USIU Africa

DEPARTMENT OF SCHOOL OF SCIENCE & TECHNOLOGY

UNDERGRADUATE PROPOSAL & PROJECT PAPER GUIDELINES

BACHELOR OF SCIENCE & TECHNOLOGY

Month, year

1.0 INTRODUCTION

The project is a partial fulfilment of the Bachelor of Computer Science (CS), Information (***Technology (APT), Business Information Technology (BBIT), and Management Information Technology (BMIT) degrees offered in the department of Computer Science and Information Technology (CS/IT))*** of USIU Africa University. The students are expected to write a well-articulated proposal and project implementation in chapter format, with a length of 15,000 words. The proposal will be undertaken during the first semester of 4th year and implementation during second semester and implementation will be done in the subsequent semester for those students that succeeded in the proposal stage. This guideline will therefore guide students on how to go about the various stages of project proposal and implementation.

2.0. OBJECTIVES

The main objectives of the undergraduate project proposal and implementation are summarized as follows:

a) To provide students with the opportunity to integrate the knowledge and skills developed in their various programs;

b) To provide students with the independent study and to develop the ability to organize work with a view to achieve specific goal and

c) To undertake an academic project based on sound Technology, Business and Innovation Management principles and intellectual reasoning.

3.0. THE PROJECT PROCESS

The objective of this course is…..

4.0. PROJECT PAPER

Upon the supervisors' approval of the detailed project proposal and implementation, students should proceed to prepare their project documentation under the supervisor's guidance; the document should

a) Be written in past tense

b) Have a minimum of 35 and maximum of 50 pages of the main document

c) Have an appendix; a Minimum of 10 pages and Maximum of 20 pages and which consists of at least 4 pages of important and necessary code.

5.0. PROJECT PAPER ORGANIZATION

The Project paper should consist of three main parts;

a) The preliminary pages or front end

- This includes elements such as the title page, dedication, abstracts in, acknowledgements, declaration form, table of contents, list of tables, figures and abbreviations.

b) The text or main body, usually divided into parts – chapters and sections

c) The supplementary pages or back end.

- The supplementary pages consist of references and appendices or annexes.

5.1. PROJECT PAPER SECTIONS

5.1. TITLE PAGE

- Should have the correct title, student details, and the degree programme with a statement on

  What the project should fulfil

Refer to sample in Appendix A

5.2. DECLARATION PAGE

The page contains the student's declaration of the originality of the Project Report.

This declaration page **must be signed** by the student.

The declaration page is to follow the format and content as shown in Appendix B

5.3. DEDICATION PAGE (OPTIONAL)

Students may include an optional dedication for the Project Report. The dedication must be brief, not more than one paragraph and must not contain any number, chart or photograph. Refer to sample in Appendix C

5.4. ACKNOWLEDGEMENT PAGE (OPTIONAL)

Here you have the opportunity to thank the various people who have helped in the development of the project. It might include specific individuals who have given information, offered insights, or generally been supportive. Gratitude may be expressed to groups of people, like those who were studied, or fellow students.

Refer to sample in Appendix …

5.5. TABLE OF CONTENT

- Table of content identifies the contents and organization of document. It is made up of

  - section headings
  - page numbers

- The rubric should be in title case and single spaced.
- The chapter titles should be in caps and bold.
- The table of contents should be organized to match the headings and subheadings and page numbers up to maximum three (3) levels.
- The table of content **SHOULD BE GENERATED** using the respective word processor.

5.6. LIST OF TABLES

- Section consists of list of the table used in the report, indicating table no, its title and page no found.

5.7. LIST OF FIGURES / ILLUSTRATIONS

- The figures may include graphs, photographic illustrations, maps and drawings.
- These should be labeled as per serializations without including the Chapters in which they are found e.g. the first figure in chapter one should be labeled as Figure 1 and if the next Figure is in Chapter Three it should be labeled Figure 2 and so on)

5.8. DOCUMENT CHAPTERS

- This section contains the problem domain and solution domain of your projects. The entire document is made up of four chapters as outlined below.
- Learners should read the sections carefully to understand and implement every instruction to the latter.
- Utilize chapter one, two and three are for project proposal and chapter four for project implementation

CHAPTER ONE

Should be between a Minimum of 2 pages and Maximum of 3 pages and consist of the following sections

Introduction

- Introduction of the project area; brief introduction to of the problem and the solution to the problem; what it is, how it operates

1.1 Background of the Study

- Should be a minimum of ½ pages and maximum of 1 page
- It should consist of detailed background information about the project/ study area and about the client. It should be clear on what business the client is involved in relation to the researcher's area of study, and how operations are currently shepherded.

1.2 Problem Statement(s)

- This section is consisted of the problems the researcher/study intends to address. The problem should be clearly stated in the light of the project research and its contribution to the solution. Preferably, the problem should originate from the background of the study (how operations are currently handled). each problem should give a brief explanation of how the problem is initiated by the current organization operations or functions.

1.3 Objectives:

- Clear, concise "SMART*"(Specific, Measurable, Achievable, Relevant, Time-bound)* objectives should be provided including project/ research and system development related objectives.

  (S - Specific, M - Measurable, A - Achievable, R- Realistic/Relevant, T- Time bound)

1.3.1 General objective

Objectives section consist of one general objective (always the topic of the study)

1.3.2 Specific objectives

A minimum of **three** and a maximum of **four** specific objectives numbered using roman numbers. Key words like Investigate, develop, design, deploy and analyze should be used to list objectives

1.4 Research questions

- Well-articulated research questions to be derived from the research questions. Should be equivalent to the number of specific objectives

1.5 Significance of the study;

- Student should justify their project by indicating the interestingness and challenge that the project presents, the timeliness of the idea, the possible advantages that realization of such a project would bring.

1.6 Scope and Limitation of the Study

- A brief description of the project scope – what was covered and what was not and why?

CHAPTER TWO: LITERATURE REVIEW

- It should have a minimum 3 pages and maximum 5 pages
- The literature review should **not** be just a compilation or reproduction of the works of others. It requires the student to examine and comment critically on the literature relevant to the student's project area or area of research.
- Its content should be as follows

Introduction

- This section includes
    - A topic sentence that states the broad topic of your project
    - The following sentence should state what is to be included/excluded
    - Final sentence that signals list of key topics that will be used to discuss the selected sources

2.1 Review of objective one

2.2 Review of objective two and so on ….

2.3 Concept map

Diagram to show the independent and dependent variables of your system from the literature review gap

CHAPTER THREE: METHODOLOGY

- This is a minimum of 4 and Maximum of 5 pages.

Introduction to the chapter

- Provide an outline of the contents of the chapter

3.1 Research methodology/Research design used.

Discuss the type research methodology/research design used with respect to the research area of the study.

3.2 Data collection methods used.

- Describe the tools used for data collection with respect to the research area of the study.

3.3 Design Diagrams

3.3.1 Compulsory: The following design diagrams should be included in the methodology section

- Context Diagram
- Level 1 DFD
- Use Case Diagram

3.3.2 Optionally: The following diagrams may be included in the methodology section, for projects that require font end (UI)/back end(Database)

- ERD
- UI low/high fidelity prototypes

3.4 Research Ethics

- Demonstrate how you will observe ethical issues related to researching human subjects/participants e.g confidentiality, anonymity, soliciting informed consents.

CHAPTER FOUR: SYSTEM IMPLEMENTATION AND DEPLOYMENT

- This is a Minimum of 8 pages and Maximum of 10 pages.
- This chapter describes the coding, testing and deployment of the project; this marks the beginning of the SOLUTION domain
- This chapter is made up of the following content;

4.1 Introduction

4.2 System architecture

4.3 Front end development (you can put some code extract)

4.4 User interface Design

4.5 User Interface modules (screenshot + explanation)

4.6 Back end development

4.1.1 Database Design models

4.1.2 Tables (if any) or data models CSV file Artff etc.

4.1.3 Code testing

4.7 Deployment methods

4.8 Conclusion and Future work

5 .9 REFERENCE

- This is a minimum of 1 page and Maximum of 2 pages.
- References are the detailed description of resources from which information or ideas were obtained in preparing the Project Report. The details of every references cited in the text, published or unpublished, must be listed alphabetically in this page.
- The APA system of referencing should be used
  Example

REFERENCES

A, R. A., & V, K. R. (2012). Data Mining: An effective tool for yield estimation in the agricultural sector. *International Journal of Emerging Trends & Technology in Computer Science (IJETTCS), 1*(2), 75-79.

Albahar, M. A. (2015). Aspect Oriented Software Engineering. *International Journal of Engineering, Management & Sciences (IJEMS), 2*(4), 29-31.

Armstrong, L. L. (2016). R.E.A.L. Therapy: Rational Emotive Attachment–Based Logotherapy for Families. *The Family Journal: Counseling and Therapy for Couples and Families, 24*(2), 164-173.

Government of the United Kingdom. (1983). *The mental health Act 1983.* London: Government of the United Kingdom.