Writing Report Techniques

1. Paper Size and Format: The project report must be printed on A4 paper and students are required to follow these bullet points for printing style:

• 12-point font size text.

• 1.5 space line text.

• Page margins: 30 mm left, 20 mm right, 25 mm top and 25 mm bottom.

2. Report Structure:

The report should be structured in the following main sections:

2.1 Title page

A page showing the project title, date, your name, course and supervisor's name needs to be included. The title page must also contain "Higher College of Technology", Engineering Department and the student section. Also, it is preferable to write the semester name in the right end of the front page (Optional).

2. 2 Declaration

Following the title page, there must be a signed declaration by the student that the report contains only your original work or fully acknowledged work by others.

2.3 Abstract

The report must include an abstract on a separate page, with keywords printed out at the bottom of the page. The abstract should be a concise description of the objectives of the work, the methods used, the outcomes and the conclusions reached. The abstract should be less than 250 words. It should be self-contained and intelligible in

its own right: it is not an introduction to the report. The better quality papers in IEE Proceedings or IEEE Transactions provide examples of good abstract writing. Note the conventional use of the present tense in abstracts to describe what is presented in the report. This should be the last section you write.

2.4 Acknowledgement

This section is to acknowledge any help you have received in carrying out your project work.

2.5 List of contents (Tables and Figures)

The report should be paginated and should contain a table of contents indicating where each section may be found. All main sections and sub-sections should be numbered using the decimal system (as in this document). Normally, not more than three levels of numbering should be needed. Modest indentation of sub-sections may make a report more readable. Pages should be numbered sequentially starting at the first page of the main report (normally the Introduction). Preliminary pages may be numbered in a separate sequence in lower case using Roman numerals.

2.6 Introduction

This section should must contain a brief background to the subject of the report and give the aims of the work. An important objective of the introduction is to point the reader's mind in the right direction with a clear understanding of the reasons for undertaking the project work.

2.7 Style and layout

Note that the assessment scheme places emphasis on good use of technical English, correct grammar, spelling and punctuation.

A few points are worth making in relation to layout, which should improve report quality:

(a) Equations should be placed on a separate line. The significant equations (especially those referred to elsewhere) should be numbered sequentially in round brackets on the right-hand side e.g (1).

(b) Each diagram must be numbered sequentially and have a suitable title included below the diagram. If diagrams are required in landscape mode they must be orientated so that the reader rotates the report 90 degrees clockwise to read. All figures, tables, diagrams and graphs should be referenced in the text. e.g.: Fig.1......,Table.1............................)

(c) Graphs must be treated as figures in the numbering system. Axes should be labelled with quantity and units and all data points clearly shown (dots surrounded by a circle are more visible and easier to plot accurately than crosses). Normally the independent variable is placed along the ordinate (x-axis). If theoretical and experimental results are being compared they should occupy the same graph.

(d) Tables should be numbered in a separate series but should also have a title placed above. Units should be included in the table headings. In vertical columns of values, the decimal points should be aligned.

2.8 Project Work

This section (or sections) describes details of the work carried out and the methods of measurement and analysis of the data obtained.

2.9 Results and Description

This section presents all the major findings, the practical experimental calculations as well as the graphs to support the results. The section should compare the practical results with theoretical predictions and account for any discrepancies as well as discuss how the results obtained match up to the original aims of the project.

2.10 Statement and achievement of technical objectives

A concise paragraph must be included clearly describing the technical objectives achieved by the project. These should be contrasted with the original project proposal to highlight the real achievements.

2.11 Conclusion

This should be the last main section of the report. It should discuss the results and summarise the technical conclusions to be drawn from the work. The conclusions to a successful project should form a fairly extensive section, including discussions of the project objectives, the achievements, alternative avenues of investigation and a critical review of the project.

2.12 Recommendations for further work

Inevitably there will always be further work, which could have been carried out to improve a project, to extend the ideas generated or techniques adopted. Far from detracting from the objectives actually achieved, this demonstrates an ability to think around the subject, to display an awareness of relevance to other applications, to be critical about one's achievement and to stimulate further study.

2.13 References

A numbered list of all the important references cited in the work should appear at the end of the report, preferably in the style recommended by IEEE. Some examples of the exact style and format is given below:

a. Article in Collection

Example:

A.J. Albrecht, "Measuring Application-Development Productivity," Programmer Productivity Issues for the Eighties, 2nd ed., C. Jones, ed., IEEE CS Press, Los Alamitos, Calif., 1981, pp. 34-43.

b. Article in a conference proceedings

In general, delete prepositions where the meaning is clear without them. Use the ordinal symbol (2nd, 14th, 23rd) for annual conferences. If available, include the conference initializm in parentheses--for example, (ICDE 98)--following the abbreviated name of the conference.

M. Weiser, "Program Slicing," Proc. 14th Int'l Conf. Data Eng. (ICDE 98), IEEE CS Press, Los Alamitos, Calif., 1981, pp. 439-449.

c. Article in a journal or magazine

Use lowercase for vol. and no. Page numbers through 9999 do not Require a comma.

I.E. Sutherland, R.F. Sproull, and R.A. Schumaker, "A Characterization Of 10 Hidden-Surface Algorithms," ACM Computing Surveys, vol. 6, No. 1, Mar. 1974, pp. 1-55.

d. Book

W.M. Newman and R.F. Sproull, Principles of Interactive Computer Graphics, McGraw-Hill, Hightstown, N.J., 1979, p. 402.

e. CD-ROM

Place the term "CD-ROM" following the publication's title and Preceding the publisher's name. For example, the format for a book that is available on CD-ROM is W.M. Newman and R.F. Sproull, Principles of Interactive Computer Graphics, CD-ROM, McGraw-Hill, Hightstown, N.J., 1979.

f. Dissertation or thesis

B. Fagin, A Parallel Execution Model for Prolog, doctoral dissertation, Dept. Computer Sciences, Univ. of California, Berkeley, 1987.

M. Nichols, The Graphical Kernel System in Prolog, master's thesis, Dept. Computer Science and Eng., Rensselaer Polytechnic Inst., Troy, N.Y., 1985.

g. Electronic publication

L.P. Burka, "A Hypertext History of Multiuser Dimensions," MUD History, http://www.ccs.neu.edu/home/home/lpb/mud-history.html (current December 2000).

When formatting URLs, use the exact address supplied by the author. For example, if the author uses the http://, you should include it; if the author does not include the http://, or a www, and so on, do not add these yourself. Not all addresses start with http:// (there are other

protocols that are also legitimate, for example, ftp://), and not all addresses need, nor indeed do all work with, a www; since we are not familiar with the addresses we must avoid incorrectly "fixing" the author's info. If you recognize something as a URL without the http://,

the reader probably will, too.

- ❖ Be sure to include all punctuation exactly as supplied (hyphens andtildes, in particular, are very common in Web addresses).

❖ Verify addresses you tag as URLs by copying and pasting them into your browser and seeing if the string of text that is in your Word doc actually goes where it should.

❖ If the address must run across more than one line, follow these guidelines:

1. Break only after a forward slash or a "dot" (period).

2. Do not split the double slash.

3. Do not split at hyphens, tildes, and so on, that are part of the address.

4. Do not introduce hyphens to break words (be very careful about this as Word may try to hyphenate automatically).

5. Separating the extension (for example, the html at the end) is discouraged.

❖ **Some Acceptable Examples**

http://

www.web-pac.com/mall/pacific/start.html

http://www.web-pac.

com/mall/pacific/start.html

http://www.web-pac.com/mall/

pacific/start.html

❖ **Not acceptable**

http:/

/www.web-pac.com/mall/pacific/start.html

http://www.webpac.

com/mall/pacific/start.html

http://www.web-pac

.com/mall/pacific/start.html

http://www.web-pac.com/mall/pacific/start.html

2.14 Appendices

Appendices may be necessary to contain information which is essential to the report, but which would impede reading of the main text, such as extensive tables of results, lengthy mathematical derivations, etc.