like where and how they will get the necessary information to look for the possible related studies to include for their thesis.

Furthermore, researchers tend to visit different universities or school libraries to find out the possible studies for their project. Researchers give their time and efforts to come up with a good and relevant research. Basically, researchers just need a copy of a certain thesis document for their related studies or they just need to read the document for the idea of improving the performance or outcome of their thesis. Therefore, it would be a big help for the researchers if they can easily search for those theses or related studies. This system aimed to help researchers to have references in quick and easy way for the document and/or project they are working on.

**BACKGROUND OF THE STUDY**

Researchers consider thesis as a requirement for some college student to graduate. Thesis is the most important or fundamental idea of an argument, presentation, or piece of writing but can also mean as a large work of art, criticism, or scientific research that represents original research and is generally the final requirement for an academic degree (vocabulary.com). A thesis is a long piece of writing based on your own ideas and research that you do as part of a university degree, especially a higher degree (Collins dictionary). This had a broad impact when it comes to study and application. This was the reflection of the knowledge that they have learned from their chosen program, their own skill and potential, and how they would apply them.

Theses can be found mostly in college libraries. College libraries in different universities use various strategies to organize their data according to their preference or on how they will be going to manage it. They have different management system, whether it is traditional or paper-based we could still consider it as a system. That’s how they kept and managed those significant records and information.

According to the study of PRISM International (2012), records management is both a discipline and management function concerned with the systematic application of management techniques and to control the information. Records are central to the work of all organized entities. Despite the application of information technologies, the mounting rise of “paperwork” requirements continue to accelerate. The creation, storage, retrieval and use of information of all types is an increasingly difficult challenge for organizations.

Aside from the difficulties in theses searching, there were factors that allow researchers to conduct them researches with this topic study. According to Adani (2012), a manual system costs a lot of paper, many time is loss with regards to data organizing and staffs for often loss data without save. The aforementioned problems were also the limitations of using the traditional paper-based system. According to Anushan (2012), data duplication can be occurred by repeating the same thing repeatedly, lack of storage and lack of security are common errors and there is too much paper wastage. These could be the problems of using manual system.

Researchers came up with an idea of creating a research management system, wherein the system is capable in searching theses and downloading of documents. Researchers wanted to improve the way of searching of thesis documents in the university. The purpose of technologies and automated system for this generation is widely used. Therefore, researchers aimed for the university to be part of it.

The study aimed to help those future researchers to find thesis references in University of Makati library at ease. There was a user login form for all the system’s identified users. The system was directly focused in thesis documents after login. Its purpose was to make the theses document available to cite and download. Users would get benefit from this system as for their research and related studies, as well as University of Makati.

**OBJECTIVES OF THE STUDY**

The general objective of the study was to develop Thesys: A Research Management System University of Makati that aimed to help those researchers to find in a quick and easy way thesis references.

Specifically, it aimed to:

1. Design the Thesys: A Research Management System University of Makati with the following features:
   1. User Login for prevention of unauthorized access.
   2. Dashboard that will give an overview for the theses document and statistical data.
   3. Search Option to know the availability of a certain thesis document and thesis details.
   4. Filtering of Results based on the keyword inputted by the user.
   5. Scanning of Documents when adding new thesis file.
   6. Uploading of scanned or softcopy of the documents.
   7. Downloading of Documents in PDF.
   8. Content Management for adding, editing and archiving of theses records and information.
2. Create the system as designed utilizing the following open source software technologies:
   1. PHP and HTML for web programming,
   2. CSS, JavaScript, Bootstrap for flexibility of system’s design,
   3. MySQL for database management system,
   4. XAMPP as the web server and database connection provider, and
   5. Google Chrome, Mozilla Firefox and other web browsers for output viewing.
3. Test the developed system based on:
   1. Functionality, which tested the system based on its functionality and features and identify the behavior output of the system,
   2. Usability, which tested the flow of the system from page to page and consistency of common objects in the system,
   3. Compatibility, modified performance and compatibility issue and will be able to perform without problems using different browsers,
   4. Performance, according to how long a process was done in the system, and
   5. Security, for form validations and unauthorized access.
4. Evaluate the performance of the system in terms of functionality, reliability, usability, efficiency and maintainability.

**SCOPE AND LIMITATIONS OF THE STUDY**

“Thesys: A Research Management System University of Makati” aimed to help those researchers to find thesis references in quick and easy way. In addition, the system would help librarian or admin to organize thesis database at ease for the aforementioned university.

There is an administrator: could be a librarian or someone who can manage the system with basic knowledge how to use it, and user – University of Makati students, faculty and visitors. If a certain user has no existing account, they must ask the administrator to create an account for them. Also, the administrator is in-charge for the content and record management and has full access of the system. There is also report generation in the system, which focuses on theses document and statistical data of most viewed, cited, and downloaded. There is scanning of documents and uploading of scanned or softcopy of the documents and it must be converted into portable document format (PDF) and can be downloaded. The researcher or user could search for the availability of a certain thesis document that they need to look for. The system also provides advanced search wherein you can filter the results based on the relevance of what you desire to find.

In able for the user to access the system, they must go to University Library to do so, since the implementation of it is stand-alone. The theses that created later than 10 years from the current year will be archived. The scanner and image to PDF converter used were a third-party application. The theses that can be viewed by the users depends on details stored in the repository of the system.

**SIGNIFICANCE OF THE STUDY**

**University Librarian or Staffs**

These personnel will be given light work to do in terms of organizing theses documentations. The system will provide statistical data for them.

**Faculty**

The system will provide real-time status of theses for them and they can have easy access in the system as for their needed information and future use.

**Students and Visitor**

University of Makati students and visitor will benefit from this project because this project would help them to access theses document in quick and easy way. They could search the thesis they need for their related studies or projects. This will lessen the time and effort of them in finding related researches, once the system is implemented.

**Researchers**

Researchers of this project learned about managing a system. The study also helped the researchers to learn more about creating the project itself. They gained knowledge according to the typical programming language they used.

**Future Researchers**

The study would help the future researchers as for their reference of thethesis that they will do in the future. Those future researchers who will make aclosely related project would serve this thesis as a guide.