THE CO-OPERATIVE UNIVERSITY OF KENYA (CUK)

SCHOOL OF COMPUTING & MATHEMATICS

Undergraduate Project Documentation Guide (Proposal & Full)

February 2022 Version

Purpose: This brief guide is meant to provide some information about writing a project proposal and full documentation at the School of Computing andMathematics, The Co-operative University of Kenya. It gives the general format, and highlights the purpose of each section, the required content and gives some pointers.

General guidelines

1. Font: Times New Romans or equivalent in LaTeX
2. Normal Text Size 12 with 1.5 spacing
3. Titles size 14, sub titles size 13 – all **BOLD** or equivalent in LaTeX
4. Paragraph spacing: 6pts After or equivalent in LaTeX
5. Margins: Top, Bottom, Right – 1 inch; Left – 1.5 inches
6. Alignment: Justified
7. Outline numbering – maximum 3 Level
8. Every section must start on a new page.
9. Page Size: A4
10. Page numbering: Bottom centered, with X of Y format.
11. Preliminary pages should use roman numbers
12. Spiral binding for proposal and for final projects
13. Submit two (2) copies of proposal and final documentation to the COD
14. Upload copies of proposal and final documentation through **LMS with Anti Plagiarism report.**

PROJECT PROPOSAL OUTLINE (WRITTEN IN FUTURE TENSE)

Document Section	The purpose	Required Content
Cover Page	Document Identification and ownership, The title for the proposed project should be short, and descriptive, that is, it should be fairly self explanatory	See appendices

Declaration page	This is a signed declaration of ownership by the student and the university supervisor allocated.	Student must indicate full name, registration no. and date. *(See attached sample on Appendices)*
Abstract	A short summary of purpose, methodology, expected result and conclusion of proposed study.	Maximum (250-300) words (less than half a page) – *must be in one continuous paragraph!*
Table of Content	Main headings and subheadings.	Auto generated ToC.
List of Abbreviations	Abbreviations used in the document. The researcher must create a detailed list with all the abbreviations and their meanings in full. A reader can quickly check this section when he encounters an abbreviation.	List of abbreviations and their meanings in full. NB: No use of an abbreviation before it is provided in full at first. Should be alphabetically written and in ascending order
List of Tables	Diagrams drawn in the document.	Auto generated Tables should be captioned at the top.
List of Figures	Tables used within the document.	Auto generated Figures should be captioned at the bottom.
Chapter 1 – Introduction	This chapter gives a brief background about the area of study. It also provides the **problem statement**. It defines the problem and **research objectives**. At the end of the research the researcher will check if he met these research objectives as he/she writes the conclusion.	1.1 Background to the study 1.2 Statement of the Problem 1.3 Objectives (Specific Objectives / Research Questions / Research Hypotheses) 1.4 Significance of the study 1.5 Scope of the study (i.e. defines the system boundary) 1.6 Assumptions 1.7 Limitations and Delimitations (i.e. challenges and countermeasures)
Chapter 2 – Literature Review	This chapter discusses all related information (knowledge) that is available in great detail. The student will survey a portion of the published work that provide context for the current problem. It should also be current Citations must be made	2.1 Introduction 2.2 Related systems (2-3) 2.3 Limitations(Weaknesses of these systems) 2.4 How your proposed solution will handle these weaknesses.

		properly in a consistent way. Use APA referencing style
Chapter 3 – Methodology	In this Chapter, the student should discuss how he/she will carry out the work to meet the project objectives. student should clearly bring out methods and tools to be used, how data will be collected and analyzed(in case project requires data collection and analysis), and equipment Realistic project schedule and budget must be provided by the student.	3.1 Introduction 3.2 Project Design (stating the development methodology, its description and justification of using this methodology.) 3.3 Design Procedures 3.4 System Requirements 3.5 Data collection and Analysis (needs assessment) methods and tools
Appendices: *[e.g., Project Budget, Project Schedule e.t.c]* **References :** *[Use APA style of referencing]*		

FINAL PROJECT REPORT OUTLINE (WRITTEN IN PAST TENSE)

Document Section	The purpose	Required Content
Cover Page	Document Identification and ownership	See Appendices
Declaration page	This is a signed declaration of ownership by the student and the university supervisor allocated.	Students must indicate full name, registration no. and date.
Dedication	[Optional]	
Acknowledgements	Acknowledging various stakeholders that have played a role in accomplishing the task.	
Abstract	A short summary of purpose, methodology, expected result and conclusion of proposed study.	Maximum (250-300) words (less than half a page) – *must be in one continuous paragraph!*
Table of Content	Main headings and subheadings.	Auto generated ToC.
List of Abbreviations	Abbreviations used in the document. The researcher must create a detailed list with all the abbreviations and their meanings in full. A reader can quickly check this	List of abbreviations and their meanings in full. NB: No use of an abbreviation before it is provided in full at first.

	section when he encounters an abbreviation.	Should be alphabetically written and in ascending order
List of Symbols and nomenclature	Symbols used in the document. The researcher must create a detailed list with all the Symbols and their meanings in full. A reader can quickly check this section when he encounters a Symbol.	
List of Tables	Diagrams drawn in the document.	Auto generated Tables should be captioned at the top.
List of Figures	Tables used within the document.	Auto generated Figures should be captioned at the bottom.

Chapter 1 – Introduction	This chapter gives a brief background about the area of study. It also provides the problem statement. It defines the problem and research objectives. At the end of the research the researcher will check if he met these research objectives as he/she writes the conclusion.	1.1 Background to the study
		1.2 Statement of the Problem
		1.3 Objectives
		    1.3.1 General Objective
		    1.3.2 Specific Objectives
		1.4 Significance of the study
		1.5 Scope of the study (i.e. defines the system boundary)
		1.6 Assumptions
		1.7 Limitations and Delimitations (i.e. challenges and counter measures)
		1.8 Definition of Terms

Chapter 2 – Literature Review	This chapter discusses all related information (knowledge) that is available in great detail. The student will survey a portion of the published work that provide context for the current problem. It should also be current Citations must be made properly in a consistent way. Use APA referencing style	2.1 Introduction 2.2 Related systems (2-3) 2.3 Limitations(Weaknesses of these systems) 2.4 How your proposed solution will handle these weaknesses.
Chapter 3 – Methodology	In this Chapter, the student should discuss how he/she will carry out the work to meet the project objectives.	3.1 Introduction 3.2 Project Design (stating the development methodology, its description and justification of using this methodology.)

	Realistic project schedule and budget must be provided by the student.	3.3 Design Procedures 3.4 System Requirements 3.5 Data collection and Analysis (needs assessment) methods and tools

Chapter 4 – System Analysis	This chapter should show the current state of the system the student wish to work on and the new study.	4.1 Detailed analysis of current system using flow charts, DFDs, UML, and Context diagrams, etc.
		4.2 System requirements
		    4.2.1 Functional requirements
		    4.2.2 Non functional requirements

Chapter 5 System Design	Description of the design environment and system components.	Detailed design of the proposed system using tools such as ERDs, DFDs, UML, etc. 5.1 Architectural design 5.2 Database design 5.3 User interface design
Chapter 6 Implementation and testing	Description of the development environment and testing procedures	6.1 Development environment 6.2 System components 6.3 Test Plan (test data, test cases, test results) 6.4 System Testing
Chapter 7: Conclusions and Recommendations	Provides a summary of achievements, lessons learnt, conclusions and any recommendations	7.1 Achievements and lessons learnt (Technical Lessons And Achievements) 7.2 Conclusions 7.3 Recommendations
References	The sources of your literature must be provided in the reference section	Use APA Referencing style
Appendices	Any extra material that is important can be included	User manual Data collections tools Project schedule Project budget Any other relevant document.

Appendix 1: Cover page format

THE CO-OPERATIVE UNIVERSITY OF KENYA (CUK)

SCHOOL OF COMPUTING & MATHEMATICS

PROJECT PROPOSAL *[Proposal Only]*

TITLE OF PROJECT

BY

STUDENT NAME
REGISTRATION NUMBER

SUPERVISOR: *[SUPERVISOR NAME]*

Project *[Proposal/ Report]* submitted in partial fulfillment of the requirements for the award
of the *[Diploma in Information Technology/Diploma in Business Information Technology]*

©MONTH, YEAR (When presented)

Appendix 2: Declaration Page Format

DECLARATION AND APPROVAL

DECLARATION

I hereby declare that this Project *[Proposal/ Report]* is my own work and has, to the best of my knowledge, not been submitted to any other institution of higher learning for any award.

Student Name: (Typed) _____ **Registration Number: (Typed)** _____

Signature: .... **Date:** ....

APPROVAL

This project *[Proposal/ Report]* has been submitted with my approval as the University supervisor.

Supervisor Name: (Typed) _____

Signature: ....**Date:** ....

Appendix 3: References Page Format

REFERENCES

Only literature that is available should be cited. Material not available through libraries, such as personal communications or unpublished data, should be given in text as parenthetical matter. The source of data and date should be included (e.g. Kanali, C. L., Personal communication, 2011). Where possible only significant, published reference should be cited (preferably more accessible source of such publications).

Make use of APA referencing style.

In general, references in text can be cited as follows. For a single author: either Waweru (2000) or (Waweru, 2000). For two authors: either Oyier and Okeyo (2011) or (Oyier and Okeyo, 2011). For more than two authors: either Kanali et al. (2010) or (Kanali et al., 2010). For two or more articles by the same author(s) in the same year, designate them as follows: Kibe (2009a, b) or Kibe et al. (2009a, b).

Referencing should be as follows.

(a) Reference to periodical publications
Williams L A. Use of computer technology by family caregivers of patients undergoing blood or marrow transplants. Biology of Blood and Marrow Transplantation, 2006, 1:10-16.

Brauner N; Schacham M. Identifying and removing sources of impression in polynomial regression. Mathematics and Computers in Simulation, 1998, 48: 75-91.

(b) Reference to textbooks
Blanchard B S, Fabrycky W J. Systems engineering and analysis. New Jersey, Prentice Hall, 1998.

(c) Reference to proceedings
Rigney M P; Kranzler G A. Seedling classification performance of neural network. Paper No. 897523, St Joseph, MI 49085, American Society of Agricultural Engineers, 1989.

The references should be listed in alphabetical order by surnames of authors. Two or more articles by the same author(s) should be listed chronologically; two or more in the same year are indicated by letters, a, b, c, etc. All single-authored articles of a given individual should precede multiple author articles of which the individual is senior author. Entries with the same senior author should be organised by alphabetising surnames of succeeding co-authors and then by year, when the name is repeated exactly.

(d) Reference to website

Schonfeld, E. (2010, May 3). Google throws $38.8 million to the wind [Web log post]. Retrieved May 4, 2010, from http://techcrunch.com

Appendix 4: Appendices Page Format

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APPENDICES

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APPENDIX A: PROPOSED SCHEDULE

Items of Work/Activities	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Conceptualization and Scoping of Project Title	▓											
Proposal writing and submission to DCeL		▓										
System Development			▓									
Project Report writing				▓	▓	▓	▓	▓	▓			
Project Presentation and Submission										▓		
Corrections and final submission											▓	▓

APPENDIX B: TOOL(S) FOR DATA COLLECTION

APPENDIX C: PROPOSED BUDGET

S. No.	Items	Specifications	Quantity	@ Ksh	Amount, Ksh
1.	Printing paper	A4, high quality	5 reams	500	2,500
2.	Printer tonners		2	6,000	12,000
3.	Writing pad	A4, high quality	5	100	500
4.	Transport				10,000
5.	Equipment				15,000

6.	Subsistence		15 days	1,500	22,500
	Total				**62,500**