THESIS/CAPSTONE OUTLINE, CONTENT, AND FORMAT

TITLE PAGE

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER

I.   INTRODUCTION

Overview of the Current State of Technology

This section gives the reader an overview of the specific technology or field in the international or local setting. The information regarding the technology or field should be contemporary and not based on outdated sources. Discussion must not be too technical or too detailed.

This section ends with a discussion on the problems faced by or that still exist in the specific technology or field (e.g., limitations of existing software or algorithms).

Desired State of Technology

This section discusses the ideal technological landscape or end-goal you envision for the project, showcasing where the organization, system, or solution should ideally be after the project's completion. It reflects the optimal implementation of technology to address business challenges, increase efficiency, enhance user experience, and meet stakeholder expectations.

Statement of the Problem

This section clearly articulates the issue or challenge that your project aims to solve or address. This sets the foundation for your entire project, guiding your research or development process, and helping readers understand the significance and context of your work.

The Statement of the Problem defines the core issue you are tackling, explains why it is important, and outlines the scope and limitations of the problem. It also helps justify why your project is necessary and what contribution it aims to make to the field of Information Technology. The problem statement would lead to the research objectives.

Objectives of the Study

General Objective

This section states the overall goal that must be achieved to answer the problem.

Specific Objectives

This subsection is an elaboration of the general objective. It states the specific steps that must be undertaken to accomplish the general objective. These objectives must be *specific, measurable, attainable, realistic, time-bounded*. Each specific objective may start with "**to design/survey/review/analyze…**"

Studying a particular programming language or development tool (e.g., to study Windows/Object-Oriented/Graphics/C++ programming) to accomplish the general objective is inherent in all thesis and, therefore, must not be included here.

Theoretical and Conceptual Frameworks

This section discusses the theories and concepts to be used in the course of designing or developing the thesis. Include only those concepts that you feel will be needed. DO NOT copy the whole source material. Use the topics stated in the objectives as a guide in determining the contents of this section.

Theoretical Framework

A Theoretical Framework refers to the foundational concepts, theories, and models that inform and guide the research, development, or implementation process of the project. It provides a structured way to understand and interpret the problem you're solving, the methodology you're using, and the expected outcomes of your project. Essentially, it acts as a lens through which you approach your research or solution, helping to align your project with existing knowledge and ensuring that your work contributes to the field.

Conceptual Framework

A Conceptual Framework in an IT Capstone project is a visual or narrative representation that outlines the key concepts, variables, and relationships involved in the project. It helps to structure the problem you're addressing, the methodology you're using, and how you expect the various elements of your project to interact with each other. While a Theoretical Framework is grounded in established theories and models, the Conceptual Framework focuses more on how you translate those ideas into practical, actionable components relevant to your specific project. The Conceptual Framework is a bridge between theory and practice - it helps to clarify and organize your approach to the problem, ensuring you address the right variables and relationships in your project.

Operational Definition of Terms

Provide clear and specific definitions for the key concepts, terms, variables, or constructs that are used throughout the project. These definitions outline how each term will be measured or observed within the scope of the project, ensuring clarity and consistency in interpretation. Operational definitions are essential because they set clear boundaries for the project, reduce ambiguity, and ensure that anyone reviewing or working on the project has a consistent understanding of the terms being used.

Scope and Limitation of the Study

This section discusses the boundaries (with respect to the objectives) of the research/proposed system and the constraints within which the research will be developed.

Significance of the Study

This section explains why research/system must be done in this area. It rationalizes the objective of the research/system with that of the stated problem. Avoid including here sentences such as "This research will be beneficial to the proponents/department/college" as this is already an inherent requirement thesis/capstone projects. Focus on the research's contribution to the field of Information Technology and Computer Studies.

II. REVIEW OF LITERATURE AND STUDIES

This section discusses the features, capabilities, and limitations of existing research, algorithms, or software that are related/similar to the thesis. The reviewed works and software must be arranged either in chronological order, or by area (from general to specific). Observe a consistent format when presenting each of the reviewed works.

The Review of Literature typically includes both theoretical background and empirical studies that inform your research or project design. It's essential to organize the review clearly to guide the reader through existing knowledge, set the context for your research, and highlight how your capstone project contributes to the field.

III.   METHODOLOGY

This section lists and discusses the specific steps and activities that will be performed by the proponents to accomplish the project.

Examples of activities include inquiry, survey, research, brainstorming, canvassing, consultation, review, interview, observe, experiment, design, test, document, etc. or as defined by the chosen Software Development Life Cycle Model.

The methodology also includes the following information:

- who is responsible for the task
- the resource person to be contacted
- what will be done
- when and how long will the activity be done
- where will it be done
- why should be activity be done

BIBLIOGRAPHY

APPENDICES*

Gantt Chart

Organizational Chart

Present DFD

Top-Down Design

ER Diagram

Screen Layout

Source Code

Resource Persons

  For each resource person: full name and title, e.g.,
  <Dr. Juan de la Cruz>
  <profession, e.g., faculty>
  <department, e.g., College of Computer Studies>
  <name of institution, e.g., Filamer Christian University>
  <e-mail address>

Proponents' Personal Vitae

* *if applicable*