**TITLE**

A Capstone/Thesis/Design Project

Presented to

**EASTWOODS Professional College of Science and Technology**

A.Y: 2022 – 2023

In Partial Fulfillment of the Requirements for the degree

**Bachelor of Science in**

**INFORMATION TECHNOLOGY**

By:

Name of Member 1

Name of Member 2

Name of Member 3

Date of Final Defense

# APPROVAL SHEET

This Capstone Project entitled “**Title Here**” proposed and submitted by Member Name 1, Member Name 2 and Member Name 3 in partial fulfillment of the requirements for the degree **Bachelor of Science in Information Technology,** has been examined and found in order and is herebyrecommended for acceptance and approval for **ORAL EXAMINATION.**

|  |  |
| --- | --- |
| **Name of Head Panel**  Chair | |
| **Name of Panel 1**  Member | **Name of Panel 2**  Member |

**CAPSTONE/THESIS/DESIGN PROJECT PROPOSAL COMMITTEE**

**PANEL OF EXAMINERS**

|  |  |
| --- | --- |
| **Name of Head Panel**  Chair | |
| **Name of Panel 1**  Member | **Name of Panel 2**  Member |
| **Adviser Name**  Adviser | |

Passed by the PANEL OF EXAMINERS on ORAL EXAMINATION with a grade of on December 18, 2021

|  |  |
| --- | --- |
| **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Date | **Mr. Jose Rizal, MIT**  Proofreader |
| **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Date | **Mr. Juan Dela Cruz, MIT**  Position |

Accepted and approved in partial fulfillment of the requirements for the degree **Bachelor of Science in Information Technology.**

# ABSTRACT

An abstract must contain the statement of the problem, the methodology used and statistics if appropriate, the results and findings obtained, and the conclusion/s.

**Keywords:** keyword 1; keyword 2; keyword 3 (List three to ten pertinent keywords specific to the study; yet reasonably common within the subject discipline.)

# ACKNOWLEDGEMENT

The acknowledgement section is a place to recognize and show gratitude to individuals or organizations that have helped you during the process of your work. This can include: 1. Advisors, mentors, and other academics who provided guidance and support. 2. Collaborators who helped with research, writing, and other aspects of the project. 3.) Funding agencies or institutions that provided financial support. 4.) Technical support staff who assisted with tools and resources. 5.) Family and friends who provided emotional support. 6.) Any other individuals or groups who made a significant contribution to the work. 7.) It is important to be specific and sincere in the acknowledgement section, and to mention the role that each person or organization played in the success of the project.

# TABLE OF CONTENTS

[APPROVAL SHEET ii](#_Toc177728181)

[ABSTRACT iii](#_Toc177728182)

[ACKNOWLEDGEMENT iv](#_Toc177728183)

[TABLE OF CONTENTS v](#_Toc177728184)

[LIST OF FIGURES ix](#_Toc177728185)

[LIST OF TABLES x](#_Toc177728186)

[CHAPTER I 1](#_Toc177728187)

[THE PROBLEM AND ITS BACKGROUND 1](#_Toc177728188)

[Introduction 1](#_Toc177728189)

[Background of the Study 1](#_Toc177728190)

[Statement of the Problem 1](#_Toc177728191)

[Objectives of the Study 2](#_Toc177728192)

[Significance of the Study 2](#_Toc177728193)

[Scope and Delimitation 3](#_Toc177728194)

[Definition of Terms 3](#_Toc177728195)

[CHAPTER II 5](#_Toc177728196)

[REVIEW OF RELATED LITERATURE 5](#_Toc177728197)

[To acknowledge and reference the work of other authors in a related study, the researcher should use the APA Format 7th Edition - Narrative Citation. The keywords to be used in this chapter must be enumerated. See the format below. 5](#_Toc177728198)

[Inventory System 5](#_Toc177728199)

[Keyword 2 6](#_Toc177728200)

[CHAPTER III 7](#_Toc177728201)

[RESEARCH DESIGN AND METHODOLOGY 7](#_Toc177728202)

[Research Methods 7](#_Toc177728203)

[Research Locale 8](#_Toc177728204)

[Respondents of the Study 8](#_Toc177728205)

[Software Development Methodology 8](#_Toc177728206)

[Development Process based on the selected SDLC 9](#_Toc177728207)

[Research Instruments 10](#_Toc177728208)

[System Development Tools 10](#_Toc177728209)

[Data Flow Diagram 10](#_Toc177728210)

[Use Case Diagram 10](#_Toc177728211)

[Use Case Diagram 10](#_Toc177728212)

[Technologies to be used 10](#_Toc177728213)

[Software Evaluation 11](#_Toc177728214)

[CHAPTER IV 12](#_Toc177728215)

[PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA 12](#_Toc177728216)

[Presentation, analysis, and interpretation of data involves defining a clear research question or problem, collecting, and organizing data, analyzing the data using statistical methods and tools, presenting the findings through clear and concise visual aids, and interpreting the results in the context of the research question or problem. Deployment and evaluation may also be included, such as conducting a survey to evaluate the impact of the research or presentation. Create a paragraph summarizing the content of this chapter. 12](#_Toc177728217)

[Traditional Process 12](#_Toc177728218)

[Traditional Process 1 12](#_Toc177728219)

[Traditional Process 2 12](#_Toc177728220)

[Development of the System 12](#_Toc177728221)

[Requirements 13](#_Toc177728222)

[Design 13](#_Toc177728223)

[Develop 14](#_Toc177728224)

[Testing 14](#_Toc177728225)

[Deployment 15](#_Toc177728226)

[Review 15](#_Toc177728227)

[CHAPTER V 17](#_Toc177728228)

[SUMMARY, CONCLUSION, AND RECOMMENDATION 17](#_Toc177728229)

[Summary 17](#_Toc177728230)

[The summary is a brief and concise overview of the main findings and key points of the study. It typically includes a brief description of the research problem, objectives, methodology, and findings. The summary should be written in a clear and concise manner and provide a quick and easy-to-understand overview of the study. This must be presented based on the selected and used Software Development Lifecycle. 17](#_Toc177728231)

[Research Methodology 17](#_Toc177728232)

[The summary of the research methodology section provides a brief overview of the research design, data collection methods, data analysis techniques, and any limitations or constraints of the study. It should summarize the key points of the methodology chapter and highlight any unique aspects of the study that may impact the interpretation of the results. 17](#_Toc177728233)

[Summary of Selected Software Development Life Cycle 18](#_Toc177728234)

[Conclusion 19](#_Toc177728235)

[Recommendation 19](#_Toc177728236)

[BIBLIOGRAPHY 20](#_Toc177728237)

[APPENDIX A 21](#_Toc177728238)

[INTERVIEW TRANSCRIPT 21](#_Toc177728239)

[APPENDIX B 22](#_Toc177728240)

[EVALUATION TOOL 22](#_Toc177728241)

[APPENDIX C 23](#_Toc177728242)

[Deployment Certificate 23](#_Toc177728243)

[APPENDIX D 24](#_Toc177728244)

[Routing Form 24](#_Toc177728245)

# LIST OF FIGURES

[**Figure 1** Agile Development Methodology Diagram 9](#_Toc177728163)

[**Figure 2** Sample Figure for Testing 9](#_Toc177728164)

# LIST OF TABLES

[Table 1 Profile of the Respondents 15](#_Toc121473316)

# CHAPTER I

# THE PROBLEM AND ITS BACKGROUND

## Introduction

The problem and its background are briefly introduced in this section. This part aims to provide context and justification for the research topic. It typically includes an overview of the issues, concerns, or gaps in knowledge that the research seeks to address.

## Background of the Study

The background of the study is a critical component of any research project, and it should highlight several important elements. Firstly, the background should introduce the related technology, discussing its background, history, and relevance to the study. Secondly, the benefactor should be identified and their role in the traditional process explained. Thirdly, the traditional process should be outlined, discussing its steps and procedures. Fourthly, the problems encountered in the traditional process should be identified, highlighting the limitations and challenges faced by the benefactor. Finally, the researcher's proposed solution should be presented, outlining how it can address the problems encountered in the traditional process. By highlighting these elements in the background of the study, the researcher can establish the context and rationale for their research and demonstrate the importance and relevance of their proposed solution.

## Statement of the Problem

The statement of the problem is a concise and clear description of the issue or research question that the study aims to address. It outlines the specific problem that the researcher is investigating and provides a clear and focused research objective. It should be specific, measurable, and includes problems regarding: 1) Features and Functionalities of the Proposed Solution; 2) Technologies to be used on the development; 3) Evaluation and Testing Methods.

1. Statement of the problem 1
2. Statement of the problem 2
3. Statement of the problem 3

## Objectives of the Study

The objective of the study refers to the specific goals or aims of the research project. It outlines the intended outcomes of the research and what the researcher hopes to achieve by conducting the study. The objectives should be clear, specific, and measurable, and should be closely related to the statement of the problem.

1. Objective 1
2. Objective 2
3. Objective 3

## Significance of the Study

The significance of the study refers to the importance or relevance of the research project. It outlines the potential impact or contribution of the research to the field of study or to society in general. It should explain why the research is important, what makes it unique or innovative, and h ow it can add value to the existing body of knowledge. By highlighting the significance of the study, the researcher can demonstrate the relevance and importance of their research and justify why it is worth investigating. See format below.

**Administrator –** Why is it significant to the Administrator?

**Future Researchers –** Why is it significant to the Future Researchers?

## Scope and Delimitation

The scope and delimitation of a study refer to the boundaries or limitations that the researcher sets for the research project. By defining the scope and delimitation of the study, the researcher can ensure that the research project is focused and achievable, and that the results are relevant and useful for the intended audience. It also helps to prevent the researcher from attempting to address issues that are beyond the scope of the study, or that cannot be adequately addressed with the available resources and methodology. See format below.

The researchers identify the task for every entity stated above.

**Administrator:**

1. Login to the system
2. Register new Users
3. Manage Accounts

**Staff:**

1. Login to the System
2. Add new request
3. Print Reports

## Definition of Terms

The research definition of terms refers to the specific terminology, concepts, and language used in the research project. It defines the key terms and concepts used in the study in a clear and concise manner, to ensure that the reader understands the specific meaning and context of the terms as used in the research. Must be alphabetically arranged. See format below.

**Inventory -** Video provides a powerful way to help you prove your point.

**Video -** Video provides a powerful way to help you prove your point.

**Inventory -** Video provides a powerful way to help you prove your point.

**Video -** Video provides a powerful way to help you prove your point.

**Inventory -** Video provides a powerful way to help you prove your point.

**Video -** Video provides a powerful way to help you prove your point.

**Inventory -** Video provides a powerful way to help you prove your point.

**Video -** Video provides a powerful way to help you prove your point.

# CHAPTER II

# REVIEW OF RELATED LITERATURE

The review of related literature is a critical analysis of the existing body of knowledge related to the research topic or problem. It involves a comprehensive search and analysis of relevant studies, articles, books, and other sources of information that are related to the research problem or question.

## To acknowledge and reference the work of other authors in a related study, the researcher should use the APA Format 7th Edition - Narrative Citation. The keywords to be used in this chapter must be enumerated. See the format below.

## Inventory System

According to the study of Luna and Rizal (2024), video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

Video provides a powerful way to help you prove your point according to the study of Rizal (2024). When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

Video provides a powerful way to help you prove your point according to the study of Bonifacio (2024). When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

In the study of Rizal (2023), the video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

According to Bonifacio (2023), the video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

## Keyword 2

*Related Literature under Keyword 2*

# CHAPTER III

# RESEARCH DESIGN AND METHODOLOGY

Research design and methodology refer to the plan or strategy that a researcher uses to conduct a study. It includes the specific methods and procedures that will be used to collect, analyze, and interpret data, as well as development of the proposed solution. Add a paragraph summarizing the whole chapter.

## Research Methods

To identify the research method to be used, students should consider the research questions, objectives, and type of data to be collected. Research methods can be broadly classified as either qualitative, quantitative, or a combination of both. Qualitative research methods are used to explore and understand the meaning and experiences of individuals or groups, while quantitative research methods are used to quantify and analyze numerical data.

It is also important to consider the strengths and limitations of each method and to choose the method that is best suited to answer the research question and achieve the research objectives. In some cases, a combination of both qualitative and quantitative methods may be appropriate to provide a more comprehensive understanding of the research topic.

## Research Locale

Research locale refers to the place or setting where the research is conducted. It can be a physical location such as a laboratory, a field site, a classroom, a hospital, a community, or an entire region or country, depending on the scope and nature of the research project.

The research locale is an important consideration in research design because it can affect the sampling method, the data collection procedures, and the generalizability of the research findings. The researcher should carefully select the research locale based on its relevance to the research questions, the availability of research participants, and the feasibility of conducting the study in that location.

## Respondents of the Study

Respondents in a research study are the individuals or groups who participate in the study and provide data or information that is analyzed to answer the research questions. Respondents are also commonly referred to as participants, subjects, or informants, depending on the type of research and the method of data collection. The researchers must identify the total number of respondents including a minimum of 10 IT Professionals. They can also use Slovin Formula to determine the appropriate sample size and reduce the number of respondents needed to represent a target population accurately.

## Software Development Methodology

Software development methodology refers to the process or framework used to design, develop, and deliver a software project for the capstone or final project of a computer science or software engineering program. It encompasses the overall approach, tools, techniques, and best practices for managing the software development life cycle, from requirements analysis and design to coding, testing, deployment, and maintenance.

Diagram

Description automatically generatedThere are various software development methodologies that can be used in capstone projects, such as Agile, Waterfall, Scrum, Spiral, and Rapid Application Development (RAD), among others. The choice of methodology depends on the project's specific requirements, timeline, budget, and team members' skills and experience. It is important for the researchers to choose the appropriate methodology that fits their project needs and to adhere to the principles and guidelines of the selected methodology throughout the project's life cycle. Researchers can cite a related study that supports their selected SDLC. See Format below.

**Figure 1** Agile Development Methodology Diagram

**Figure 2** Sample Figure for Testing

### Development Process based on the selected SDLC

#### Phase 1

Explain the procedure done in Phase 1

#### Phase 2

Explain the procedure done in Phase 2

## Research Instruments

A research instrument refers to the tool or method used by researchers to collect data or information for their study. It can take various forms, such as a questionnaire, survey, interview guide, observation checklist, test, or experiment. See format below.

**Research Instrument 1 –** Explain the selected Research Instrument

**Research Instrument 2 –** Explain the selected Research Instrument

**Research Instrument 3** – Explain the selected Research Instrument

## System Development Tools

System development tools refer to a set of software tools or applications used by developers to design, build, test, and deploy computer-based systems, such as software applications, websites, databases, and other digital solutions. These tools can help streamline the software development process and improve productivity, quality, and efficiency. It includes diagrams such as ERD, EERD, UML Diagrams, Data Flow Diagrams, Mockups and etc.

### Data Flow Diagram

Explain the diagram to be used

### Use Case Diagram

Explain the diagram to be used

### Use Case Diagram

Explain the diagram to be used

### Technologies to be used

1. **Technology 1** - Explain the selected technology.
2. **Technology 2** – Explain the selected technology.

## Software Evaluation

Software Evaluation is the process of assessing the quality and effectiveness of a software product or system. This evaluation is important in ensuring that the software meets the needs of its intended users and performs as expected. To perform a software evaluation, researchers must use a standardized set of criteria defined by the ISO 25010 standard.