IT108 – Project Guidelines

1. The project is an individual work or by pair of two.
2. The project must be a documentation of your information system in Computer Programming 1 (Java Programming).
3. You can use tools like Microsoft Office or Google Docs.
4. The project is due on ***December 16, 2024***.
5. Schedule of Final Project Panel Defense will be on ***December 16, 2024, onwards.***
6. No late work will be accepted.
7. Marks will be awarded for Completeness of the project documentation.
8. Any images downloaded from the Internet should be given credence.
9. Project materials of each student cannot be shared with others. The results will be withheld for further investigation if any identical projects are found.
10. Proper backup has to be maintained. You should not copy the softcopy of projects into any of school computers to avoid any identical pairs of projects.
11. You can use alternative storage media like internet cloud services.
12. The school will not be responsible for any missing storage media due to the student's negligence.
13. Please refrain from using AI tools to generate any content (text, video, audio, images, code, etc.)
14. Passing off any AI generated content as your own (e.g., cutting and pasting content into project content, or paraphrasing AI content) constitutes a violation of BLUE PHENIX academic integrity policy. If you have any questions about using generative AI consult your trainer.

Tools Allowed

1. Students are to use tools that they have learned in the course.
2. Students may use alternative tools approved by the lecturer.

Project Submission

1. Soft copy of all raw and processed files must be submitted.
2. Student should **print the documentation** with a front page that follows the format.
3. The printed final project documentation must be in **soft bind / ring bind** (*see annex 2*).
4. Submit the printed documentation on the said due date.
5. Burn all your files in a CD/DVD.
6. Write your name on the CD/DVD and attached it at the back of your project documentation.

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Project Phases and Deliverables

Phase 1: Project Proposal (Documentation)

This phase is focused on planning and conceptualization. In this phase, students will identify the information system they plan to develop and outline the project's goals and scope.

Contents of the Proposal Document: (*See Annex 1 below*)

1. **Introduction**
2. **Statement of the Problem**
3. **Overview of the Current State of Technology:**
4. **Objectives:**
    - **General Objective**
    - **Specific Objectives**
5. **Scope and Limitations:**

Phase 2: System Analysis and Design (Documentation + Initial Technical Work)

This phase involves in-depth system analysis and designing the technical structure, including database schema design and initial system architecture. Key elements include:

1. **Feasibility Study:**
    - Evaluate the feasibility of the project from technical, economic, and operational perspectives.
2. **Requirements Specification:**
    - **Functional Requirements:** List the essential functions the system must perform.
    - **Non-Functional Requirements:** Include performance, security, scalability, and other quality attributes.
3. **Use Case Diagrams & Descriptions:**
    - Provide use case diagrams to illustrate how users will interact with the system, including detailed descriptions of each use case.
4. **Entity-Relationship Diagram (ERD):**
    - Design the database model using ER diagrams that represent the relationships between the data entities.
5. **System Architecture:**
    - Provide a diagram showing how different components of the system will interact (i.e., how the front end will connect with the backend and database).

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Phase 3: System Development (RDBMS + Programming)

This phase includes the actual coding and development of the system using Java for the front end and RDBMS for the back end. Key deliverables include:

1. **Database Creation:**
    - Implement the database based on the ERD designed in Phase 2. Ensure that all tables, relationships, and constraints (primary keys, foreign keys, etc.) are properly created.
2. **System Implementation:**
    - Code the system using Java programming. The system should meet the functional and non-functional requirements identified in Phase 2.
3. **Basic Features:**
    - Login/logout functionality
    - CRUD (Create, Read, Update, Delete) operations for core system entities
    - Input validation
    - Basic reporting features (if applicable)

Phase 4: Testing and Debugging (IT Project Management + Programming)

In this phase, students will rigorously test the system to ensure it functions as expected and meets the objectives outlined in Phase 1.

1. **Test Plan:**
    - Prepare a testing plan that outlines different test cases, including input data, expected output, and actual results. Identify functional and non-functional testing scenarios.
2. **System Debugging:**
    - Fix any bugs or issues found during testing.
3. **User Acceptance Testing (UAT):**
    - Get feedback from potential users and make necessary adjustments.

Phase 5: Project Documentation and Finalization (IT Project Management + System Manual)

The final phase involves completing the necessary documentation for the project, which includes both technical and user manuals. Deliverables include:

1. **User Manual:**

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- A detailed guide for end-users, explaining how to operate the system, including screenshots and step-by-step instructions for each function.

2. **Technical Documentation:**
   - Include all necessary technical details such as system architecture, database schema, and API documentation (if any).
3. **Final System:**
   - Deliver the fully functional system that is ready for deployment.
4. **Final Presentation:**
   - Prepare a formal presentation covering the entire project lifecycle: from problem identification and analysis, through system design, to system development and final testing.

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Annex 1

Introduction

Introduce your project here with a good opening line. You can start by comparing the state of businesses in the old days, on how they handle transactions, on advertising their products, and on interacting with their customers. Afterwards, you can insert information about the state of the modern era. Show how technological advancements had been a great help in our society today.

In the second paragraph, you can narrow the topic to the kind of project you're working on. If you're building a web app, explain how people nowadays had been dependent on it. You can also tell how not having a website compromises a company's edge in the business competition. If you're building a mobile app, tell how these apps have changed our lives.

In the third paragraph, tell additional information related to the things you have mentioned on the previous paragraph. Tell other benefits of using the kind of project you were proposing. State examples, scenarios. Then formally mention your exact project proposal in the last sentence. Add another sentence that will serve as a proof that your project is just like what you have said in the previous sentences.

End the introduction section by generalizing the benefits that your type of project will provide to your client(s).

1.1. Statement of the Problem

Start this section by introducing your chosen client: what kind of business/organization they are, what specialization they are focusing on. Then tell the other basic information such as when they had started, who is the head or the one in charge, and where it is located.

Then formally state their main problem in the first sentence of the second paragraph. Don't forget to mention the source of your information in sentences like, "According to Mr./Ms. X, owner of Company ABC, their business only [statement of the problem]."

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Mention another minor problem of your client that is related to the main problem. Only mention the problems that are of interest and are related to your project proposal. Scrap out any other irrelevant information.

Explain why it is important why this problem must be solved. What are the risks? What will happen if they are not aided in this? Will they lose more customers? Will other businesses surpass them? All information included in here must come from a formal interview.

1.2. Overview of the Current State of Technology

This section is somewhat similar from the previous section, but only focuses on the current state of technology of your client. Were they only using Microsoft Excel as a means of record keeping? Were they still using logbooks in tracking the ins and outs of the people in their premises?

Were they only using social media in advertising their business? How about sending of notifications and special promos? Do they only use fliers? SMS? Email?

Make some comments on their current state of technology here. Things such as whether what they're currently using were too costly or tiring or both. Talk about some of their business flows here too, such as their scheduling or booking process. Do they only entertain walk-in customers? Or do they also employ some online alternatives such as making use of Google Forms?

Lastly, state here some comments from the client on the aforementioned things. Are they aware about the advantages and disadvantages of their current state of technology? Do they wish that someone might help them upgrade their processes in the means of using softwares?

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1.3. Objectives

1.3.1. General Objectives

- The main objective of the study is to develop [Title of your Capstone Project] for [Client/Organization name]

Write a paragraph here explaining why your capstone project is the best solution for the stated problems of your client. How can it be done generally?

1.3.2. Specific Objectives

- To create a [state a software module / interface / major part of the system] which has a function for [state which usage].
    - [additional information stating why this is the chosen specific objective].
- To create a state a software module / interface / major part of the system] which has a function for [state which usage].
    - [additional information stating why this is the chosen specific objective].
- To create a [state a software module / interface / major part of the system] which has a function for [state which usage].
    - [additional information stating why this is the chosen specific objective].

1.3.3. Scopes and Limitation

Back End Scope

- Module 1 - This is where [explain the purposes of this module].
- Module 2 - This is where [explain the purposes of this module].
- Module 3 - This is where [explain the purposes of this module].
- Module 4 - This is where [explain the purposes of this module].
- Module 5 - This is where [explain the purposes of this module].

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Front End Scope

- Module 1 - This is where [explain the purposes of this module].
- Module 2 - This is where [explain the purposes of this module].
- Module 3 - This is where [explain the purposes of this module].
- Module 4 - This is where [explain the purposes of this module].
- Module 5 - This is where [explain the purposes of this module].

LIMITATIONS

- Limitation 1
  - A brief explanation why this is a limitation of the project.
- Limitation 2
  - A brief explanation why this is a limitation of the project.
- Limitation 3
  - A brief explanation why this is a limitation of the project.

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ANNEX 2


Masters
BOOKBINDING
BOOKBINDING IN THE 21st CENTURY
An investigation into the changes in the industry and how Print and Marketing Agencies have taken over as the Primary source of business
by
Roger Masters
Dissertation submitted to the London College of Printing in partial fulfilment of the requirements for the Degree of Master of Arts in Bookbinding
February 2009


EFFECTS OF THE
QUALITY