

THE UNIVERSITY OF HONG KONG
Department of Computer Science

**Guidelines for BEng(CompSc) Capstone Project (COMP4801) and
BASc(FinTech) Capstone Project (FITE4801) 2023-2024**

1 Introduction

To fulfill the requirements of the BEng(CompSc) degree, students must obtain at least 240 credits, of which 12 credits are from a capstone project (COMP4801). To fulfill the requirements of the BASc(FinTech) degree, students must obtain at least 240 credits, of which 12 credits are from a capstone project (FITE4801).

This document provides a general guideline of the capstone projects (COMP4801 and FITE4801). The COMP4801 and FITE4801 projects provide an opportunity for students to study and work independently on a substantial Computer Science project for COMP4801 and FinTech project for FITE4801 under the supervision of academics in the Department of Computer Science (the Department). This guideline is subject to change or amendments. Both COMP4801 and FITE4801 will have a Project Coordinator. When referring to the Programme Director in this guidelines, it will be the BEng(CS) Programme Director for COMP4801 and the BASc(FinTech) Programme Director for FITE4801.

1.1 Weighting

The weighting of COMP4801 and FITE4801 projects are equivalent to 12 credits.

1.2 Project Grouping

Students taking project should form their own project team among their fellow students. They may form a group of maximum of four partners. Students are reminded that they will be assessed individually. Individual projects are also allowed.

1.3 Enrolment Period and Project Duration

All projects should commence in the first semester of the final academic year. Students are required to prepare the project in the summer semester before the final academic year. Students should submit their enrolment application in a period specified by the Department. Enrolment at other times will not be accepted.

Please note that a project represents a significant amount of work (at least 300 learning hours per student). The project must be completed in 2 semesters, i.e.,

the first and the second semester of the final academic year.

2 Project Enrolment Process

2.1 List of Potential Supervisors

A list of potential supervisors with their expertise will be provided by the Department and will be available on the Moodle. Students may approach them to seek advice for project topics. Students are welcome to make appointments with the potential supervisors via email. Students may also seek help from the Project Coordinator.

2.2 Enrolment Process

Each group may find its supervisor (with the agreement of the supervisor) from the list provided by the Department, or a supervisor will be assigned by the Project Coordinator if the group fails to find a supervisor on their own. Besides, each group is required to submit a short proposal on the proposed topic together with the enrolment application to show their interest and understanding on the proposed topic.

2.3 Project Allocation

The project allocation will be done by the Project Coordinator right after the end of the enrolment period, taking into consideration supervisor choices and teacher workload distribution. Under normal situations, the group will be assigned with the agreed supervisor. The Project Coordinator may, however, assign a group to another supervisor in some circumstances. The final project allocation result will be announced on Moodle. Normally, the project allocation result will be announced before the beginning of the first semester of the final academic year.

2.4 Change Enrolled Project / Group Members

After enrolling in the project, students are allowed to:

- change the enrolled project to another project with the agreement of all concerned parties.
- change the group members with the agreement of all concerned parties.

To apply for changing enrolled projects, students have to submit the Change Enrolled Project Form, provided by the Department, **within two weeks after the project is allocated.** Change enrolled project after the above period is allowed in exceptional circumstances with the approval of the Programme Director, otherwise it will be considered a failure and the failed student has to re-enroll and

re-do another project, subject to the same regulations. Change of supervisor is generally not encouraged and can only be done with the agreements of the exiting supervisor, the new supervisor and approval by the Programme Director.

3 Assessment

Each project will be assessed by a panel of examiners consisting of the supervisor, a second examiner and a moderator. The second examiner and the moderator will be assigned by the Project Coordinator. The role of the moderator is to scale the grade distribution of all students in the programme if necessary to ensure quality and standard.

The assessment is based on project deliverables comprising detailed project plan, webpage, interim report, first presentation, final report, final presentation and project exhibition (with a 3-min video). The submission deadlines of the project deliverables will be announced by the Project Coordinator at the beginning of the first semester. Students are advised to establish a close working relationship with their supervisors. They should maintain regular contact with the supervisors so that the progress of the project is well monitored, and ensure that they have put in a substantial amount of work worthy of the 12-credit project. Students will be expected to take a proactive approach to the meetings. It is the student's responsibility to inform their supervisor of progress and to lead the development of the project.

3.1 Detailed Project Plan

After the project allocation process has been completed, each group has to submit a detailed project plan to their supervisor by week 4 of the first semester. The project plan should include the objectives and scope of the project and the schedule for the implementation. Students should consult their supervisors about the feasibility of their proposals. They should also state the estimated number of learning hours for each milestone of the project in the proposal.

3.2 Project Webpage

Each project group has to design a project webpage and place it into a server provided by the Department. The webpage should contain details of the project in an easy-to-understand manner. Students should design the webpage at the beginning of the first semester and keep the webpage updated so that their supervisors can closely monitor the progress of the project.

3.3 Interim Report

Project groups should submit an interim report by at the end of the first semester. The report should contain some preliminary results accomplished in the first

semester. The schedule for the rest of the project should also be included in the report, which allows supervisors to monitor the progress of the project even more closely.

3.4 First & Final Presentations

Each student has to attend the first and final presentations for the project in which each student in the group presents their contribution to the project. The first and final presentations will be scheduled at the end of the first and second semesters, respectively.

The duration of the first/final presentations (including demonstration and Q&A session) for each project is shown as below:

No. of members	Duration (minutes) Presentation + Q&A
1	20 (15+5)
2	30 (25+5)
3	40 (30+10)
4	50 (40+10)

3.5 Final Report

Each student has to submit an individual report of the project report around the end of the second semester. The electronic copy of the report should be submitted on Moodle in one single file in PDF format. The report should be a complete report without any unfinished sections. It is ready to be assessed before the final presentation.

3.6 Grading

The grading of a project includes the assessment of the above mentioned requirements. Examiners will take a holistic approach in the assessment, including but not limited to preparation, efforts, innovation, actual work, project implementation, achievement, presentation etc. The marking scheme is given in the following table:

Deliverables	Supervisor	2nd Examiner
Detailed Project Plan	12	8
Project Webpage	2	2
First Presentation	10	14
Interim Report	22	22
Final Presentation	14	14
Final Report	40	40
Total	100	100
Weighted Total	60%	30%
	10% for project exhibition and 3-min video by judges	

3.7 Peer Assessment

Peer assessment is used to provide fair assessment for each member of the group in terms of the overall contributions to the project. The Peer Assessment algorithm used is based on the model of WebPA introduced by Loughborough University and used by many other universities around the world. The project marks will be appropriately moderated according to this peer review to reflect the different contributions of individuals, including yourself. Each member in the team will give a score to all members including himself/herself from 1-5 with the following meaning.

- 1 Poor = not enough contribution to make any impact to the project
- 2 Less than average = less than the fair share expected
- 3 Average = good contribution as expected
- 4 Very good = more than the average of other team members
- 5 Excellent = outstanding contribution, key to the completion of the project

More information about WebPA can be found at the website - <http://webpaproject.lboro.ac.uk/>.

The Peer Assessment (PA) score is used on 30% weighting of the overall marks before calculating the final moderated marks, i.e. 70% of the original marks by examiners will be without any PA moderation.

4 Virtual Project Budget

The rationale behind setting up a virtual project budget system is to let students experience budget constraints similar to a real life situation. Each group will be allocated a virtual project budget of HK\$1,000 x number of project group members. For example, a budget of HK\$ 4,000 will be allocated to a project with 4 students.

The budget may be used for purchasing reference book and equipment, etc. Students should check with the CS Technical Office and see whether they have the equipment before purchasing. The items to be purchased should be endorsed by the supervisor. All purchased materials remain the property of the university and must be returned after use.

Details of the virtual project budget system and reimbursement procedures are available on Moodle. Students should closely observe the reimbursement procedures and deadlines; any late claim will not be entertained.

5 Failure of Project

Students who fail to satisfy the examiners in their project will receive a fail grade (F) in their project.

Department of Computer Science

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