

Faculty of Applied Sciences  
Bachelor of Science in Computing

**COMP490 Final Year Project  
Final Report**Academic Year 2022/23

|  |  |
| --- | --- |
| Your project title | |
|  |  |
| Project number: | Your project number |
| Student ID: | Your student ID |
| Student Name: | Your name |
|  |  |
| Supervisor: | Your supervisor |
| Assessor: | Your assessor |
|  |  |
| Submission Date: | Submission date |

Declaration of Originality

I, [your name], declare that this report and the work reported herein was composed by and originated entirely from me. This report has not been submitted in any form for another degree or diploma at any university or other institute of tertiary education. Information derived from the published and unpublished work of others has been acknowledged in the text and a list of references is given in the bibliography.

[Your signature]

[Date of signature]

Abstract

This template file provides the Word styles for writing the Final Year Project.

Text highlight in green are instruction or hints. Text highlight in gray are sample text to demonstrate formatting. The following paragraph is an example.

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

There are also some placeholders highlight in red. Change them to your own information, e.g. your name and project title.

In any submitted report, you must delete or replace all the colour text.

Acknowledgement

Write your own acknowledgement

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# Introduction

Introduction must include the following:

* Background and motivation. Problem. Related works
* Project description
* Objectives
* Main tasks

Refer to the Writing Guide and the Writing Workshop for more detail on the content requirement for each chapter.

## Objectives

One paragraph to state the aim or goal of the whole project. Then break down the goal into 4-6 SMART objectives.

The objectives of this project are:

* Sample objective 1
* Sample objective 2

## Risk Assessment

Introduce the main risks of your project in this intro paragraph

Table 1: Table of prioritized risk

|  |  |
| --- | --- |
| Priority | Risk Identifier and Description |
| 1 | Risk 1: short description |
| 2 | Risk 2: short description |
| 3 | Risk 3: … |
| 4 | Risk 4: .. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Probability** | High |  |  | Risk 1 |
| Medium |  | Risk 3 | Risk 2 |
| Low |  |  |  |
|  |  | Low | Medium | High |
|  |  | **Impact** | | |

Figure 1: Probability impact matrix before proposed solution

## Summary

The summary should be finished like this: This report is organized as follows: Chapter 2 introduces the background of our work. Chapter 3 presents our design approach. Chapter 4 shows the implementation details….

# Background and Related Work

In this chapter, you provide background information for readers to help them understand your project. There may be more than one sections on background domain.

This chapter also provides detail about related work. In chapter 1, you should have mentioned some related works and explain how your project is related to them when you discuss relevancy. If you want to provide detail of related works, include them in this chapter.

Call this chapter “Background” if all related works have been described in Chapter 1.

## Domain 1

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

## Domain 2

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

### A Subtopic in Domain 2

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text. A sample list below:

* Sample list item
* Sample list item

### Another Subtopic in Domain 2

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text.

## Related Work

Give a brief description of related works. May be omitted if enough detail of related works are already covered in Chapter 1.

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

# Design Approach

After formulating a problem in previous chapters, you provide detail on how you solve the problem in the next two chapters. You should accomplish the following in Chapter 3 and Chapter 4:

* Provide sufficient information on how the project is accomplished. There should be enough detail for others to replicate your work.
* Perform detailed analysis of problem and methodical design.
* Exhibit analytical thinking. Compare alternatives in design and justify decision. Be aware of any shortcomings in design and methodology.

The required content in the two chapters depends on the nature of your project and the preferences of your supervisors. In general, Chapter 3 describes high-level ideas of the solutions, whereas Chapter 4 covers in detail how you implemented your idea, with emphasis on the key problems you have solved.

For development project, Chapter 3 is usually named “Design Approach”. You should elaborate your idea for solving the problem, with all the details of software analysis and design. In general, you should include the following:

* Requirement analysis – describe what the software system does
* Architecture – e.g. browser, mobile device, web server, app server, database server
* Use appropriate modelling tools and techniques (e.g. ER diagram, UML). Justify your design (e.g. discuss the implication and constraints, give reasons for making choice)

For research project, describe in detail how you carried out the experiments to verify your idea, and how your experimental data is obtained. The collected data should be adequate for verifying the hypothesis. You should include theoretical analysis (e.g. mathematical derivation, algorithm analysis) and well-formulate hypothesis to confirm / refute by the experiments.

## First Topic

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

## Second Topic

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

# Implementation

For development project, explain how you *implement* the algorithm in a specific development platform. You may include some programming code, but show only the challenging or more interesting ones. Some cases that are worth of explaining are:

* Code pieces that are especially critical for correct system operation
* Non-standard, innovative way (algorithm, data structure) to solve a problem

Similarly, you may explain system setup and configurations that are critical for successfully implementation of your system. Other things you can include in this chapter:

* Explain choice of programming language, platforms and tools (including software toolkits or libraries)
* Unforeseen problems in implementation, and how you overcome them.

For research project, describe in detail about the implementation of the experiments/algorithms. This may include some programming code, hardware/software setup, data modelling, configuration details, choices of parameters, testing environment.

## First Topic

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

## Second Topic

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

# Results and Discussion

Chapter 5 provides detail of the project outcome. There is usually factual description of the software / hardware developed or experiment results. You may need to substantiate the quality of the results with software / hardware testing or statistical verification.

In addition, you have to evaluate the significance of the project outcome. First, you should discuss whether or not the project outcome meets the project objectives and provide evidence to defend your answer. You may also want to point out the contributions on a larger context, and compare your system with existing works. You can also discuss limitations. You should exhibit **critical thinking** in these discussions.

Sample text sample text Sample text sample text Sample text sample text Sample text sample text. Sample text sample text Sample text sample text, Sample text sample text Sample text sample text.

# Conclusion and Further Work

Conclude your work by stating the contributions and their significance in larger context. It should do the following.

* Summarize the main contributions of your work, and how it fulfilled the objectives. If applicable, restate the hypotheses and describing how the observed results met those expectations.
* Describe how your work may contribute to existing works in the field. How does your work fit in and support existing work in the field?
* Point out ways to extend your work, or how to overcome limitation of your work

Some questions you can try to answer as further work are as follows: Should somebody else follow up along the lines of your work, what would you recommend to do next? In other words, what would be a good topic or topics for a new project related to this work? Can your work be applied in other areas? What are the limitations?

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Appendix A. Project Management

Gantt chart, program plan

Appendix B. Reflection

Reflect on the progress of the yearly project. Can use first person pronoun to write.

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