Master of Computer Science

Guidelines for Project Interim Report

MCS3101 – Individual Project

18th August, 2016

The interim report should be submitted to the Academic & Publication Branch of the UCSC. The interim report aims to ensure that you understand the project objectives, have mastered the relevant literature, have conceptualized or designed your solution (or initial model) and have a realistic time plan. Along with the interim report you should submit the duly filled and signed Interim Report Submission Form separately at the time of submission of your interim report. A hard copy of the interim report should be submitted to the Academic & Publication Branch of the UCSC and a soft copy of your report should be submitted to the given link in the PG VLE.

Since all of you are doing projects in quite diverse research fields it is impossible to define a concrete structure or template which fits with all projects. Hence, it is up to the student and his/her supervisor(s) to discuss and define the final structure/template of the report. However, as a norm, we can expect some of the common Chapters/Sections/etc. which are typically included in a this form of a report. Hence, below given formatting instructions and report structure have been shared with you as a guideline for the report.

Basic Formatting Guidelines

Cover

The interim report should be spiral bound. It is NOT necessary to laminate the cover page or include plastic cover sheets. The title, the author's name, index number and the year of submission should appear in the front cover. Templates for these pages will be available on the PG VLE.

Paper

Each copy of the report shall be on good quality A4-sized clear white paper having at least 80 gsm. Printing should be done on both sides of the paper.

Font

The general text should be in 12 point Times New Roman. Chapter headings should be in 16 point size and any other title should be in 14 point size.

Line Spacing

The typing should be with a line spacing of 1.5. Candidates may choose an appropriate spacing for the appendices and it should appear after the references.

Margins

Top, right and bottom margins should be equivalent to 2 cm. The left margin should be 3 cm.

Pagination

Please note the quality of report content to be more important than its number of pages. Therefore you are encouraged decide on the most important information (which would benefit the readers) to be provided in your report, avoiding any unnecessary repetition of detail.

Pages should be numbered consecutively throughout the report. Preliminary pages (first page, cover page and title page) should not be numbered. Starting with statement of declaration, abstract, acknowledgements, table of contents, list of figures, list of tables and list of abbreviations that precede the Preliminary pages should be numbered with lower case roman numerals beginning with i for the page that contains the statement of declaration. Number the main text with 1, starting with the Chapter 1. All

page numbers should be placed on the bottom (halfway between the last text line and the bottom edge of the paper).

Report Structure Guidelines

There is no single report structure applicable to the wide range of projects undertaken by students. The example structure given can be adapted in your report. Before diverging significantly from the given structure, note that many successful reports and scientific papers have a structure similar to this.

In general, all reports should be divided into a series of numbered sections, each with appropriate titles. You may consult your supervisor/ project coordinator if there are any issues regarding the structure of the report. The following pages are compulsory for your thesis:

First Page

The first page format and the contents are given in the PG VLE (Masters_Project_First_Page). Please use this page as your first page of the thesis.

Cover Page

The cover page should include the full title of the dissertation, the author's name with initials and the year of submission. A template of a Cover Page is available in the PGVLE.

Table of Contents

This should list all the chapters, sections, and subsections of the report giving the page number on which each starts. You are required to use the word processor's facility for generating table of contents rather than typing titles and page numbers. A list giving the number, title, and the page of each figure used in your report should be provided. You are required to use the word processor's facility for generating List of Figures

List of Tables

A list giving the number, title, and the page of each table used in your report should be provided. You are required to use the word processor's facility for generating the list of tables.

List of Abbreviations

If abbreviations are used in the thesis, a list should be provided.

Chapter 1: Introduction

The introduction chapter should provide the overview of the project in a way that motivates the reader. It is very important to define the problem clearly and briefly. The introduction can also include the motivation behind the project. The objective(s) of project together with the scope must be described clearly in this chapter. This chapter puts the work into context. Having read it, the reader should be left in no doubt as to:

- The topic area to which the work applies
- Why the work is being done
- What else has been done in the area and by whom
- How the author proposes to tackle the problem.

The introduction chapter shall contain sections such as Motivation, Statement of the problem, Aims and Objectives, Scope, Structure of the thesis. Students should include expected contribution/novelty of the research/application as well.

It is common to end this chapter with a brief overview of each of the subsequent chapters of the report.

Chapter 2: Background

This chapter should give essential background information with references to published material in research papers, URLs, magazine articles and similar. Depending on the type of the project, this chapter includes a critical review of similar research. You are encouraged to refer web on how to review literature (should avoid standard text book material such as definitions etc.).

A literature review: A survey of existing similar systems, related work could be provided in this chapter. A good literature survey should demonstrate your awareness and understanding of the background literature to your topic. It should begin by setting the proposed work in a wide context, and progress to a more detailed account of the most relevant work in the area, taking care to include some up-to-date references. Reviewing the literature can help to identify questions and issues that have not yet been answered, ideally questions that will be addressed through your project. It may also be appropriate to incorporate criticisms of previous work, although you need to take care here that your criticisms do not reflect a lack of understanding.

You are encouraged to refer web on how to conduct "literature review" and writing style. You should not just provide a list of references followed by a short summary of each of them. Instead the review should be organized and structured in a meaningful way, and the themes and relationships between the references identified. You should expect to redraft the review several times in order to arrive at a text that is clearly written, easy to understand, but that displays an in-depth understanding of the topic. The review would include taxonomies, tabular comparisons of past work, approaches etc.

In summary, you should consider the following points when writing your literature review:

- The literature survey should be focused and concise. Only references that are directly relevant to the project work should be reviewed.
- A literature review is not undertaken for its own sake; it is included in a dissertation or report because it allows you to demonstrate that you have a good understanding of the background to the project.
- References should not be reviewed simply by listing each one in turn and writing a short paragraph about it. Rather, the themes and relationships between reference sources should be identified; that is, the literature review should be organized in a useful and meaningful way.
- The literature survey should be up-to-date. There should be some evidence that the student has read recent literature in the relevant field.
- It is important not just to describe previous work, but to criticize it (and to justify the criticisms). Which ideas identified by the literature review are useful and can be applied to the project? Which ideas are not useful, and why not?
- The citations should be properly included in the text where necessary.

Chapter 3: Analysis and Design

Analysis: This chapter should include the requirements critical analysis of the problem under investigation. There should be evidence of a methodical approach to form/model/conceptualize the solution. You should discuss alternate solutions (e.g., methods, algorithms, data structures etc.) and the one selected by you should be explained and justified. Coherent and logical arguments are encouraged with respect to the selection. Based on your research and your approach you can define an appropriate title for this chapter.

If you have more content for Analysis and Design sections, breaking this chapter for two separate chapters is also possible.

Chapter 4: Progress to Date and Project Plan

What have you achieved to date? Describe any results you have and also include a detailed plan of work (if possible using a Gantt chart) for the rest of the project. Issues you should consider here are:

- Has the project changed direction from the original proposal? If so, why?
- Have any difficulties found? How will they be resolved?
- Is the time plan realistic?
- Is the scope of the project reasonable, or is too much being attempted?
- Has sufficient time been allocated for writing up the dissertation?
- Data Requirements (if Any)
- Outline of Evaluation and Testing Methodology.

References

References and citations should be included according to the IEEE format given in the File called “Masters_Project_IEEE-ReferenceGuide.pdf”. This file is available on the PG VLE.

General points about writing style

Eliminate jargon. Showing off your technical vocabulary will not demonstrate that your research is valuable. If using a technical term is unavoidable, add a non-technical synonym to help a non-specialist infer the term's meaning.

- Omit needless words—redundant modifiers, pompous diction, excessive detail.
- Avoid stringing nouns together (make the relationship clear with prepositions).
- Eliminate "narration," expressions such as "It is my opinion that," "I have concluded," "the main point supporting my view concerns," or "certainly there is little doubt as to. . . ." Focus attention solely on what the reader needs to know.