香 港 浸 會 大 學
HONG KONG BAPTIST UNIVERSITY

Computer Science Department

B.Sc. (Hons.)
in
Computing and Information Systems

Final Year Project Handbook

2016-17

July, 2016

Introduction

The Final Year Project constitutes a very significant part of the B.Sc. (Hons.) in Computing and Information Systems programme. It requires the students to engage in a highly independent problem solving activity during the final year of their studies. The topic of the Final Year Project should be within the area of information systems. This can be a system development, but it can also be a research or survey study. Students are encouraged to keep in close contact with their Project Supervisor to ensure smooth progression of their work.

Management and Monitoring

A project coordinator will be appointed by the Head of the Department. This coordinator will chair a Project Committee (comprised of Project Supervisors) which will monitor project selection, assignments and overall progress in conjunction with individual Project Supervisors.

Each student enrolled in the project will be supervised by a faculty member. The project will be jointly assessed by the supervisor and an observer assigned by the Project Committee at the start of the project. The responsibility of observers is to evaluate project proposals, final reports, presentations and demonstrations.

Final grades of projects will be decided by the Project Committee.

To select a topic, the following steps are to be taken:

1. An individual student should submit his/her project proposal in the later part of the second semester of his/her Year 3 study for approval by the Project Committee.

2. If a student could not meet the deadline (at least one week before the meeting date of the Project Committee), he/she will have to hand in the proposal in the following semester.

3. After the proposal is approved, the progress of the project will be monitored at scheduled intervals.

Group projects are not allowed unless a clear cut line can be drawn between individual parts so that students can progress individually without interacting with other parts.

Assessment: Each Final Year Project will be assessed by a supervisor and an observer, both assigned by the Project Committee. Students are advised that these assignments may be changed by the Project Committee if necessary.

For evaluation of the project, criteria categories and weightings are established as described below. Note that there are two percentage figures in the parentheses. The first percentage is allocated by the supervisor, whereas the second is by the observer. The overall percentage distribution between the supervisor and the observer is 64% and 36%, respectively.

1. Identification and analysis of the problem and proposed approach/solution (12%, 8%)

This category assesses the student's ground work and identification and analysis of the problem. The student is expected to do a thorough literature search and is graded according to the efficiency, and robustness of the solutions. A balance between efficiency and completeness of the project will be taken into considerations. For design oriented projects, higher grade could be awarded for its originality.

2. Quality and quantity of work done   (30%, 20%)

The grade for this category reflects the quality and the amount of completed work including those of the final report. The difficulty of the project will be taken into consideration.

3. Presentations, demonstrations, and poster session   (12%, 8%)

This category includes oral presentations of the project and demonstrations if applicable. Communication skills are emphasized. The poster session with the auto demo file (if applicable) will be worth 2%.

4. Creativity, effort, project management, progress reports, and professional attitude in regular meetings   (10%, 0%)

This category covers the assessment of the attitude of the student, the amount of effort the student has put into the project, self-discipline, general management skills in the project development process, regular meetings with supervisor, and regular uploading system archives. The ingenuity of development and creativity towards achieving the project objectives are considered. Incomplete incorporation of amendments (suggested by the supervisor) to the project report will be penalized in this category. This category is assessed by the supervisor only.

Credit will be awarded only at the end of the semester during which the project is completed. In case a student cannot complete the project to the required standard, the student will, at the discretion of the Project Committee, be granted an extended period up to the 1st of November of the same year for resubmission and the highest possible grade is C. Note that university regulations stipulate that a student will only be considered for graduation in the same year if the final grade reaches the Academic Registry on or before the 1st of September.

Reminders

1. Late submission of documents: if Progress Reports and/or the Project Report were handed in late, penalties would be imposed accordingly. This policy ensures fairness to those students who work hard to meet the deadlines.

2. Project presentation/demonstration (including the Q&A session) is of 45 minute duration. If your presentation significantly overruns or underruns the time allocated, there will be penalties. Therefore, rehearse and plan your timing carefully and allow some time for questions as well. Furthermore, if you start your presentation later than originally scheduled, there will also be penalties.

Schedule for 2016-17

(Note: the items in the project proposal, progress reports and project report are for regular information system development projects. For research type projects, please consult your supervisor for the contents to be included.)

		Dates
1.	Last day to choose tentative topic and propose project supervisor(s). (By submitting proposal form to General Office)	Apr 29, 2016 (Fri) 5 pm
2.	Release of tentative project supervisor assignment list	May 13, 2016 (Fri)
3.	Last day for submission of formal written project proposal to the project supervisor.	May 27, 2016 (Fri) 5 pm

The project proposal should include the following categories:

- Project Background
- Problem / Improvement Areas
- System Introduction
- Proposed System

For a group project, each FYP student should state clearly the parts he/she intends to work on.

4.	Approval of project proposal by supervisor and observer.	June 15, 2016 (Wed)

| 5. | Submission of first progress report to project supervisor. | Sept 2, 2016 (Fri) 5 pm |

In this report, normally the following items are expected:

a. Project Plan

- Brief Introduction to Proposed System
- Resource Implications (Please review the hardware and software list provided by the Dept. Items not in the list may be unavailable.)
- Development and Operating Costs
- Tangible and Intangible Benefits
- Cost-benefits Analysis
- Development Schedule
- Recommendation

b. Initial System Analysis

- Initial Use Case Model (Use Case Diagram & Description)
- Initial User Interface Prototyping (diagrams & storyboards)

| 6. | Bi-weekly meetings with supervisor | Semesters 1-2, 2016-17 |

| 7. | Submit all source code monthly (end of Dec, Jan, Feb, Mar) | Semesters 1-2, 2016-17 |

| 8. | Mid-year presentation and demonstration | Jan 4-6, 2017 |

9.	Submission of second progress report to project supervisor.	Jan 12, 2017 (Thu) 5 pm

Contents include System Analysis and Design.

a.	System Analysis

-	Use Case Model (Use Case Diagram & Description)
-	Class Diagrams (with attributes only)
-	Activity Diagrams (on workflow) with Description
-	User Interface Prototype

b.	System Design

-	Class Diagrams & Descriptions (with attributes & methods)
-	Sequence Diagrams with Description
-	State Charts with Description
-	Database Design & Physical Data Model

10.	Submission of hardcopy and softcopy of project report for grading to the department secretary and BU eLearning (BUMoodle), respectively. The program source listings are not required.	March 17, 2017 (Fri) 5 pm

The project report should include an Introduction, Project Plan, System Analysis & Design, Test Plan & Strategies Report, Discussion, and Conclusion.

The Test Plan & Strategies Report should cover

- Testing Strategy
- List of items and features to be tested
- Passing or failing criteria for items/features
- Test Deliverables
- Black-box Test
- Stress Test
- Brower Test

Your softcopy project report should be submitted in ONE pdf file. The submission of the following items to BU eLearning are not required:
- Title page
- Declaration page
- Page for your supervisor's & observer's signatures
- Acknowledgement
- Table of contents
- Appendix

Except for page number in the footer, page headers and footers in the softcopy should be removed. The maximum report file size is 20 MB.

Please visit
http://www.comp.hkbu.edu.hk/~comp4888/pdffile.pdf
for instructions for combining/manipulating pdf files.

The University staunchly upholds the principles of academic integrity. As one part of HKBU's effort to prevent plagiarism, the software Turnitin is used to compare all assignments against multiple sources whenever appropriate. A report on each assignment is generated that includes a percentage similarity and links to specific similar sources. Turnitin does not conclusively prove whether or not an assignment is plagiarized – the faculty will make this determination.

The Turnitin policy guidelines have been uploaded on the department's intranet (https://www.comp.hkbu.edu.hk/v1/?page=teaching_and_learning_guidelines) for your easy reference.

Please visit also
http://www.comp.hkbu.edu.hk/~comp4888/Turnitin-quick-guide-student-v2.pdf for the BU eLearning submission guide.

Each FYP student may submit his/her final report to Turnitin more than once before the deadline. The <u>first time</u> that the student submits his/her final report to Turnitin, he/she is allowed to see the percentage of similarity. This percentage will <u>not be released</u> to the student in subsequent submissions. Therefore do make good use of this chance to get rid of susceptible contents in your final report.

11.	Oral presentation and/or demonstration of the project.	April 3 - 7, 2017 (Mon – Fri), except Apr 4 (Ching Ming Festival)
12.	Poster session	Apr 11, 2017 (Tue)
13.	Submit the following deliverables via the department's archive system: https://archive.comp.hkbu.edu.hk/IS/: - Revised complete project report (in pdf), with all appendices - Abstract - Poster (in pdf) - Auto demo file (using Captivate) - Presentation slide file (in pdf) - Source code+database+installation guide (in zip)	April 20, 2017 (Thu) 5 pm

Your revised project report should be submitted in ONE pdf file.

<u>Guidelines for the Preparation of the Final Year Project Report</u>

Project reports should be typed in black with font size 10 to 12, single line spacing and paginated on two sides of A-4 bond paper, and with 0.5 inch margins on all sides. The maximum length of the report is 400 pages, excluding the appendix, if any. The report file size (excluding the appendix) in pdf format should be less than 100MB.

The order of the materials included should be as follows:

1.   Standard Cover (as recommended by the Department)

2. Standard Title Page (see sample attached)

   Project title and name of the student are listed.

3. Acknowledgment Page (if applicable)

   Acknowledgements of contributions to the project and words of appreciation to personnel who extended support to the project.

4. Declaration Page (see sample attached)

   Declaration of original and independent work by the author.

5. Acceptance Page (see sample attached)

   To be signed by the project supervisor and the co-supervisor if they find the project report acceptable.

6. Table of Contents (see sample attached)

   As the sample is only a guideline, you do not need to rigidly follow it.

7. Abstract (see sample attached)

   The abstract should not exceed one page, and should summarize the essentials of the project, including the objective, method, results and conclusion.

8. Chapter 1. Introduction

   This chapter should state clearly and precisely the objectives and significance of the project.

9. Main Text

   The number of chapters and their contents may vary according to the nature of the project.

   Within the main text, you should focus on describing "what" you have done in each of the development phases, and equally importantly describe "how" and "why" this was done.   Be sure to reference any appropriate technical documentation contained within your appendices.

   All figures and tables, referred to in the text, must be numbered and labelled correctly.

10. Final Chapter. Discussions, Contributions and Conclusion

This chapter should include a statement to indicate whether the project proposal has been fully implemented. Discussions of results and their implications and the merits of the proposed solution should also be included.

11.   References

References should be listed in alphabetical order and cited by author and year of publication in the text.

Format Examples :

Journal

Ives B and Learmonth G P (1984) The information system as a competitive weapon. *Communications of the ACM* 27, pp.1193-1201.

Book

Checkland P B (1981) *Systems Thinking Systems Practice*. Wiley, Chichester.

Contributed volume

Earl M J (1987) Information systems strategy formulation. In *Critical Issues in Information Systems Research* (BOLAND R J and HIRSCHHEIM R A, Eds.), pp. 157-168. Wiley, Chichester.

Conference paper

Ameen J R M and Harrison P J (1983) Normal discount Bayesian models. Presented at the *International Meeting on Bayesian Statistics*, Valencia, Spain, September 1983.

Unpublished reports/theses

Rozenblit J W (1985) A conceptual basis for model-based system design. PhD. Thesis, Wayne State University, Detroit, Michigan.

Web Page

Irving L (1998) *The risks and rewards of electonic commerce*. Journal of International Banking and Commerce. Retrieved January 11, 1999 from the World Wide Web: http://www.ARRAYdev.com/commerce/JIBC/9801-3.htm

Braun D (1997) Of the Coming in 2007. In *The Wearable Internet*. CMP Media Inc. Retrieved November 15, 2001 from the World Wide Web : http://www.techweb.com/wure/news/1997/10/1009wearable.html

12.   Appendices (if needed)

All details, such as the followings, should be included in the Appendices. For example, for developed systems in the final year project, students should document their systems. The documentation may include, but not limited to, some or all of the followings:

The Test Cases of While-box and Black-box Testing – To describe the cases derived from White-box and Black-box testing methodologies and report the test results of each case. The test cases of other testings (e.g. browser testing, stress test) should be included in the main report.

Executive Summary – To summarize the purpose, problems addressed, solution methods, capabilities and operational flow of the system.

Systems Manual – To describe in some details the purpose, problems addressed, solution methods, capabilities and operational flow of the system.

Users Manual – To describe the detail procedures to be followed by a user for using the system. The Installation Guide should also be included.

Technical Manual – To describe the logical as well as the physical design of the system. (The ERD, DFD, etc. may be included here.) This should also include detailed requirements and procedures for the set up and installation of the system.

Recommended References for Report Writing

MLA Handbook for Writers of Research Papers, 3rd edition. New York : MLA, 1988
Lester, James D. Writing Research Papers : A Complete Guide, 8th edition. New York : Harper Collins College Publishers, 1996.

Plagiarism

Plagiarism is the academic offense of representing another person's work as one's own. Evidence of plagiarism is the inclusion of other people's original ideas in your own work without properly identifying the material included as derived from other people's work and providing the appropriate citation.

The penalties for plagiarism are severe. If the person is a current student, the penalties may include dismissal from the University. If the person convicted of plagiarism is a graduate of the University, and the plagiarism was contained in the academic work required for a degree, the University may take legal action against the graduate which may include revoking of the degree.

To avoid any possible misunderstanding, care must be taken to follow the rules concerning the use of quoted materials. You are advised to read the publication titled "Avoiding Plagiarism" which can be obtained at
http://buar2.hkbu.edu.hk/curr/avoid_plagiarism/ .

All final year project reports should be submitted via "Turnitin". It is a software for identifying unoriginal text and the original sources by text matching from Internet sites, electronic journals and books, and past reports/assignments held in its database. A report on each assignment is generated that includes a percentage similarity and links to specific similar sources. The originality reports will be sent to the project supervisor and observer. Turnitin does not conclusively prove whether or not an assignment is plagiarized – the faculty will make this determination.

More guidelines on anti-plagiarism and Turnitin policy can be found at
(https://www.comp.hkbu.edu.hk/v1/?page=teaching_and_learning_guidelines)

As stipulated in the University's regulations, a student found to have committed an act of plagiarism shall receive an "F" grade for the course. In addition, any committed plagiarism case will be announced to all students.

Students should agree that by taking this project, all required reports/papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted reports/papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such reports/papers. Use of the Turnitin.com service is subject to the Terms and Conditions of Use posted on the Turnitin.com site.

Each FYP student may submit his/her final report to Turnitin more than once before the deadline. The first time that the student submits his/her final report to Turnitin, he/she is allowed to see the percentage of similarity. This percentage will not be released to the student in subsequent submissions. Therefore do make good use of this chance to get rid of susceptible contents in your final report.

Sample
Title Page
Paper Size: A4
Margin:-
- Between top edge of paper
  and the upper line of the
  frame: 8.5cm
- left 6 cm
- right 5cm
- frame height 5.5cm
- frame width 10cm
Project Report

Management System
for Personnel Agency

by

LEE Tai Chung, Tim

Submitted in partial fulfillment of the requirements for the degree of

Bachelor of Science (Honours)
in Computing and Information Systems

Hong Kong Baptist University

April, 2017

Declaration

I hereby declare that all the work done in this Final Year Project is of my independent effort. I also certify that I have never submitted the idea and product of this Final Year Project for academic or employment credits.

_____

 LEE Tai Chung, Tim

Date: _____

Hong Kong Baptist University
Computer Science Department

We hereby recommend that the Final Year Project submitted by LEE Tai Chung, Tim entitled "Management System for Personnel Agency" be accepted in partial fulfillment of the requirements for the degree of Bachelor of Science (Honours) in Computing and Information Systems.

_____   _____
Dr. Abel B.C. Ding   Dr. Esther F.G. Hung
Supervisor   Observer

Date: _____   Date: _____

TABLE OF CONTENTS

* To declare the software/library (e.g. open source software, content management system) that you have used for the project and state the part(s) you employed them.

ABSTRACT

[Abstract text, single line spacing, do not exceed one page]