Computer Science Tripos – Part II – Project Proposal

How to write a dissertation in LaTeX

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Introduction

The problem to be addressed.

Many students write their CST dissertations in LaTeX – and spend a fair amount of time learning just how to do that. The purpose of this project is to write a demonstration dissertation that provides a starting point to show how it is done.

This core proposal document will be augmented by a separately-printed cover sheet at the front and a resource form at the end. Additional sheets for risk assessment and human resources may also need to be included.

This document will elaborate much of the material that is summarised on the additional sheets.

Starting point

Describe existing state of the art, previous work in this area, libraries and databases to be used. Describe the state of any existing codebase that is to be built on.

I am already able to write prose using the English language. I have an online dictionary, etc.

Resources required

A note of the resources required and confirmation of access.

For this project I shall mainly use my own quad-core computer that runs Fedora Linux. Backup will be to github and/or to an SVN repository on an external hard disk that is dumped to writable CD/DVD media. I have another similar computer to hand should my main machine suddenly fail. I require no other special resources.

Work to be done

Describe the technical work.

The project breaks down into the following sub-projects:

1. The construction of a skeleton dissertation with the required structure. This involves writing the Makefile and making dummy files for the title page, the proforma, chapters 1 to 5, the appendices and the proposal.

2. Filling in the details required in the cover page and proforma.

3. Writing the contents of chapters 1 to 5, including examples of common LaTeX constructs.

4. Adding a example of how to use floating figures and "encapsulated PostScript" or PDF diagrams.

Success citeria

Describe what you expect to be able to demonstrate at the end of the project and how you are going to evaluate your achievement.

The project will be a success if I have a completed dissertation with the correct chapter titles and I have achieved my other success criteria, which are to blah . . .

Possible extensions

Potential further envisaged evaluation metrics or extensions.

If I achieve my main result early I shall try the following alternative experiment or method of evaluation . . .

Timetable

A workplan of perhaps ten or so two-week work-packages, as well as milestones to be achieved along the way. Provide a target date for each milestone.

Planned starting date is 16/10/2011.

1. **Michaelmas weeks 2–4** Learn to use X. Read book Y. Read papers Z.

2. **Michaelmas weeks 5–6** Do preliminary test of Q.

3. **Michaelmas weeks 7–8** Start implementation of main task A.

4. **Michaelmas vacation** Finish A and start main task B.

5. **Lent weeks 0–2** Write progress report. Generate corpus of test examples. Finish task B.

6. **Lent weeks 3–5** Run main experiments and achieve working project.

7. **Lent weeks 6–8** Second main deliverable here.

8. **Easter vacation:** Extensions and writing dissertation main chapters.

9. **Easter term 0–2:** Further evaluation and complete dissertation.

10. **Easter term 3:** Proof reading and then an early submission so as to concentrate on examination revision.