PATEROS TECHNOLOGICAL COLLEGE
College St., Sto. Rosario Kanluran, Pateros, Metro Manila
Institute of Information and Communication Technology

TITLE

A Capstone Research Project Documentation
Presented to the Institute of Information and
Communication Technology

In Partial Fulfillment
of the Requirements for the Degree
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

By
Proponents Name

Month Year

Table of Contents

Chapter 1

The Problem and Its Background

Introduction

(this should contain the explanation as to the conceptualization of the idea for the project, the company setting and background if applicable and the relevant benefits of the project proposed)

Project Context and Its Background

(this should contain information as to the Background of the company if applicable and the relevant issues and conditions that are prevalent which necessitates the proposal of the system/ project. This may include concepts to be used and applied to the project may include theoretical and or conceptual frameworks to be used for the project.)

Project Purpose and Description

The Purpose and Description as part of the outline for Methods of Research Project defines the features and capabilities should be written in such a way that it would highlight the significance of the project. Furthermore, it should be written using a general language and non-technical terms.

Objectives

Start with the general objective of the research. The general objective should provide the answer to the problem just stated above. In a way, the general objective is a restatement of the title of the research.

The specific objectives follow, using a colon at the end;

a. The specific objectives must be measurable;

b. They should have a one-to-one correspondence to the conclusions you will make in Chapter 5.

Scope and Limitations/Delimitations of the Project

Scope. The scope of the study explains the extent to which the research area will be explored with regards to the proposed title. Meaning giving its parameters, features and functionalities are the main discussion at this section.

Limitation/Delimitation. The researcher must distinguish whether your research will use limitation or delimitation. Limitation are those conditions beyond the control of the researcher that may place restrictions on the conclusion of the study and their application to other situation, while **Delimitation** are the boundaries beyond which the study is not concerned.

Theoretical Framework or Conceptual Framework of the Study

Theoretical framework is a symbolic construction which uses abstract concept, facts or laws, variables and their relations that explains and predicts how an observed phenomenon exists and operates. The researcher is required to formulate exiting theories which link his study because theories are useful devicefor interpreting, criticizing, and unifying established scientific laws or facts that guide in discovering new generalizations.

Definition of Terms

(define operational and technical terms used in the study)

Chapter 2

Review of Related Literature and Studies

Related Literature

Local Literature

(*15 literature*)

Foreign Literature

(*15 literature*)

Related Studies

Local Studies

(*15 literature*)

Foreign Studies

(*15 literature*)

Synthesis

Summary of the Chapter 2 documentation.

Chapter 3

Methodology

A research methodology outlines what research is, how it is conducted, how progress is measured, and what constitutes success.

Milestone Scheduling

A milestone is a specific point within a project's life cycle used to measure the progress toward the ultimate goal. Researchers include the title proposal, approval of title, preparation and creation of every chapter of title

(Table 1: Chapter 1 Milestone Schedule)

(Table 2: Chapter 2 Milestone Schedule)

(Table 3: Chapter 3 Milestone Schedule)

System Project Development Process

The researcher will use

(Figure 2: Agile)

Requirement Analysis

The proponents must first determine the information requirements with regard to the specific organization under study. At this phase, the proponents or researchers needs to know the details of the current system function: WHO (the people who are involved, WHAT (business activities), WHERE (the environment in which the work takes), WHEN (the timing), and HOW (how the current procedures are performed) of the business or organization under study. The proponent must know and analyze why the business uses the current system. There may be good reasons why the organization is using the current methods, and these should be considered when designing the proposed system.

Sampling Technique

The term sampling refers to the method of choosing subjects in a particular study. A sample is selected from a group which is called a population. The sample and its population determine which generalizations may be made from the findings.

Current Technical Situation

The programmer, system analyst or software engineer, no matter how brilliant they are, they cannot design the software which will serve as computing solutions addressing the needs of a particular organization unless they familiarized themselves how such organization perform their business.

Requirement Documentation

Under this section, all software features are enumerated in detail or for the proposed system or software what it does. Therefore, the requirement documentation does not include database schemas, normalization, of tables, system architecture, description of communication layers, in short, no statement of design in any sort. It only answers to the question “HOW the software will do” or statement of design shall be addressed.

Project In – Scope

Project Out – Scope

Design of Software, Systems, Product and/or Processes

The focus on this section is to give the technical aspect of the software to be developed in a way that demonstrate comprehension of the tradeoffs involved in design choices. For design of software, systems, product and/or processes should be given on how the requirements analysis and documentation have been complied with especially those possible tradeoffs presented within the given requirements under various constraints. This can be presented either conceptual design, data models, system architecture or block diagrams will show that the students have an idea on how to identify, formulate and solve computing problems.

Figure 3. Data Flow Diagram Level 0

The DFD Level 0 diagram, commonly known as the context diagram. …

Figure 4. DFD Level 1

The Level 1 Data Flow Diagram (DFD) provides a detailed overview of how the ..

Figure 4. DFD Level 2

The Level 2 Data Flow Diagram (DFD) provides a detailed overview of how the ..

Figure 6. UML (Use Case Diagram)

This figure represents the UML (Use Case Diagram) of..

Figure 7. Flowchart

This figure represents the Flowchart of ..

Figure 7. System Flowchart

The System Flowchart Displays The entire project, elaborates it and summarize the task that the system will encounter and the overall job of the system.

Figure 11. Block Diagram

The Block Diagram of the ..

Prototype of the Application

Figure 12. Login, Registration and Forgot Password

Figure 13. Admin Interface

Figure 14. User Interface

Development and Testing

This section should be discussed in synopsis because the detailed discussion of its actual application. In designing, developing and evaluating the proposed system or software, the authors must standardize the development of the study. It is recommended the use of ISO 25010 to test the quality of the system.

Data Analysis Plan

After gathering data, the statistical tools that will be used in the analysis of data are the weighted arithmetic mean, standard deviation, analysis of variance, and the person product-moment coefficient of correlation. The weighted arithmetic mean will be used to determine the average responses for item of the four (4) options in each item in the questionnaire namely, 4 (Strongly Agree / Very Good / Very Willing / Very High), 3 (Agree / Good / Willing / High), 2 (Disagree / Hesitant / Low / Poor), and 1 (Strongly Disagree / Very Hesitant / Very Low / Very Poor). The Likert scale can be generated by means of the respondents' replication on the survey.

References: