

ST. PAUL’S UNIVERSITY

**DEPARTMENT OF COMPUTER SCIENCE**

**Undergraduate Project Documentation Guide (Proposal & Full)**

**Purpose:** This brief guide is meant to provide information about writing a project proposal and full documentation at the Department of Computer Science, St. Paul’s University. 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 Department
14. Upload/Submit copies of proposal and final documentation to the lecturer/ **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 |

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| **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. Background to the study   2. Statement of the Problem   3. Objectives (Specific   Objectives / Research Questions / Research Hypotheses)   * 1. Significance of the study   2. Scope of the study (i.e. defines the system boundary)   3. Assumptions   4. 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 | * 1. Introduction   2. Related systems (2-3)   3. Limitations (Weaknesses of these systems)   4. How your proposed solution will handle these   weaknesses*.* |

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|  | 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. | * 1. Introduction   2. Project Design (stating the development methodology, its description and justification of using this methodology.)   3. Design Procedures   4. System Requirements   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. | * 1. Detailed analysis of current system using flow charts, DFDs, UML, and Context diagrams, etc.   2. System requirements      1. Functional requirements   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.   * 1. Architectural design   2. Database design   User interface design |
| **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. | |

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|  | 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. Background to the study   2. Statement of the Problem   3. Objectives      1. General Objective      2. Specific Objectives   4. Significance of the study   5. Scope of the study (i.e. defines the system boundary)   6. Assumptions   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 | * 1. Introduction   2. Related systems (2-3)   3. Limitations (Weaknesses of these systems)   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. | * 1. Introduction   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. | * 1. Design Procedures   2. System Requirements   3. 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. | | * 1. Detailed analysis of current system using flow charts, DFDs, UML, and Context diagrams, etc.   2. System requirements      1. Functional requirements      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.   * 1. Architectural design   2. Database design   3. User interface design |
| **Chapter 6 Implementation and testing** | Description of the development environment and testing procedures | | * 1. Development environment   2. System components   3. Test Plan (test data, test cases, test results)   4. System Testing |
| **Chapter 7:**  **Conclusions and Recommendations** | Provides a summary of achievements, lessons learnt, conclusions and any  recommendations | | * 1. Achievements and lessons learnt (Technical Lessons And Achievements)   2. Conclusions   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**

**ST. PAUL’S UNIVERSITY**

DEPARTMENT OF COMPUTER SCIENCE

**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 *Degree in Computer science/BOBIT/BCIS*

**©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.

1. 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.

1. Reference to textbooks

Blanchard B S, Fabrycky W J. Systems engineering and analysis. New Jersey, Prentice Hall, 1998.

1. 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.

1. 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](http://techcrunch.com/)

**Appendix 4: Appendices Page Format**

**APPENDICES**

**APPENDIX A: PROPOSED SCHEDULE**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Items of Work/Activities** | **Months** | | | | | | | | | | | |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **1**  **0** | **1**  **1** | **1**  **2** |
| Conceptualization and Scoping of Project Title |  |  |  |  |  |  |  |  |  |  |  |  |
| Proposal writing and submission to Department of Computer Science |  |  |  |  |  |  |  |  |  |  |  |  |
| 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** |