UNIVERSITY OF PERADENIYA

DEPARTMENT OF COMPUTER ENGINEERING



CO421: FINAL YEAR PROJECT I

Project Title

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May 12, 2016

Abstract

State the problem, motivations, and objectives concisely. Summarise methods used and results that you obtained. Highlighting key contributions. Limit to one short paragraph.

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1. Introduction

State the problem and your motivations for exploring it. What is its theoretical and/or practical importance in wider context?

Guide to contents of the rest of the report.

1.1. Scope

State overall project goals. Clearly define the limits of your intended solution.

1.2. Objectives

Specify functional and/or architectural requirements of the solution. Do you have unique requirements in comparison to previous explorations of the problem?

2. Background

Explain relevant concepts [1] with appropriate citations. Either provide definitions for all technical jargon here or in a separate glossary.

2.1. Related work

Categorise existing approaches to the problem [2] in literature. Split into thematic subsections if necessary. Contrast previous studies with yours, instead of just quoting paper abstracts!

3. Methodology

3.1. System Decomposition

Decompose the system into components and describe each one. Illustrate data and control flow interactions between components using suitable notation. Opt for standard notations whenever possible, and explain any non-standard notation used.

3.2. Design Rationale

What considerations drove system design choices? What are the trade-offs? Were alternative solutions considered?

4. Implementation

Details of data structures and schemata, file, protocol and packet formats used in the implementation. Cite relevant standards [3] such as RFCs [4].

Describe the use of third-party components and tools. Do not dwell on technology choices such as IDE, implementation language, and database.

Explain implementation challenges, optimisations attempted etc. Illustrate important work-flows in your system with screenshots.

4.1. Verification and Test

Describe behavioural specifications, contracts, assertions, unit and integration test suites for verifying correct operation of the system.

5. Evaluation

What system attributes are you evaluating? Why are they important? Precisely describe experiment set-up and measurement methodology.

5.1. Results and interpretation

Present experimental data in tables and graphs. Label graph axes with appropriate units and scale them so they are legible in print.

Compare results obtained with a baseline, such as the ideal case, or naive solution. Explain any deviations between outcome expected vs. trends in actual data.

6. Conclusion

Present an honest appraisal of the success of your approach to the problem. What are its limitations? Highlighting challenges overcome in solving the problem and key results obtained.

Describe what you learnt in the course of the project.

6.1. Future work

What improvements are possible with the benefit of hindsight? Propose potential extensions to your solution or alternative explorations of the problem.

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A. Glossary

Optional glossary of technical terms.

B. Project artefacts

Optional appendix detailing the experimental setup needed to reproduce your work. Add further appendices as required.