Practicum Guidelines

Proposal & Final Report Writing

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SECTION A

CHAPTER

1

Introduction

Practicum (also known as Industrial Training) is one of compulsory conditions for all students of School of Computing, College of Arts and Sciences (CAS) to fulfil the requirement for Bachelor of IT with Honors (BIT (Hons)) or Bachelor of Science with Honours (Information Technology) [B.Sc. (Hons) (Information Technology)]. Practicum code is **STIX 3912.**

The purposes of Practicum are to:

- expose the students to real working environment
- enhance the students' knowledge through exposure to industrial/organization's operation
- provide opportunities for the students to conduct real tasks in a more challenging environment

During Practicum, students will be assessed on their communication capability while applying their theoritical and practical knowledge.

Students are eligible for Practicum after accumulating at least 110 credit hours (sixth semester). Students are also abided to all regulations of Practicum program of Universiti Utara Malaysia (UUM). Practicum will be implemented for 24 weeks (six months) at the allocated organizations.

Practicum is a link between School of Computing, College of Arts and Sciences (CAS) and industries/organizations. It is expected that the outcomes of Practicum not only

will enhance the knowledge of the students but also assist the industries/organizations in managing IT sources. This can also provide literal feedback to CAS in identifying the requirements of industries/organizations and the students' weaknesses in effort to strengthen its curriculum. With that, CAS will be able to produce more capable graduates in order to fulfil workforce demand in the particular areas.

1.1 Forms

There are **THREE (3)** forms required by students:

| Ref. No | Colour Code | Form |
|---------|-------------|---------------------------|
| PRAK01 | Green | Company's evaluation Form |
| PRAK02 | Yellow | SOC's evaluation Form |
| PRAK03 | Blue | Practicum Checklist |

Note:

- a) PRAK01 form needs to be submitted to company's supervisor (industry).
- b) PRAK02 needs to be handed to the visiting lecturer (UUM) during Practicum visit.
- c) PRAK03 form needs to be kept by student and to be signed by UUM supervisor accordingly.
- d) Please ensure all information is written completely and clearly on the front page of the form.

1.2 Practicum Information

Information about Practicum can be obtained from Practicum group on Facebook (Practicum STIX3912) and website of PPA (http://www.ppacas.uum.edu.my).

1.3 Practicum Regulation

During Practicum, students are subject to UUM's regulations. The following are the main things need to be aware by students:

a) Confirmation of Practicum

Students need to confirm their attendance at the organization by returning their attendance confirmation slip to CUIC (please refer to Item 5.0 Regulations for UUM Practicum Program for more information). Students are also required to inform their supervisors regarding the aforementioned status.

b) Postponement of Practicum

Postponing of Practicum is not allowed except for students that have serious health issues. Please refer to Item 7.0 Regulations for UUM Practicum Program for more information.

c) Report Preparation

In preparing report, students are subject to Act and Regulations of Academic Treachery from paragraph 12 UUM Act (Examination) 1988. Academic treachery includes any acts that break any examination rules and plagiarizing project paper, academic practice, or any assignments and courses. If found guilty, Students Discipline Body can execute one or more of the following punishments:

- Warning.
- Fine not more than RM 200.00.
- Suspension from any or all University's facilities in a certain decided period of time.
- Exclusion from any parts of University in a certain decided period of time.
- Expulsion from University.

d) Incomplete (TL)

Incomplete grade (TL) can be applied by students if they have not completed any specific components such as final report. This application need to be applied to the Dean of PPA through SOC supervisor. Please refer to Item 12.0 Regulations for UUM Practicum Program for more information.

e) Disciplines during Practicum

Students whom are terminated from Practicum which caused by disciplinary issues confirmed by the supervisors will be given F grade. Please refer to Item 16.5 Regulations for UUM Practicum Program for more information.

1.4 Supervision and Visitation to Organization

The purpose of Practicum supervision is to ensure the students are given proper tasks based on their Practicum project scope. The supervision is conducted by:

- 1) UUM Supervisor (SOC CAS)
- 2) Company's Supervisor (Organization)
- 3) Visiting Lecturer (UUM)

Lecturers play the role of supervising and monitoring students' tasks starting from the date they registered until the end of the Practicum. The particular supervisors will consult students from the stage of writing the proposal to the stage of checking the final report. Meanwhile, the visiting lecturers act as the link between UUM and organizations in order to ensure good relationship and future cooperation. Project presentation will be evaluated by visiting lecturers at the organization.

The following is the list of actions that must be taken by students and every lecturer (students are required to inform the supervisor regarding actions that must be taken).

Actions Student a) Submit a proposal to lecturer. b) Present the project to supervisor and visiting lecturer duringt he visit. c) Prepare the related forms for supervisor and lecturer. d) Submit log book, report draft, CD and final report to lecturer. e) Remind the supervisor to complete the Supervisor Evaluation Form (PRAK01) to be submitted to the lecturer. f) Submit the attendance form to the lecturer. **UUM's Supervisor** a) Responsible on the students during the entire (SOC) Practicum duration. b) Sign PRAK03 form accordingly. c) The main link between SOC-CAS and supervisor d) Monitor students' work performance. e) Monitor students' project progress. f) Evaluate students' performance using PRAK02 form. **Visiting Lecturer** a) Act as the link between UUM and organizations in (MUU) order to ensure good relationship and future cooperation. b) Evaluate project presentation during the visit c) Observe the suitability of the organization for Practicum placement. Company's a) Assign suitable project to the student. Supervisor b) Review the log book and attendance. c) Evaluate project presentation. d) Submit the PRAK01 form to the visiting lecturer.

1.5 Evaluation Components

Practicum evaluation is divided into TWO (2) components:

- 1) UUM's Supervisor Evaluation Form (PRAK02) **60%**
 - Proposal
 - Log book
 - Presentation
 - Report (Draft and Final)
 - Individual assessment
- 2) Company's Supervisor Evaluation Form (PRAK01) 40%
 - Presentation
 - Proiect
 - Individual assessment

Students who do not fulfil any of the above evaluation components will be considered **FAIL** in Practicum.

Practicum activities phases are as follows:

| Phase | Item | Action | Notes |
|------------------|---|----------------------|-------------------------------|
| E | 1) Students register at PPA | Student | |
| Before Practicum | 2) Students attend Practicum workshop | Student | |
| re Pra | Students are assigned to UUM's Supervisor | SOC | Check portal/ announcement |
| Befo | 4) Students meet the assigned UUM's Supervisor | Student | |
| | 5) Students register at the organizations | Student | Day 1 |
| | 6) Students submit confirmation of registration form to PPA | Student | Week 1 |
| | 7) Students report the organization environment to the UUM's Supervisor | Student | Week 1 |
| | 8) Students discuss project with Company's Supervisor | Student | Week 1 |
| | 9) Students submit proposal to UUM's Supervisor | Student | Week 2 |
| | 10) Students start the project | Student | |
| ticum | 11) Students report the project progress | Student | |
| g Praci | 12) Visiting lecturers inform visiting dates | Visiting lecturer | |
| During Practicum | 13) Students inform Company's Supervisor regarding the visiting dates | Student | |
| | 14) Students give feedback about the visiting date to visiting lecturer | Student | |
| | 15) Visiting lecturer fix the visiting date | Visiting lecturer | |
| | 16) Visiting lecturer visits the organization | Visiting lecturer | |
| | 17) Students present project to supervisor and visiting lecturer | Student | |
| | 18) Students submit report draft | Student | A month before Practicum ends |

| | 19) Students submit log book and attendance sheet to UUM's Supervisor | Student | One week after Practicum ends |
|-----------------|---|-------------------------|--------------------------------------|
| Ę | 20) Company's Supervisors submit PRAK01 form to visiting lecturer during Practicum visit | Company's Supervisor | During Practicum visit |
| After Practicum | 21) UUM's Supervisor check the report draft and give feedback to students | UUM's Supervisor | |
| Afte | 22) Students do corrections and submit final report (hard cover), CD, and PRAK03 form to UUM's Supervisor | Student | Two weeks after Practicum ends |
| | 23) UUM's Supervisor complete PRAK02 form and key-in final Practicum marks | UUM's Supervisor | |

CHAPTER 2

Project Scope

In general, students are allowed to do any Information Technology (IT) related projects. However, the project has to be proposed by the students and approved by UUM's Supervisor. UUM's Supervisor can discuss the project with company's supervisor to determine the appropriate scope.

2.1 IT Project

Below is the list of suggested projects that can be conducted during practicum. However, projects are not limited to the list.

| | Project | Description |
|---|---|--|
| 1 | Application Development | · |
| | ■ Web-based | Develop any web-based applications using server-side scripting (such as PHP or ASP), databases and HTML pages. The application must be interactive and contains basic functions such as data entry, update, generate report, and etc. Example: e-commerce website, online student registration system, web-based staff management system, and web portal. Static pages which contain only HTML files are not allowed. |
| | ■ Web Services | Suitable for those who have deep knowledge in web application technology such as UDDI. Example: Web service for tourism industry, universities information web service |
| | ■ Client server | |
| | Mobile/wireless application | |

| 2 | Information system planning | ISP: A study to propose an information system plan for the organisation/department Plan a new system or upgrading the current system |
|---|---------------------------------------|--|
| 3 | Bioinformatic application | |
| 4 | High performance computing | Grid/cluster/parallel/distributed/real-time computing, simulation |
| 5 | Information system & network security | Focus on computer security: Planning, analysis, design, implementation, policy, audit, etc. |
| 6 | Computer system configuration | |
| 7 | Other relevant topics | With the approval of lecturer |

SECTION B

CHAPTER 3

Proposal Preparation

A proposal should be prepared by students to explain about project to be conducted at the organization. The proposal must be submitted to the UUM's Supervisor **TWO** (2) weeks after the students registered at the organization.

3.1 Proposal Writing Guidelines

The proposal must be clear, concise, neat and written in English. Maximum number of pages is 10 excluding attachments. Front page of the proposal as in Appendix A. Student needs to discuss with the supervisor to determine appropriate project. The project scope must be agreed by both supervisors. The proposal should be signed by the student and approved by the company's supervisor (Refer Appendix B). Please refer Chapter 5 for the format of the proposal.

3.2 Proposal Content

The proposal should consist of the following items:

| Item | Description |
|------------------------------------|--|
| 1. Front page | Contains title of the project and details of student and supervisor. |
| Table of Content | Contains topic, sub-topic and page number. |
| 3. List of Figures | List any illustrations or figures (if more than 5 |
| | illustrations or figures) |
| 4. Introduction | Explain goals, problem statement, objective, |
| | project scope and project significance |
| | precisely. |
| Project Planning | Discuss on: |

- Methodology
- Feasibility study (including tools, software, cost and Gantt chart)

6. Summary Prepare summary of the proposed project7. References Include all relevant references

7. References8. AppendicesInclude all relevant referencesInclude all attachment (if any)

Below is the main content of the proposal;

1.0 Introduction

- 1.1 Project background
- 1.2 Problem statement
- 1.3 Objective
- 1.4 Scope
- 1.5 Project significance

2.0 Project Planning

- 2.1 Methodology
- 2.2 Feasibility study
 - 2.2.1 Tools (examples: hardware, software, database, and etc.)
 - 2.2.2 Cost estimation
 - 2.2.3 Gantt chart

3.0 Summary

References

Appendices

SECTION C

CHAPTER

4

Practicum Report Preparation

Practicum report is one of the required components for BIT and BSc IT. The report must follow the defined specifications. The report must be prepared by the student based on their project and experience during Practicum. The report will be evaluated by UUM's Supervisor. Students who fail to submit the report within the timeframe will be given **F**. Student can apply for *Tidak Lengkap (TL)* grade to the Dean of PPA with UUM's Supervisor agreement. After eight weeks, student will be given **F** grade if fail to submit the final report (please refer to general Practicum regulation for TL grade).

4.1 Report Writing Guidelines

Report should be written in English. Report should not exceed **50 printed pages** excluding appendices. Please refer Section 4.2 for report format.

4.2 Report Content

Practicum report consists of three main parts which are:

Section A: Report Introduction Section B: Body of the report

Section C: References/Bibliography and Appendices

All of these three main parts must be organized and given page number accordingly based on the following table:

| Section | Order | Item | Page Numbering |
|---------|-------|--|---|
| | 1 | Title Page | No page number |
| | 2 | Declaration | |
| | 3 | Acknowledgement | |
| | 4 | Disclaimer | |
| Α | 5 | Executive Summary | Using Roman small letters |
| | 6 | Table of Content | Using Roman small letters (starting with iii) |
| | 7 | List of Table | (Starting with iii) |
| | 8 | List of Figure | |
| | 9 | Abbreviation | |
| | 10 | Body of Report | |
| В | | Chapter 1: Introduction Chapter 2: Project Description Chapter 3: Methodology Chapter 4: Conclusion | Using number (starting with number 1) |
| | 11 | References/Bibliography | |
| | 12 | Appendices | |
| С | | Appendix A: Overall | |
| | | experience | |
| | | Appendix B | |
| | | Appendix b | |

4.2.1 Section A: Report Introduction

Report introduction consists of several components (or pages) including title page, declaration, acknowledgement, disclaimer, executive summary/abstract, table of content, list of table, list of figures and abbreviation.

1) Title Page (refer Appendix C)

This page consists of the following information:

- (i) Full project title (middle of the page)
- (ii) Place of Practicum (bottom of the page)

The title must explain the main project and the length is up to 10 - 15 words.

2) Declaration (refer Appendix D)

This page consists of the following items:

- (i) Short declaration statement and course code (at the top page)
- (ii) Student's name and matric number (in the middle of the page)

3) Acknowledgement Page

This page contains the acknowledgement to all parties (individuals or institutions) who assist in the project implementation. The acknowledgement must be simple and concise.

4) Disclaimer (refer Appendix E)

This page contains statement to claim validity and copyright of the report contents. Student needs to write down the student's name and matric number.

5) Executive Summary/Abstract

Executive Summary is the essence of the whole report and need to be given a special attention as main text. References should not be cited in the Executive Summary, but **if it is necessary**, use footnote. Avoid from using any abbreviations or acronyms.

Executive Summary should **not exceed 300 words**. It must contain fact-specific issues, a brief explanation of the project; main findings including the facts that are significant or not and conclusion. This summary should be typed in single spacing in only one page.

| Exampl | le. |
|--------|-----|
| | |

ABSTRACT

Online management system is one of a web-based application that could help organizations in enhancing their productivity, encouraging greater customer participation, and enabling mass customization, besides reducing costs. Online management system or electronic management can be defined as a process to manage data, information and making communication through the Internet. The process could be implemented in different categories of technology such as real-time system, web-based system, and mobile applications. Thus, the journal management system has great potential to be integrated with the web application. With the need for faster publishing process and complexity of management process, an online management system for journal is proposed.

6) Table of Content

Table of Content should follow the order, with relevant page number, all section and sub-section, topic and sub-topic; list of references, acronyms and others overall report function; appendices and indices (if any).

Example:

| TABLE OF CONTENT |
|-------------------------------|
| Title Pagei |
| Declarationii |
| Acknowledgementiii |
| Disclaimeriv |
| Executive Summaryv |
| List of Tablevii |
| List of Figurevii |
| Abbreviationix |
| 1.0 Introduction 1 |
| 1.1 Organization Background 1 |
| 2.0 Project Description4 |
| 2.1 Project Introduction4 |
| 2.2 |

7) List of Table

This list contains all table titles exactly like in the text. Information that needs to be included is table number, title and page number.

Example:

List of Table

| Table Num. | Item | Page |
|------------|------------------|------|
| Table 1.1 | List of computer | 2 |
| Table x.x | | |

8) List of Figure

This list includes graphs, figures, maps and other illustrations. The title of figures must follow the captions of figures in the report. The information must have figure number, title and page number.

Example:

List of Figure

| Figure Num. | Item | Page |
|-------------|--------------------|------|
| Figure 1.1 | Organization Chart | 5 |
| Figure x.x | | |

4.2.2 Section B: Body of Report

Report content should consist of four main chapters namely Introduction, Project Description, Overall Experience and Conclusion. At the end of each chapter (except chapter conclusion), a summary of the chapter should be provided to formulate ideas/body of the chapter. The following is the breakdown of the report:

Chapter 1: Introduction

- 1.1 Organization Background
- 1.1.1 Organization History and Structure
- 1.1.2 Vision/Mission
- 1.2 Organization Activities
- 1.3 Chapter 1 Summary

Chapter 2: Project Description

- 2.1 Project background
- 2.2 Problem Statement
- 2.3 Project Objective
- 2.4 Project Scope
- 2.5 Significance of Project
- 2.6 Weaknesses and Recommendation
- 2.7 Chapter 2 Summary

Chapter 3: Methodology

- 3.1 Overall phases
- 3.2 Description of each phase
- 3.3 Chapter 3 summary

Chapter 4: Conclusion

Appendix A

Other Assignment in the Organisation

List of Task

Practicum Problem

Practicum Effectiveness

Practicum Objectives Achievement

Learning Outcome during Practicum

Recommendation and Suggestion

1) Chapter 1: Introduction

Introduction should include two main things; the organization background and an overall observation of the entire organization. Organization background contains basic information such as a brief organization history, management, objective, organization mission and vision. Overall observation covers overall aspect of organization specialization and roles. Discussion of related topics should not exceed two pages each respectively.

2) Chapter 2: Project Description

Chapter 2 covers detail explanation on the MAIN project. This chapter consists of introduction of the project, project methodology, weaknesses and recommendations. Problem statement of the chosen project, objective, project scope and project significance must be explained in the introduction of the project. The chosen methodology must be suitable with the project scope. Each phase needs to be explained in detail together with related deliverables.

Note:

Project design must include description of the technical specification in this chapter.

3) Chapter 3: Methodology

This chapter should explain how project was conducted.

4) Chapter 4: Conclusion

Note:

In Chapter 4, explanation/description on how the Practicum meets the objective should be included.

Conclusion is the formulation of all chapters. Students need to provide clear and solid conclusion.

4.2.3 Section C: References/Bibliography and Appendices

Section C covers the provision of list of references/bibliography and appendices. Both items are important to provide readers a referral or obtain additional declaration on the matter.

1) Reference/Bibliography

Reference/Bibliography should follow the provided format and style. Please refer Section D on references/bibliography style.

2) Appendices

If any, appendices need to be attached after the references. Details of the attachment should be listed in the table of content. Page number is needed in every appendix. If there is more than one, use A, B, C, D to number each appendix. Every new appendix must start with new page. Some good examples for appendices are:

Appendix A should report activities of other project (other than main project) throughout the Practicum. In appendix, relevant activities/projects should be listed clearly. Students also need to report any problem encountered throughout the Practicum.

Other appendix can cover the following:

- UML diagrams
- storyboard
- script
- user manual
- network design
- flow chart
- Gantt chart
- source code
- organization chart, etc.

SECTION D

Format for Proposal and Report Writing

Proposal and final report must be prepared and typed clearly. Writing format for both proposal and final report must be standardized based on the format given.

5.1 **Font Type and Size**

Use Times New Roman. Specifications include:

- (i) Font size 12 for the text including the main topics. The main topics must be written in uppercase (capital letter) and should be bold.
- The font size for subtopics is also 12. Write the subtopics in title case (ii) and bold.

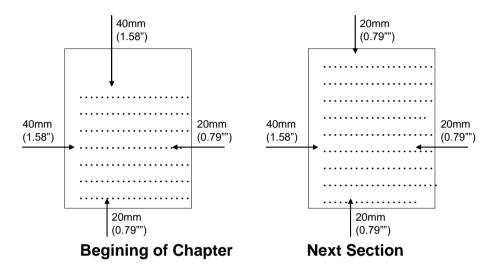
Example:

- 1.0 MAIN TOPIC
- 1.1 Subtopic
- 1.1.1 More Sub-subtopics
- (iii) Font size for captions on tables and figures is 10.

- (iv) Use word processor that can give you a standard typing format.
- (v) The usage of headers and footers is not allowed.

5.2 Margin

Margin on the left hand side of the report is 40mm (1.58") and 20mm (0.79") on the right, top and bottom side; except for the beginning of the chapter, where the top margin must be at least 40mm (1.58").



5.3 Heading and Subheading

Use a consistent numbering format (refer to the example below). The position of the subtopics must align with the main topics (no indentation is needed).

Example:

| 1.0 MAIN TOPIC | Level 1 |
|----------------------------------|---------|
| 1.1 Subtopic for 1.0 | Level 2 |
| 1.1.1 Proportion of Subtopic 1.1 | Level 3 |
| a) Proportion for 1.1.1 | Level 4 |
| i) Proportion for a) | Level 5 |

Note: Please refer to the Technical Report Writing text book or any academic writing books.

5.4 Spacing

Proposal must be typed in single spacing, whereas the final report must be typed in 1.5 spacing.

The following item must be typed in single spacing in the final report:

- (i) Foot note
- (ii) Quotation that exceeds three lines
- (iii) References
- (iv) Table
- (v) Appendices, e.g. questionaires, letters, etc.

The main section (chapter) must begin on a new page.

5.5 Paging

- (i) Page numbers must be continuously counted. It should be without any brackets, hyphens or other decorations.
- (ii) Page number before the first chapter of the report must be written using small Roman numbers. No numbering is needed for the Title Page.
- (iii) The page numbering starts from the first page of the first chapter of the report.

5.6 Table and Figure

Tables should be labelled in sequence according to the chapter/section in the report and written in title case. The caption for a table is written at the top of the table. The format is as follows:

Table <Chap>.<Table No>: <Name/Table Topic>

Example:

Table 5.1: Tabulation of Computer Users in Malaysia's Northern States

| | Perlis | Kedah | Penang |
|------|--------|-------|--------|
| 1995 | 1000 | 1200 | 2971 |
| 1996 | 1500 | 1800 | 3654 |
| 1997 | 1572 | 1890 | 3985 |
| 1998 | 1602 | 1906 | 4576 |
| 1999 | 1680 | 1950 | 4867 |
| 2000 | 1750 | 2103 | 6514 |
| 2001 | 1890 | 2500 | 7514 |
| 2002 | 1990 | 2530 | 8245 |
| 2003 | 2504 | 2641 | 9987 |

Based on the above example, the caption for the table begins with "**Table 5.1**" which shows that the table is the **first** table in Chapter **5**.

The same goes for figures except that the caption for a figure is written at the bottom of the figure. The format is as follows:

Figure <Chap>.<Figure No>: <Name/Figure Topic>

Example:

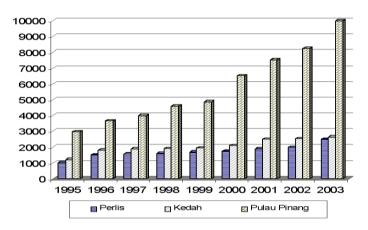


Figure 1.2: Availability of Computers in Malaysia's Northern States

Based on the above example, the caption for the figure begins with "Figure 1.2" which shows that the figure is the **second** figure in Chapter 1.

CHAPTER 6

Reference Preparation

All references must be relevant, cited and placed after **the final chapter of the report**. Each reference must be consistent and follow the writing practices procedures below:

- Each entry must start at the left margin with the second line indented four spaces and in single spacing (refer example).
- If there are more than two works by one author, the repetition name can be avoided by replacing with continuous line throughout 8 column (space) start at left margin.
- If the author is unknown, the entries are arranged according alphabetically (excluding "The","A" and others).

6.1 Citation in the Text

Entries in the reference should follow either IEEE/ACM format (http://standards.ieee.org/guides/style/) or APA format (http://www.apastyle.org/). For the guideline purpose, the following are examples of citations for IEEE/ACM and APA styles.

For writing the citation, please refer to **Appendix J** for IEEE/ACM styles and **Appendix K** for APA style.

6.2 Creating References/Bibliography

List of reference must be provided at the end of the report based on the order of citation used in the text, not in alphabetical order. **One reference number is for one reference**.

For preparing the reference list, please refer to **Appendix J** for IEEE/ACM styles and **Appendix K** for APA style.

CHAPTER 4

Proposal and Report Submission Procedures

7.1 Proposal Submission

Completed and approved proposal endorsed by the company's supervisor should be submitted to UUM's Supervisor. Final date to submit the proposal is on the 14th day, which is **TWO (2) weeks** after the Practicum begins. The proposal should be in printed form (hard copy).

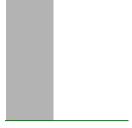
7.2 Practicum Report Submission

Students must submit a report draft within one month before the Practicum ends to be reviewed. The report should be complete and neat. Refer **Appendix F** for the front page of the report draft. The lecturer will provide feedback before returning the report to the student.

Students must correct the report based on UUM's Supervisor's feedback. Students need to reprint the report and submit it to UUM's Supervisor. The report need to be submitted in **TWO (2)** forms:

- 1) Binded with hard cover (silver colour)
- 2) Softcopy in CD

For hard cover format, students can refer to **Appendix G** and **Appendix H** for the CD cover format. Report in the CD must be in .pdf format. Students are reminded to submit the binded report **TWO weeks** after the Practicum ends to their respective UUM's Supervisor.



Bibliography

Akta dan Peraturan. (1993). Jabatan Hal-Ehwal Akademik, Universiti Utara Malaysia.

APA Style (n.d.), Retrieved May 22, 2017, from APA website, (http://www.apastyle.org/).

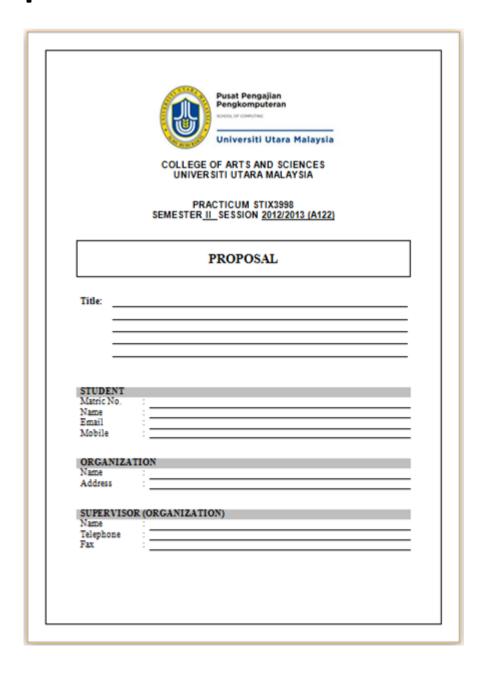
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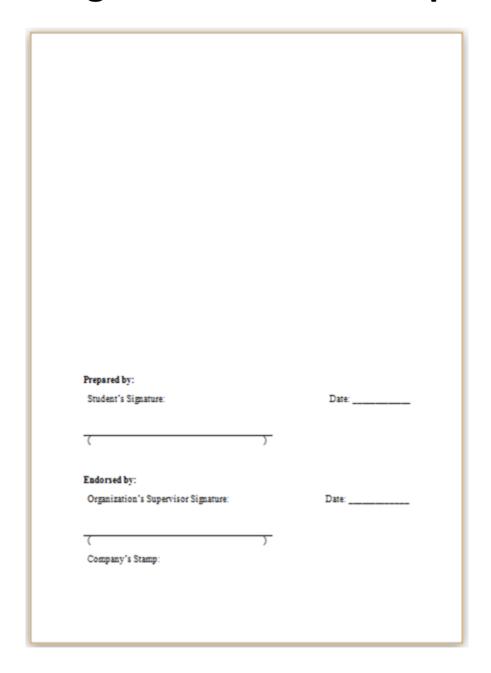


Front Page Format of the Proposal



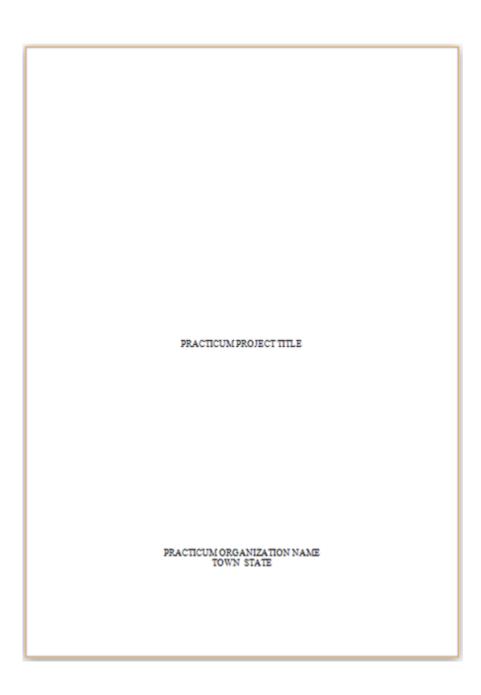


Last Page Format of the Proposal





Title Page





Declaration

This report is prepared to fulfil the requirement of STIX3998 Practicum By: STUDENT NAME MATRIC: 99999



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JANUARY 2014

DISCLAIMER

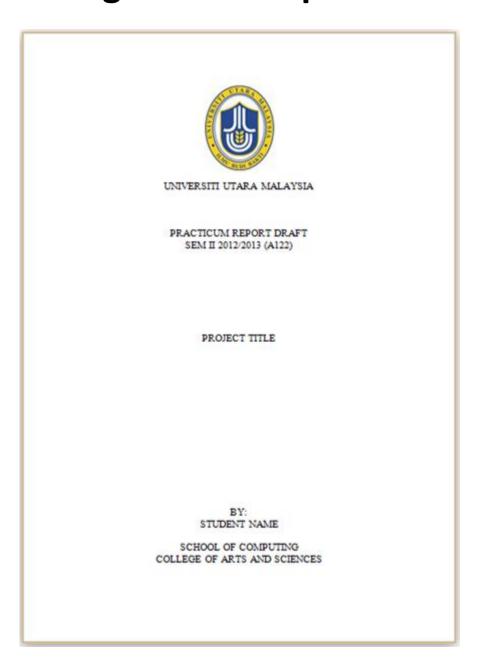
STIX3998 PRACTICUM

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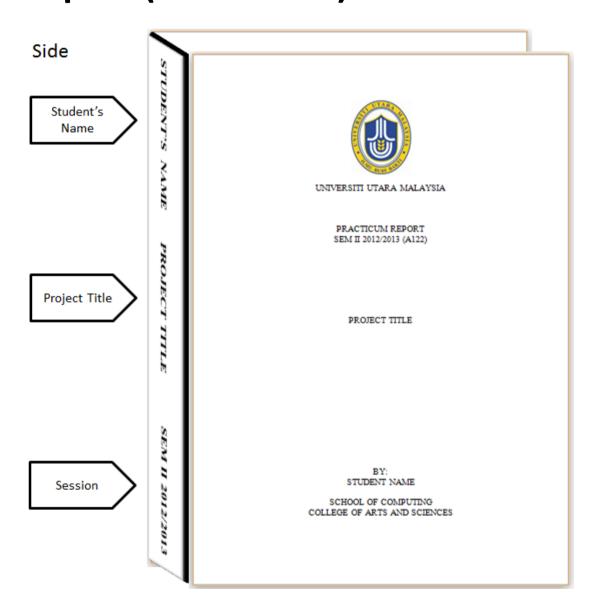


Front Page of the Report Draft



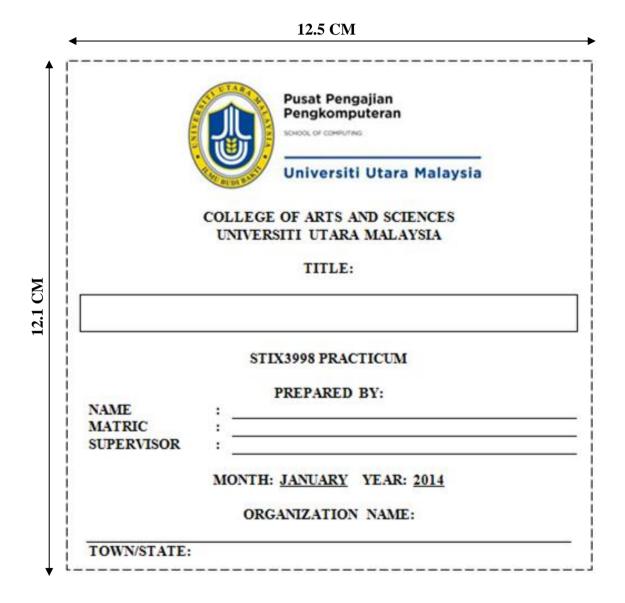


Side and Front Page of the Final Report (Hard cover)





CD Cover





Evaluation Forms

| Ref. No | Colour Code | Form |
|---------|-------------|--------------------------------------|
| PRAK01 | Green | Company's Supervisor Evaluation Form |
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IEEE Citation Style Guide

Any citation style is set up to give the reader immediate information about sources cited in the text. In IEEE citations, the references should be numbered and appear in the order they appear in the text. When referring to a reference in the text of the document, put the number of the reference in square brackets. Eg: [1]

The IEEE citation style has 3 main features:

- The author name is first name (or initial) and last. This differs from MLA style where author's last name is first.
- The title of an article (or chapter, conference paper, patent etc.) is in quotation marks.
- The title of the journal or book is in italics.

These conventions allow the reader to distinguish between types of reference at a glance. The correct placement of periods, commas and colons and of date and page numbers depends on the type of reference cited. Check the examples below. Follow the details exactly. Eg.: put periods after author and book title, cite page numbers as pp., abbreviate all months to the first three letters (eg. Jun.)

Check the distinctions between print and electronic sources (especially for journals) carefully.

Print References

Book

Author(s). Book title. Location: Publishing company, year, pp.

Example:

W.K. Chen. Linear Networks and Systems. Belmont, CA: Wadsworth, 1993, pp. 123-35.

Book Chapters

Author(s). "Chapter title" in Book title, edition, volume. Editors name, Ed. Publishing location: Publishing company, year, pp.

Example:

J.E. Bourne. "Synthetic structure of industrial plastics," in Plastics, 2nd ed., vol. 3. J. Peters, Ed. New York: McGraw-Hill, 1964, pp.15-67.

Article in a Journal

Author(s). "Article title". Journal title, vol., pp, date.

Example:

G. Pevere. "Infrared Nation." The International Journal of Infrared Design, vol. 33, pp. 56-99, Jan. 1979.

Articles from Conference Proceedings (published)

Author(s). "Article title." Conference proceedings, year, pp.

Example:

D.B. Payne and H.G. Gunhold. "Digital sundials and broadband technology," in Proc. IOOC-ECOC, 1986, pp. 557-998.

Papers Presented at Conferences (unpublished)

Author(s). "Paper's title," Conference name, Location, year.

Example:

B. Brandli and M. Dick. "Engineering names and concepts," presented at the 2nd Int. Conf. Engineering Education, Frankfurt, Germany, 1999.

Standards/Patents

Author(s)/Inventor(s). "Name/Title." Country where patent is registered. Patent number, date.

Example:

E.E. Rebecca. "Alternating current fed power supply." U.S. Patent 7 897 777, Nov. 3, 1987.

Electronic References Books

Author. (year, Month day). Book title. (edition). [Type of medium]. Vol. (issue). Available: site/path/file [date accessed].

Example:

S. Calmer. (1999, June 1). Engineering and Art. (2nd edition). [On-line]. 27(3). Available: www.enggart.com/examples/students.html [May 21, 2003].

Journal

Author. (year, month). "Article title." Journal title. [Type of medium]. Vol. (issue), pages. Available: site/path/file [date accessed].

Example:

A. Paul. (1987, Oct.). "Electrical properties of flying machines." Flying Machines. [Online]. 38(1), pp. 778-998. Available: www.flyingmachjourn/properties/fly.edu [Dec. 1, 2003].

World Wide Web

Author(s)*. "Title." Internet: complete URL, date updated* [date accessed]. M. Duncan. "Engineering Concepts on Ice. Internet: www.iceengg.edu/staff.html, Oct. 25, 2000 [Nov. 29, 2003].

Odd Sources

Newspaper

Author(s)*. "Article title." Newspaper (month, year), section, pages.

Examples:

B. Bart. "Going Faster." Globe and Mail (Oct. 14, 2002), sec. A p.1. "Telehealth in Alberta." Toronto Star (Nov. 12, 2003), sec. G pp. 1-3.

Dissertations and Theses

Author. "Title." Degree level, school, location, year.

Example:

S. Mack. "Desperate Optimism." M.A. thesis, University of Calgary, Canada, 2000.

Lecture

Lecturer(s). Occasion, Topic: "Lecture title." Location, date.

Example:

S. Maw. Engg 251. Class Lecture, Topic: "Speed skating." ICT 224, Faculty of Engineering, University of Calgary, Calgary, Alberta, Oct. 31, 2003.

E-mail

Author. Subject line of posting. Personal E-mail (date).

Example:

J. Aston. "RE: new location, okay?" Personal e-mail (Jul. 3, 2003).

Internet - Newsgroup

Author or Topic*, "Title," Complete network address, date when it was updated [date accessed].

Example:

G.G. Gavin. "Climbing and limb torsion #3387," USENET: sci.climb.torsion, Apr. 19, 2000 [Oct. 4, 2002].

Exact page number References

To refer readers to specific page numbers in a text, use the number of the reference followed by a colon (:) and the page numbers.

Example:

Johnson suggests that citing will lead to a decrease in being cited for plagiarism [1:2829].

The [1] refers to the numbered reference and the 28-29 refers to the pages being cited.

^{*} If you can't find this information, exclude it.



APA Style

This handout is based on the 6th edition of the *Publication Manual of the American Psychological Association (APA)*, but is not a comprehensive guide. For all rules and requirements of APA citations, please consult the 6th edition of the *Publication Manual of the American Psychological Association*.

APA requires that information be cited in 2 different ways—within the text and in a reference list at the end of the paper. The reference list should be on a new page, double spaced, and use the hanging indent method (all lines after the first one are indented).

See also:

 Publication Manual of the American Psychological Association, 6th ed. Washington, DC: American Psychological Association, 2010.

Reference Desk Reserve 808.06615 p976m 2010 (at Reference Desk)

• Concise Rules of APA Style, 6th ed. Washington, DC: American Psychological Association, 2010.

Reference Desk Reserve 808.06615 C744r 2010 (at Reference Desk)

CITATIONS IN THE TEXT:

APA uses the author-date method of citation. The last name of the author and the date of publication are inserted in the text in the appropriate place.

When referencing or summarizing a source, provide the author and year. When quoting or summarizing a particular passage, include the specific page or paragraph number, as well.

When quoting in your paper, if a direct quote is less than 40 words, incorporate it into your text and use quotation marks. If a direct quote is more than 40 words, make the quotation a freestanding indented block of text and DO NOT use quotation marks.

One work by one author:

- In one developmental study (Smith, 1990), children learned...
 OR f
- In the study by Smith (1990), primary school children...
 OR f
- In 1990, Smith's study of primary school children...

• Works by multiple authors:

When a work has 2 authors cite both names every time you reference the work in the text. When a work has three to five authors cite all the author names the first time the reference occurs and then subsequently include only the first author followed by et al. For example:

First citation: Masserton, Slonowski, and Slowinski (1989) state that... Subsequent citations: Masserton et al. (1989) state that...

For 6 or more authors, cite only the name of the first author followed by et al. and the year.

• Works by no identified author:

When a resource has no named author, cite the first few words of the reference entry (usually the title). Use double quotation marks around the title of an article, chapter, or Web page. Italicize the title of a periodical, book, brochure, or report. For example:

The site seemed to indicate support for homeopathic drugs ("Medical Miracles," 2009). The brochure argues for homeschooling (Education Reform, 2007).

Treat reference to legal materials such as court cases, statutes, and legislation like works with no author.

• Two or more works in the same parenthetical citation:

Citations of two or more works in the same parentheses should be listed in the order they appear in the reference list (i.e., alphabetically, then chronologically).

Several studies (Jones & Powell, 1993; Peterson, 1995, 1998; Smith, 1990) suggest that...

Specific parts of a source

Always give the page number for quotations or to indicate information from a specific table, chart, chapter, graph, or page. The word page is abbreviated but not chapter. For example:

The painting was assumed to be by Matisse (Powell, 1989, Chapter 6), but later analysis showed it to be a forgery (Murphy, 1999, p. 85).

If, as in the instance of online material, the source has neither visible paragraph nor page numbers, cite the heading and the number of the paragraph following it. This allows the reader to locate the text in the source. For example:

The patient wrote that she was unimpressed by the doctor's bedside manner (Smith, 2006, Hospital Experiences section, para. 2).

CITATIONS IN A REFERENCE LIST:

In general, references should contain the author name, publication date, title, and publication information. Include the issue number if the journal is paginated by issue.

For information obtained electronically or online include the DOI:

DOI - a unique alphanumeric string assigned to identify content and provide a persistent link to its location on the internet. The DOI is typically located on the first page of the electronic journal article near the copyright notice. When a DOI is used in your citation, no other retrieval information is needed. Use this format for the DOI in references: doi: xxxxxxx

If no DOI has been assigned to the content, provide the home page URL of the journal or of the book or report publisher. Do not insert a hyphen if you need to break a URL across lines; do not add a period after a URL, to prevent the impression that the period is part of the URL.

In general, it is not necessary to include database information. Do not include retrieval dates unless the source material has changed over time.

Book:

Strunk, W., Jr., & White, E. B. (1979). *The guide to everything and then some more stuff.* New York, NY: Macmillan.

Gregory, G., & Parry, T. (2006). *Designing brain-compatible learning* (3rd ed.). Thousand Oaks, CA: Corwin.

Chapter of a Book:

Bergquist, J. M. (1992). German Americans. In J. D. Buenker & L. A. Ratner (Eds.), Multiculturalism in the United States: A comparative guide to acculturation and ethnicity (pp. 53-76). New York, NY: Greenwood.

Journal Article with DOI:

Paivio, A. (1975). *Perceptual comparisons through the mind's eye. Memory & Cognition*, 3, 635-647. doi:10.1037/0278-6133.24.2.225

Journal Article without DOI (when DOI is not available):

Becker, L. J., & Seligman, C. (1981). Welcome to the energy crisis. Journal of Social Issues, 37(2), 1-7.

Hamfi, A. G. (1981). The funny nature of dogs. *E-journal of Applied Psychology*, 2(2), 38 -48. Retrieved from http://ojs.lib.swin.edu.au/index.php/fdo

Online Newspaper Articles:

Becker, E. (2001, August 27). *Prairie farmers reap conservation's rewards. The New York Times*. Retrieved from http://www.nytimes.com

Encyclopedia Articles:

Brislin, R. W. (1984). Cross-cultural psychology. In R. J. Corsini (Ed.), *Encyclopedia of psychology* (Vol. 1, pp. 319-327). New York, NY: Wiley.

Developmental genetics.(2005). *In Cambridge encyclopedia of child development*.

Retrieved from http://owww.credoreference.com.library.muhlenberg.edu:80/entry/cupch ilddev/development al genetics

Technical and Research Reports (often with corporate authors)

Hershey Foods Corporation. (2001, March 15). 2001 *Annual Report*. Retrieved from http://www.hersheysannualreport.com/2000/index.htm

Book Reviews:

Dent-Read, C., & Zukow-Goldring, P. (2001). Is modeling knowing? [Review of the book *Models of cognitive development*, by K. Richardson]. *American Journal of Psychology*, 114, 126-133.

NOTE: For articles that have a DOI, see Journal Article with DOI example.

Data Sets:

Simmons Market Research Bureau. (2000). Simmons national consumer survey [Data file]. New York, NY: Author.

• Blog post:

Lincoln, D. S. (2009, January 23). *The likeness and sameness of the ones in the middle.* [Web log post]. Retrieved from http://www.blogspace.com/lincolnworld/2009/1/23.php

• Website with no author or date of publication:

Census data revisited. (n.d.). Retrieved March 9, 2009, from Harvard, Psychology of Population website, http://harvard.edu/data/index.php

Do not include retrieval dates unless the source material may change over time. If no DOI has been assigned to the content, provide the homepage URL.

• Reprint from Another Source:

- Citation in the text: (Newton, 1998/1999).
- Reference List Citation:

Newton, W. (1999). Return to Mars. In C. Mari (Ed.), Space Exploration (pp. 32-41). New York, NY: H.W. Wilson. (Reprinted from National Geographic, pp. 2-26, August 1998).

• In this example of a reprinted book review, the author of the book is named first, followed by the editor of the reprinting source, then the reviewer. In your parenthetical citation, it is necessary to name the author of the book, while the reviewer is named to distinguish from other reviews of this book.