Guidelines for Preparation of Project Proposal

IN2901 - Software Development Project

Faculty of Information Technology
University of Moratuwa

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Guidelines for Preparation of Project Proposals

Your project proposal must define the scope of the project and state the proposed methodology for addressing the requirements of the project. It must be prepared based on the General Guidelines listed bellow.

1. General Guidelines

Submission: One copy of the Project Proposal that is prepared as per the following instructions must be submitted to your supervisor.

Length: 4 pages excluding the title page and table of contents.

Paper: A4 – 80 GSM

Lettering: Times New Roman

Printing: A laser quality printing, single sided.

Margins: Left, 20mm; top, bottom, and right, 10 mm.

Sections/sub sections: The proposal to be structured with the Sections listed under the Body of the Proposal given below. Arabic numbering system must be used for numbering of Sections/Subsections.

Tables and Figures: All Tables and Figures must be named with captions, and cited inside the text. *See the sample for using tables and figures (Appendix A).*

Reference and citations: The list of Reference must be arranged in alphabetical order of the name of the first author, and numbered in square brackets. The corresponding number of a reference must be used to cite the particular work inside the text. All items in list of reference must be cited inside the text. *See the sample for reference and citations (Appendix B).*

Page numbering: All page numbers must be centered at the bottom of each page. Roman numbering must be used for the pages before the body of the text. No page numbering for the title page. Arabic numbering must be used for the page numbers of the body of the proposal.

Assembling the Project Proposal: Assemble the following for composing the final documentation. Details of these topics are given below.

- *Cover Page*
- *Title Page*
- *Table of Contents*
- *Introduction*
- *Background & Motivation*
- *Problem in Brief - Scope*

- *Aim & Objectives*
- *Proposed Solution*
- *Resource Requirements*
- *Reference*
- *Appendix*

Cover page: Using appropriate line spacing, print the following information.

- Project Proposal (14pt, bold, centered)
- Level # (12pt, bold, centered)
- Title of the Project (14pt, bold, centered)
- Group name (12pt, centered)
- Faculty of Information Technology (12pt, centered)
- University of Moratuwa (12pt, centered)
- 2009 (12pt, centered)

Title Page: Same as the Cover page. Include the following information with the information given on cover page
Index numbers and names of group members (in a centered table, no borders)
Supervisor Name

Table of Contents: This is a list of Sections and Subsections with the page numbers. Although a project proposal has only few pages, it would be nice to include a table of contents for the proposal. *See the sample for table of contents (Appendix C).*

2. Body of the Proposal

The proposal must be structured with the headings listed below. Note that the names of the headings given below are only a guideline and you are to rename them to reflect your project. All headings must be numbered (12pt, bold), and body of the text in must be in 12pt.

- *Introduction*
- *Background & Motivation*
- *Problem in Brief*
- *Aim & Objectives*
- *Proposed Solution*
- *Resource Requirements*
- *Reference*
- *Appendix*

Introduction

This must give a brief description about the problem area, the problem that you address, the importance of the problem, technology to solve the problem and the nature of the solution you propose.

Background & Motivation

This is one of the most important sections of a project proposal, and this section finally points out the problem that you address in the project. If the problem is not worth addressing, then there is no project! Here you should describe the background of the problem domain you selected. And also write why the problem is so important to solve. Whenever possible, support the importance of the problem with some reference key persons/sources. Also explain why you are motivated, and your capability to address the problem. At the end of this section, you may have pointed out several issues, but arguably identify exactly one problem to solve.

Problem in Brief

You may rename the heading to reflect the problem that you address. For example, the heading can be: Major issue – Communication gap. Since the previous section pointed out several problems, here briefly write the specific problem that you are going to address.

Aim & Objectives

Aim: Write a sentence similar to 'The aim of this project is to develop a system for addressing <your problem> with the use of <selected technology>'.

Objectives: The following can be the most general objectives of any project, but you can define more specific objectives to suit with your project
- *Study* of the <problem domain>
- Study of technologies that can solve the problem
- Design and develop a system for solving the problem
- Evaluation of the proposed solution
- Preparation *of final documentation*

Proposed Solution

Here you may give a better heading to reflect your project. For example, heading can be 'Using Expert Systems for Student counseling', instead of the generic title Proposed Solution. This is also one of the major sections of the proposal. The acceptance of the proposal is largely determined by the quality of this section. In this section, you should describe the solution as detailed as possible. As such you should write about, technology adapted, nature of solution (input, output, process, users), feasibility of implementation of the solution, your capability to solve the problem, and availability of resources. If relevant, add a figure for this section.

Resource Requirements

This is only a list of resources such as Computer with 512MB RAM and 2GHz or more processing power, Linux OS, Internet connectivity, Oracle Database, etc. If you can find some resources on your own, it is a plus point, and you should clearly indicate it in this section.

Reference

This is the list of reference. A sample for the list of reference is given below in this document. Note all what you listed under list of reference must necessarily be cited inside the body of the text. In project proposal, references are generally cited in the sections of Introduction and Background & Motivation.

Appendix - Plan of Action

It is better to include a plan of actions as an appendix. This may be cited in the section on Proposed Solutions. This is a list of activities together with intended dates for their completion. In order to decide on the time scale, you must refer to the project duration prescribed by the Faculty. The list of activities must be defined as per the Objectives of the project.

Whenever there is a figure/table, you must cite it as follows.

…………………….The top level architecture of the proposed system comprises of there modules, namely, Web client, Inference Engine, and Expert Systems KB sever. Figure 3 shows the interaction among these modules.
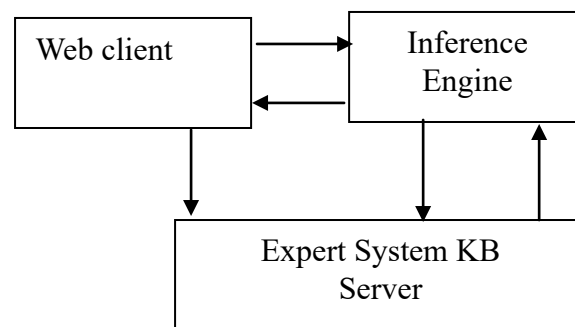

Figure 3: Top Level Architecture of the Proposed System

Table 1: Web Client

Client Name	IP

Your writing must be supported by some sources of information. Those information are listed under a title called Reference at the end of the body of the proposal. The items in the list of reference are referred inside the body of the text, and they are called citations. There are various reference and citation styles, and you must use the following style in the project proposal.

Below is an example about citations.

…………………..State university system has been able to accommodate only a 15% of A/L qualified students under the free education system in Sri Lanka [2]. However, there will be a demand for 5,000 IT graduates annually by the year 2010 [1, 2].

Below is how list of reference are prepared in alphabetical order.

Reference

[1] Perera, A. B. (2003), *Applications of ontological modeling,* Journal of Ontology, 3(2), pp 120-145

[2] Silva, A (2004), *University Statistics,* University Grants Commission

[3]

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