CAPSTONE PROJECT PROPOSAL OUTLINE AND CONTENT

Capstone Project 1 Content

Title Page

If the title of the Capstone project is an acronym, provide a line description and the said acronym. This one-line description provides the reader a general idea of what the capstone project is all about.

Example: Intelligent Tutoring for C Programming (ITS-C)

Abstract

From 150 to 200 words of short, direct and complete sentences, the abstract should be informative enough to serve a substitute for reading the capstone project itself. It states the rationale and the objectives of the research. Do not put citations or quotes in this section. Avoid beginning the abstract with “This paper/document/study/project/..”

The abstract should include at least five keywords that are relevant to the capstone project. For example:

Keywords: agent, collaboration, communication, multi-agent systems, and distributed artificial intelligence

CAPSTONE PROJECT OUTLINE AND CONTENT

Title page

Approval Sheet

Dedication

Acknowledgement

Abstract

Table of Contents

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List of Tables

CHAPTER 1 THE PROBLEM AND ITS BACKGROUND

Project context, Crisis Situation

Introduction/Overview of the Current State of Technology

This section gives reader an overview of the specifics technology or field in the international or local setting. The information regarding the technology or field should be contemporary and not based on the outdated sources. Discussion must be technical or detailed.

This section has end with a discussion on the problems faced by or that still exist in the specific technology or field (e.g. limitation or existing software or algorithms). The problem statement would lead to the research objectives.

Objectives of the study

General objective

This section states the overall goal that must be achieved to answer the problem.

Specific objectives

This must subsection is an elaboration of the general objectives. It states the specific steps that must be undertaken to accomplish the general objective.

These objectives must be *specific, measurable, attainable, realistic, tine-bound(SMART).*

Scope and Limitations

This section discusses the boundaries (with respect to the objectives) of the research and the constraints within which research will be developed. It includes here the technicality of the project, details of technologies to be used and how the project will work.

Studying a particular programming language or development tool (e.g. to study Windows/Objectives-Oriented/Graphics/C++ programming) to therefore, mist be included here.

Significance of the Study

This section explains why research must be done in this area. It rationalizes the objective of the study with that of the stated problem. Avoid including her sentences such as "This study will be beneficial to the proponents/department/college" as this is already an inherent requirements of all Capstone projects. Focus on the research's contribution to the Information Technology Field.

Definition of Terms

This section defines the different operational found in the documentation.

CHAPTER 2 REVIEW OF RELATED LITERATURE

This section discusses the features, capabilities, and limitations of existing research, algorithms, or software that are relevant and related/similar to the Capstone Project. The reviewed works and software must be arranged either in chronological order, or by area (from general to specific). Observe a consistent format when representing each of the reviewed works. In this section, the minimum number of pages is 15 and maximum of 30.

Related Literatures/Related Studies

This section includes only those concepts that you feel will be needed. ***Thematic organization of literature shall be followed.*** DO NOT COPY the whole source material. Use the topics stated in the Capstone project Proposal Research Objectives as a guide in determining the contents of this section.

Synthesis of the Reviewed Literature and Studies

This section relates the related Literatures and studies to the Capstone project.

CHAPTER 3 TECHNICAL BACKGROUND

Environment (only for org-specific capstone project)

- Locale

- Population of the Study
- Organizational Chart/Profile
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Requirements Specifications

- Operational Feasibility
  - Fishbone Diagram
  - Functional Decomposition Diagram
- Technical Feasibility
  - Compatibility checking (hardware / software and other technologies)
  - Relevance of the technologies
- Schedule Feasibility
  - Gantt Chart
- Economic Feasibility
  - Cost and Benefit Analysis
  - Cost Recovery Scheme
- Requirements Modeling
  - Input
  - Process
  - Output
  - Performance
  - Control
  - Either of the following two (2) or combined, whichever are applicable:
    - Data and Process Modeling
      - Context Diagram
      - Data Flow Diagram
      - System Flowchart
      - Program Flowchart
    - Object Modeling
      - Use Case Diagram
      - Class Diagram
      - Sequence Diagram

- Activity Diagram

- Risk Assessment/Analysis
- Design
  - Output and User-Interface Design
    - Forms
    - Reports
  - Data Design
    - Entity Relationship Diagram
    - Data Dictionary
  - System Architecture
    - Network Model
    - Network Topology
    - Security
- Development
  - Software Specification
  - Hardware Specification
  - Program Specification
  - Programming Environment
    - Front End
    - Back End
  - Deployment Diagram
  - Test Plan
- Testing
  - Unit Testing
  - Integration Testing
    - Compatibility Testing
    - Performance Testing
    - Stress Testing
    - Load Testing
  - System Testing
  - Acceptance Testing (must be done after the Oral Defense)

CHAPTER 4 METHODOLOGY, RESULTS AND DISCUSSION

This section lists and discusses the research design used and specific steps and activities that will be performed by the proponents to accomplish the project. The discussion covers the activities from Capstone Project 1 to Capstone Project 2.

Examples of activities include inquiry, survey, research, brainstorming, canvassing, and consultation, review, interview, observe, experiment, design, test, document, etc.

The methodology also includes the following information:

- Who is responsible for the task
- The resource person to be contacted
- What will be done
- When and how long will the activity be done
- Where will it be done
- Why should be activity be done

Description of the Prototype

Process Model Used

Implementation Results

- Project Implementation Checklist
- Implementation Contingency
- Infrastructure/Deployment

CHAPTER 5 RECOMMENDATIONS

REFERENCES

List of the books referred to in a scholarly work.

APPENDICES

Appendices may include the following:

Relevant Source Code

Evaluation Tool or Test Documents

Sample Input and Output Reports

User Guide

Process/Data/Information Flow

Screen Layout

Test Results

Sample Generated Output

Pictures showcasing data gathering, investigation, deployment

CURRICULUM VITAE

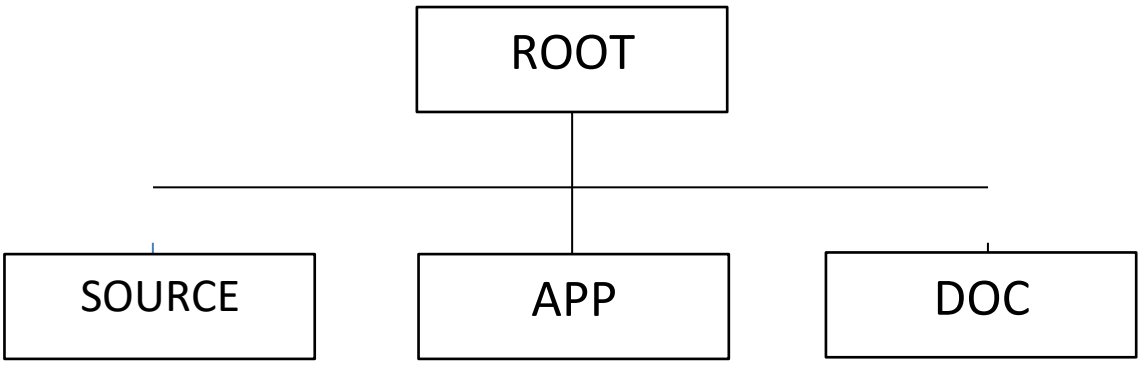
Final Deliverables

If a capstone project group received a verdict of PASS WITH MINOR REVISIONS, this does not guarantee the group that they have passed the capstone project**. They are required to accomplish all revisions given by the panelists. Furthermore, the group has to submit all the requirements imposed by the capstone project coordinator**. If any of the requirements is not received by the capstone project coordinator with the condition that the software is running perfectly will automatically receive a FAIL mark for PROJECT 2.

The following are the guidelines and requirements for PROJECT 2 final deliverables:

All capstone project groups must submit the following:

- Two (2) hardbound (ROYAL BLUE color) copy of the capstone project documentation. This copy must be original
- The main document must be printed on a white bond paper, substance 24, using 12-size font (Arial), double-spaced.
- Include in the main capstone project document the Approval Sheet.
- The source codes to be printed (2/3 of the whole codes)
- The front cover of all volumes should follow the same format as the capstone project title page.
- The side cover of all volumes should contain the capstone project title, year of completion and the surname of the proponents.
- Two (2) properly labeled CD-copies of the source codes capstone project documentation (including user's manual), defense presentation, and executable files.
- The CD(s) must be subdivided into the following directory structure:



Where:

[SOURCE] contains the source code (*.CPP, *.H, *.JAVA, *.JSP, etc.)

[DOC] contains the capstone project documentation and is subdivided into main document (<main>), user's manual.

[APP] contains the executable file (*.EXE) and its necessary components, including DLL (*.DLL) help files (*.HLP), data files (*.DAT, *.TXT), components actives, etc. needed to execute your software.