

The University of Hong Kong
Department of Computer Science
COMP3297_1A Software Engineering
2023-24 Group Project Specification

Project Description:

a. Background

Your client, Ken Road Kindergarten, is a non-profit-making Kindergarten. They want to develop a web-based application to motivate students to learn mathematics through some online exercises.

Currently, teachers are using the traditional way to give hard-copy exercises to students weekly and collect their work for grading afterward. The number of exercises is limited, and the grading process is quite long.

The Mathematics Panel Head Barbie Chan and the Chief Technical Officer Matthew Wong invite your group to develop the EasyMath application, which could improve the effectiveness of learning mathematics.

b. Overview

The description of the EasyMath is as follows:

1. The administrative staff will generate the accounts for teachers and students.
2. After login, a teacher can add the exercises in the application with the help of Artificial Intelligence (AI).
3. After login, a student can work on the exercises and the scores will be recorded.
4. At the end of each month, if the student obtains a certain number of scores, he/she will get an electronic certificate in the system.

Project Tasks, Deliverables and Deadlines:

1. Requirements Elicitation

To elicit the user requirements, each group will have one **10-minute** first client meeting, interviewing the client (simulated by TA) on **Oct 4, 2023**.

On **Sep 27, 2023**, multiple session timeslots of client meetings #1 will be released on the course Moodle page. Each group should pick only **ONE** of these timeslots on Moodle by **Oct 1, 2023, 23:59**.

Please note that it is **NOT** a must to have all group members to attend the meeting. You may have representatives instead.

Your meeting performance is graded, including but not limited to effective communication with clients and skills of requirements elicitation.

Deliverables #1 (Deadline Oct 11, 2023, 23:59)

After the meeting, each group is required to send an email to the client to confirm the user requirements by the end of **Oct 11, 2023**. This serves as an informal meeting note including all user requirements. The title of the email should be “**Group [Group Code, e.g. A, B, C ...] - Confirming user requirements**”. This set of deliverables will be graded based on the correctness and completeness of the user requirements elicited during the first client meeting.

2. Software Design

Your client will reply to your email and confirm with you the user requirements. Each group should perform software design based on the user requirements provided by the client.

Deliverables #2 (Deadline Nov 8, 2023, 23:59)

By **Nov 8, 2023, 23:59**, each group shall submit the set of system diagrams (use case, class, and sequence, etc.) used for the second client meeting.

3. Client Meeting #2 – Requirements confirmation and idea pitching

On **Nov 15, 2023**, you are required to meet your client (simulated by TA) again to review your system design. Your client will review your system diagrams and provide feedback on the system (if any).

On **Nov 8, 2023**, multiple session timeslots of client meetings #2 will be released on the course Moodle page. Each group should pick only ONE of these timeslots on Moodle by **Nov 12 23:59**. It is not a must to have all group members to attend the meeting.

Change of Requirements

During client meeting #2, the client would like to make changes to some of the requirements. Your group must update your system design in the subsequent phases. During the meeting, your group may also propose **a maximum of three changes** to the requirements to improve the system and convince your client to accept and confirm the changes.

Your meeting performance is graded, including but not limited to the effectiveness of presenting the system diagrams and handling Q&As.

Bonus (Deadline Nov 20 23:59)

If your group has proposed changes to the requirements and is accepted by the client, your group is required to send an **email** to the client to confirm these changes. A bonus of a maximum of **5%** will then be awarded if the changes are properly reflected in your final set of deliverables. You must send this email by the end of **Nov 20, 2023**, to be eligible for the bonus marks.

4. Software Design Update, SRS document and prototype video demo

Each group should update the system design and user requirements according to the client's feedback in the second client meeting. In addition to system design, you are required to prepare the UI/UX design and a prototype video demo of the UI/UX design. The video can be uploaded on YouTube or any cloud drive for submission.

Deliverables #3 (Deadline Nov 22 23:59)

You are required to prepare a system requirements document, which include the following finalized elements by **Nov 22, 2023, 23:59**:

- a) User requirements of the whole system.
- b) Use case diagram(s) and related tabular description of the whole system with all use case relationships.
- c) Sequence diagram(s) of the whole system.
- d) Class diagram(s) of the whole system with attributes and operations when appropriate.
- e) UI/UX design of the whole system including page transition if suitable.
- f) Prototype video demo of the UI/UX design, to be submitted in the form of a link.

You may include other elements that help us understand your system design idea, but they will not be graded. Your work will be graded by its correctness and completeness.

5. Peer Review

Please complete the peer review form on Moodle by **Nov 29, 2023, 23:59** to evaluate yourself and your groupmates. Submission is optional, but this allows us to have a better understanding of your contribution in your group.

Contact:

You may contact your client by email kenroadkindergarten@gmail.com.

Assessments:

[10%] Client meeting #1

[10%] Deliverables #1 (Preliminary user requirements)

[5%] Deliverables #2 (Preliminary software design)

[15%] Client meeting #2

[60% total] Deliverables #3

- [10%] Complete set of user requirements
- [10%] Use case diagram(s)
- [10%] Sequence diagram(s)
- [10%] Class diagram(s)
- [10%] UI/UX design document
- [10%] Prototype video demo of UI/UX design

[Extra 5%] Proposed changes

Note: Additional features or enhancement/modifications that are not agreed by the client will not be considered when grading. Comments will be given after receiving each deliverable. But we only release a final project grade (A, B, C, D, or F) for your project.

Late Policy:

1 day:	-12.5% of total available marks
2 days:	-25%
3 days:	-50%
>3 days:	no mark

Plagiarism:

Plagiarism is prohibited. Please refer to the email sent by the department about plagiarism.

“Definition of Plagiarism

As defined in the University's Regulations Governing Conduct at Examinations, plagiarism is "the unacknowledged use, as one's own, of work of another person, whether or not such work has been published.", or put it simply, plagiarism is copying (including paraphrasing) the work of another person (including an idea or argument) without proper acknowledgement.

In case of queries on plagiarism, students are strongly advised to refer to "What is Plagiarism?" at <https://tl.hku.hk/plagiarism/>

- If a student commits plagiarism, with evidence after investigation, no matter whether the student concerned admits or not, a penalty will be imposed:

First Attempt: if the student commits plagiarism (in an assignment/test of a CS course) for the first time in his/her entire course of study, the student shall be warned in writing and receive zero mark for the whole assignment or the whole test; if the student does not agree, s/he can appeal to the BEng(CompSc) Programme Director within a week;

Subsequent Attempt: if the student commits plagiarism more than once in higher course of study, the case shall be referred to the Programme Director for consideration. The Programme Director shall investigate the case and consider referring it to the University Disciplinary Committee, which may impose any of the following penalties: a published reprimand, suspension of study for a period of time, fine, or expulsion from the University.

- Both the student who copies other's work and the student who offers his/her work for copying shall be penalized.”