User manual of automated examination system

Contents

1. Login page

The Login webpage of examination system is very simple and clear. You just need to choose your role in selected option. Then, enter the username, password and click 'Sign in' to enter your home page. If you forget to input username, password and Role. The system will show a red block to remind you. It will show 'bad credentials' if you enter wrong username, password or role.

We will first view the webpages and functions of Student's interface, then teachers', finally the admin interface.

Login Parameters

Username:	root
Password:	P@ssw0rd

2. Student page
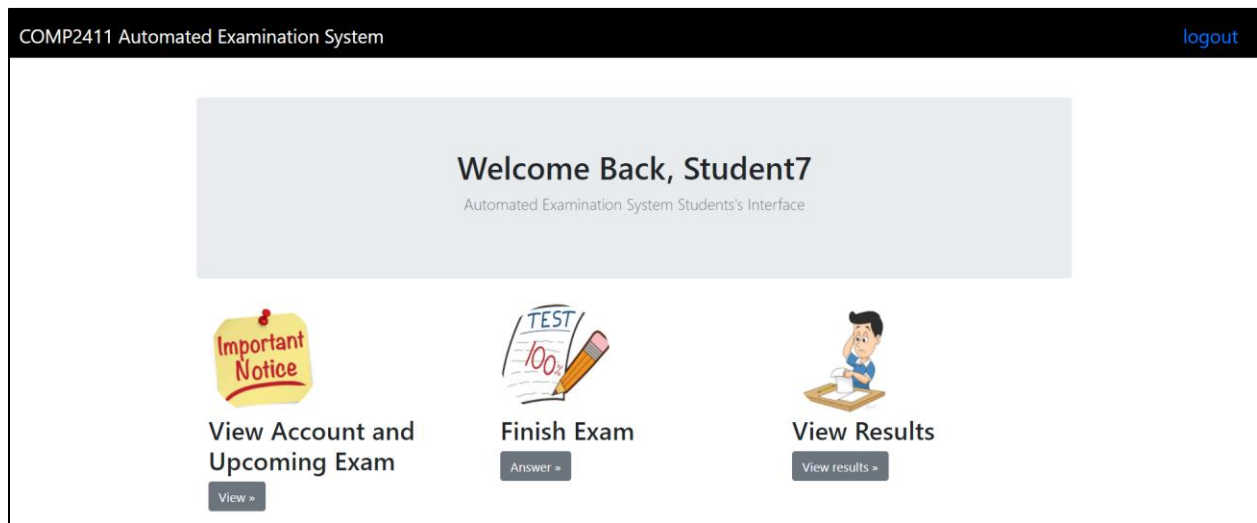
If you are a student, you will see this page after you login. Successfully. On this page, you can do 4 actions.

- First, you can logout by simply click the word 'logout' which is at the top right corner.
- Second, you can view your account information and exam schedule by clicking 'view' button.
- Third, once you click the 'Answer' button, you can complete your exam.
- Forth, you can check your exam result on 'View Result' page.

1) View Account and Upcoming Exam
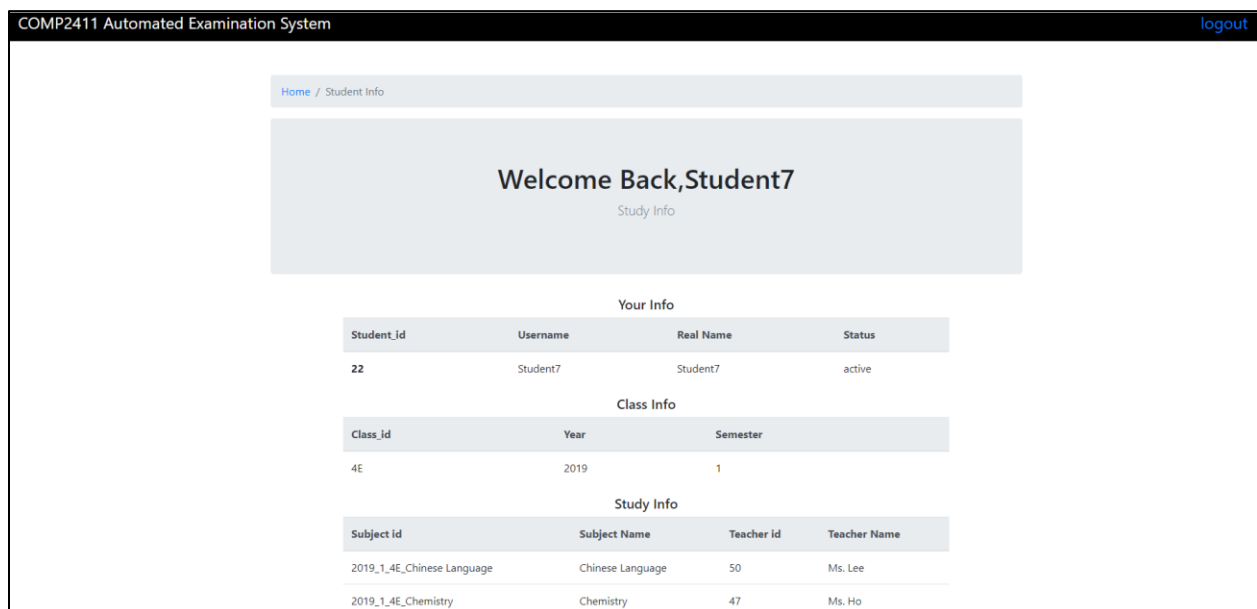
In this webpage, there is information about user's real name, username, current status, information of the class he/she attend and the subjects they study this semester.
By the way, if you want to back to the previous page, click the blue text in the directory list.
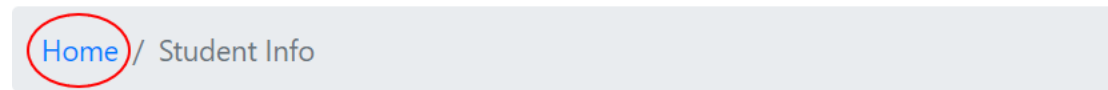
2) Finish Exam / doing exam paper(s)
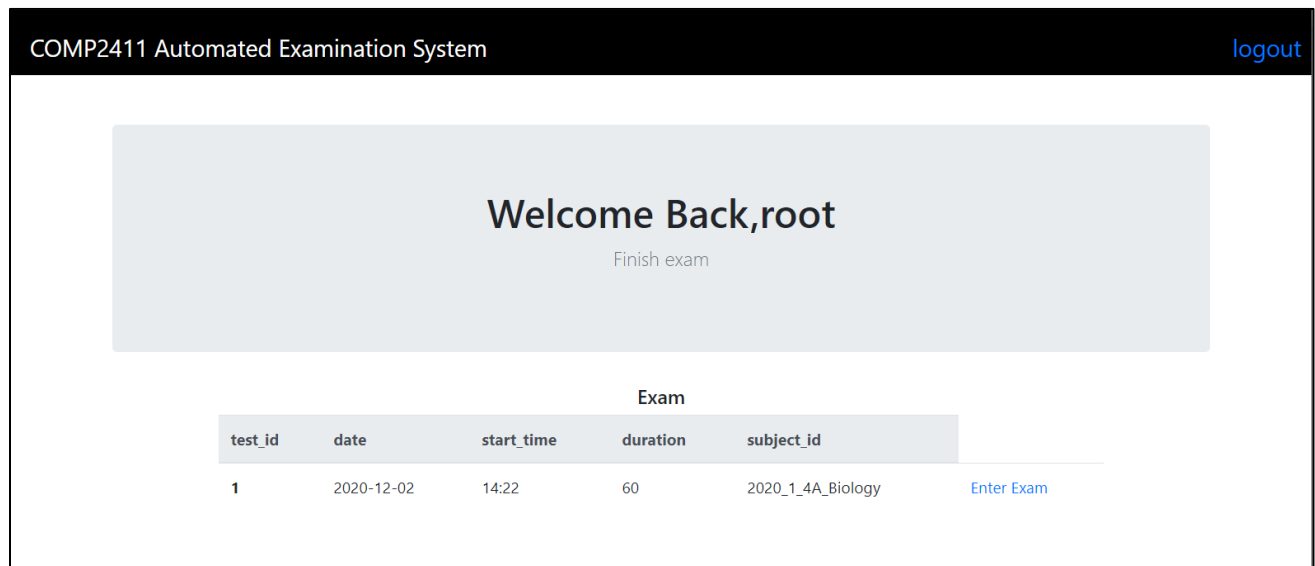
In this webpage, it will show a table of your exam schedule. The table contains some details about your examination, include the test_id, date, start time, duration and subject_id with class. If you want to start the exam, click 'Enter Exam' to start your examination.
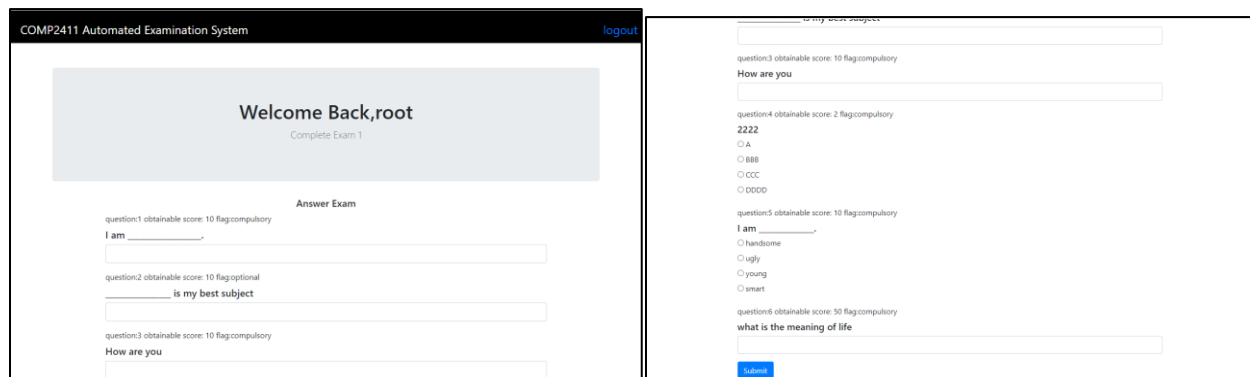
When entering the exam, there will be a list of questions for you to answer. You can scope down or up to answer further questions and review your answers. There are 3

types of questions, include MC (multiple choice), Fill in the blank and long questions. After you complete the exam paper, you should roll to the bottom and click the 'Submit' button to hand-in your answers.

If the question is optional, it will show 'Bonus Question' on the top right side of the question:

Obtainable score: 10	BONUS QUESTION

3. Any Question ?

tf

After you submit the exam paper, you cannot redo the paper again to avoid plagiarism. The system will remove the URL of exam paper automatically.

COMP2411 Automated Examination System   logout

Home / Question Paper

Welcome Back,Student7
Finish exam

Exam

test_id	date	start_time	duration	subject_id

3) View Result (receiving exam result)

To check your exam result, you can click 'View Result' to view your grades. The grades will be released when subject teachers mark all the papers for students and compile grades completely.

Home / Result

Please select your class

Class id	Year	Semester	Status	Operate
5A	2020	1	active	✎

First the student selects the class he belongs in. As he may belong to multiple class prior to this semester, there might be multiple records.

The report will show up after clicking the "operate" button. The website will render all the graded subjects records in that class.

Generate Report

Result Report

Year : 2020
Semester : 1
Class : 5A
Student Name : David Yeung

Student Results

Subject Name	Exam Date	Exam Time	Subject Name	Exam Duration (mins)	Grade
English	2020-12-16	16:00	English	60	A+
Liberal_Studies	2020-12-10	16:30	Liberal_Studies	70	A+

Mean Grade: 4.3
Standard Deviation: 0

Conversion Table

Grades	Marks
A+	4.3
A	4
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
F	0.0

Report Sample

3. Teacher Interface

If you were teachers, you can see the below interface after successfully login:

1) View Information

You can check your personal information in teacher Info. Also, it will list out the class that you are going to teach. To further view the students in this class, you can click 'Check Class' to see more information.

Year 2019 Semester 1 4E

Student_id	Year	Semester
22	Student7	Student7
24	Student8	Student8

2) Create a new exam paper for class

Please choose subject to create exam

Active Subjects you are teaching

Subject id	Subject name	Class id	Year	Semester	Operate
2021_3_1A_course 1	course 1	1A	2021	3	✎
2020_2_9C_Drawing	Drawing	9C	2020	2	✎

3) Set up an Examination

If you want to set up an exam paper for class, choose the second choice (Create Exam paper) to enter exam management interface.

Then, click the picture of Operate column to enter creating exam paper interface.

Here, clicks blue button to create paper, select unfinished exams then click the red button to delete exam(s).

Input exam date, time and duration to create an exam. There are calendar and time input for user to input the information easily and accurately.

4) Set up question for Exam

After creating exam, you can enter a new interface to set up questions. (This icon → ✏️)

Manage Exam Questions

Exam Details:
Date: 2020-12-10 Time: 16:29 Duration 100mins

[Add Questions] [Delete Questions]

Active Questions

☐	Question Type	Questions	Options (for mcq questions)	Answer	Obtainable Score	Compulsory/Optional
☐	Multiple Choice Questions	Which options you usually choose ?	A: A B: B C: C D: D	B	2	compulsory
☐	Fill in the blank	This subject is _____ .	-	COMP2411	3	compulsory
☐	Long Questions	Any Question ?	-		10	optional

Deleted Questions

Question Type	Questions	Options (for mcq questions)	Answer	Obtainable Score	Compulsory/Optional
Long Questions	Any question ?	-		10	compulsory

Again, the blue button for creating questions and red for deleting question(s). There are 3 types of questions, include MC (Multiple choices), fill in the blank and long questions. For each question, you can choose whether it is compulsory or optional. Questions default as compulsory questions. To change it to optional, untick the box of Compulsory:

☑ Compulsory
If unchecked, it will be treated as a bonus question!

For mc question, it is not allowed to have an empty answer for choices. If users forget to input all answer, a pop-up window will be shown to remind users:

localhost:3500 顯示
Please fill in Option C

[確定]

le Choice Questions

le Score

For fill-in-the-blank and long question, you can determine whether it is open-ended question (leave a blank on 'Correct Answer' text box). If it is, the system will not mark this question automatically. Teachers need to mark the paper by another function of exam system (which will be demonstrated later)

Question type — **Multiple choices (MC)**

Question type — Fill **in the blank**

Question type — **Long question**

Add Question   ✕

Question Type

| Long Questions   ⌄ |

Obtainable Score

| |

Question

| |

Correct Answer

| |

☑ Compulsory
If unchecked, it will be treated as a bonus question!

Submit

Close

5) Marking exam paper

The interface of the paper you can mark is like other interfaces, click this (🖉) button to enter the examinations of subject.
Since one subject may have more than one exam, so you need to choose which exam you are going to mark.

Home / Mark Exam Papers

Please choose subject to mark exam

Active Subjects you are teaching

Subject id	Subject name	Class id	Year	Semester	Operate
2021_3_1A_course 1	course 1	1A	2021	3	🖉
2020_2_9C_Drawing	Drawing	9C	2020	2	🖉

Select (🖉) which exam you are going to mark the papers.

Mark Exams

Finished Exams

Exam date	Exam time	Exam duration (mins)	Mark Students Paper
2020-12-10	16:29	100	☑

Mark Exams

Compile Grades

Student List

Student name	Submitted?	Temp Score (If applicable)	Marked?	Mark Students Paper (If applicable)
Student7	✔	3	✘	☑
Student8	✔	7	✘	☑

Here is a list of students' exam papers. It records who students are required to attempt this exam, whether he has submitted the paper, temp score and status of marking. Temp Score means the temporary score that MC and fill in the blank questions are marked by system automatically. When students submit the answer paper, the system will mark the questions which provide suggested answer.

You should compile Grades (Cyan color button) after marking all student's papers. The 'Marked?' column will show a tick (✔) on the field if you have updated the status of student's papers.

If you compile grade while have not finished marking, system will interrupt your action and pop up a window to remind you:

localhost:3500 顯示

There are still exam_paper which is not marked yet, please mark all the paper first before

確定

Compile Grades   ✕

Student name	Submitted?	Marked?	Score	Points Possible (excluding bonus)	Percentage	Grades
Student7	✓	✓	15	14	107.14%	A+
Student8	✓	✓	7	14	50%	D+

[Compile]

[Close]

After compiling the grades, the system will generate a preview of student's grades. If you have no problem with this result, press the blue button to continue, otherwise, click grey button to close this pop-up window and modify your marked paper.

Please make sure that all the students have submitted the papers and their records, scores and grades are correct. Since once you compile the grades, students cannot submit paper anymore and you cannot modify the scores and grades.

As there may be bonus questions in the exam papers, students may achieve marks > 100%, they will be graded as A+ as well.

To further mark each paper, click ✎ to enter marking paper interface.

Grade conversion Table

Mark	Grade
95 or above	A+
[90 95)	A
[85 90)	A-
[80 85)	B+
[75 80)	B
[70 75)	B-
[65 70)	C+
[60 65)	C
[55 60)	C-
[50 55)	D+
[45 50)	D
[40 45)	D-
Below 40	F

6) Notices of marking paper

Grade Student Paper

Status: This paper needs grading

Update this exam paper to be marked

Question Type	Question	Options	Suggested Answer	Student's Answer	Score	Bonus Question?	Grading / Modify Marks
Multiple Choice Questions	Which options you usually choose ?	A: A B: B C: C D: D	B	A	0/2	✖	✎
Fill in the blank	This subject is _____ .	-	COMP2411	COMP2411	3/3	✖	✎
Long Questions	Any Question ?	-		tf	pending for grading	✔	✎
Multiple Choice Questions	sd	A: 1 B: 2 C: 3 D: 4	A	D	0/4	✖	✎
Fill in the blank	test pen-end	-		ok	2/5	✖	✎

Student Mark / Total Mark : 5/14 (Bonus Mark : 10)

Long Question and some of the Fill-in-the-blank need teachers to mark and calculate scores manually. Please pay attention to the 'Score' column, if that field exists 'pending for grading', it means this question need teachers to mark it manually. Click ✎ to modify the scores of questions.

After finishing marking, click the green button 'Update this exam paper to be marked' to change the status of this paper.

7) Viewing exam reports

Teachers can view the report of student's exam performance after compiling the grades. First, you need to choose which class you want to see, the performance of your instructed class(es) or the student's performance of your instructed subject.

Instructed class means you can see all the examinations performance of subjects, even the subjects are not taught by you as you are the class teacher.
Instructed subject means you can only view the exam performance of the subjects you are teaching in different classes because one teacher can have many subjects.
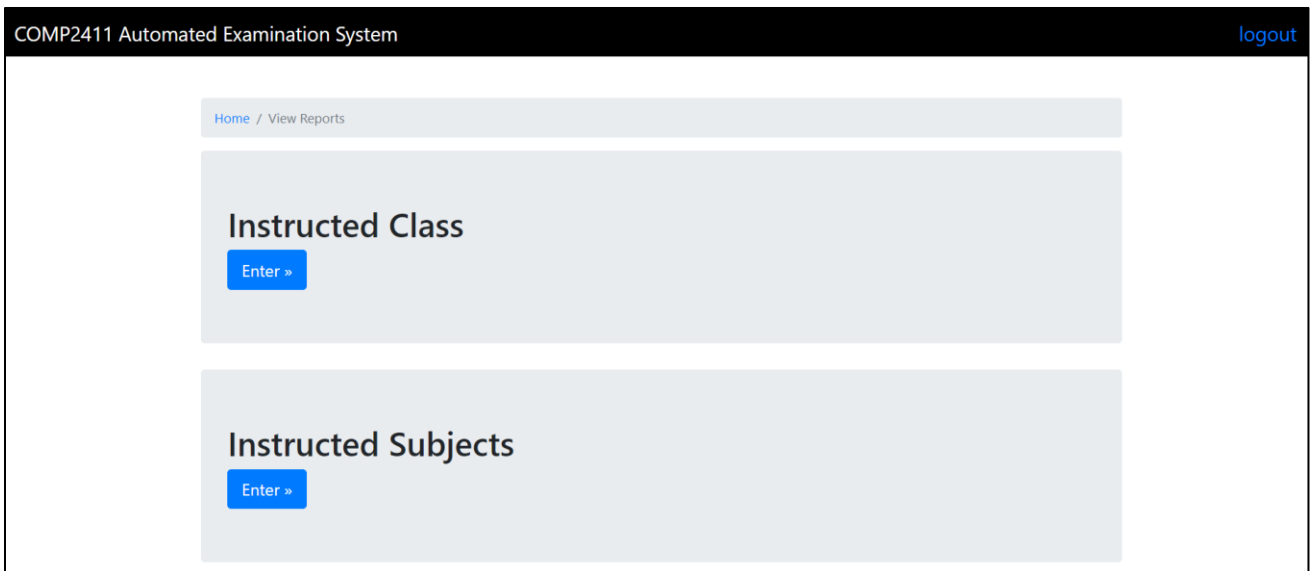
If you want to view the exam performance of your instructed class, then you need to select the class, subjects of class, and exam of subject separately to view the report.

View Report of Instructed Class

Choose the class that you want to check. You may check the archived class in previous year as well.

Please choose Subjects

Active and Archive Subjects of this class are listed below

Subject Id	Subject Name	Instructor	Subject Status	Operate
2019_1_4E_Chinese Language	Chinese Language	Ms. Lee	active	✏
2019_1_4E_Chemistry	Chemistry	Ms. Ho	active	✏

OR

Please choose Student

Active and Archive Students of this class are listed below

Student Name	Operate
Student7	✏
Student8	✏

Second, select to view by subject or view by student.

- If you choose view by student, the student report of that class will be generated. You may store the report by clicking "Generate Report".

Generate Report

Result Report

Year : 2020
Semester : 1
Class : 5A
Student Name : David Yeung

Student Results

Subject Name	Exam Date	Exam Time	Subject Name	Exam Duration (mins)	Grade
English	2020-12-16	16:00	English	60	A+
Liberal_Studies	2020-12-10	16:30	Liberal_Studies	70	A+

Mean Grade: 4.3
Standard Deviation: 0

Conversion Table

Grades	Marks
A+	4.3
A	4
A-	3.7
B+	3.3

- View By Subject

If you choose view by subject, please select the subject you want to view. Afterwards, click the exam report you want to check, a report will be generated for you containing all the students sitting on that exam. You may store the report by clicking "Generate Report".

Home / View Reports / Class / Class: 5A Year: 2020 Semester 1 / English

Please choose Exams

Marked Exams are shown below

Exam Date	Exam Time	Exam Duration (mins)	Operate
2020-12-16	16:00	60	✎

Generate Report

Result Report

Year : 2020
Semester : 1
Class : 5A
Subject : English
Exam-Date : 2020-12-16
Exam-time : 16:00

Student Results

Student Name	Grade
David Yeung	A+
Hugo Lee	B-

Mean Grade: 3.5
Standard Deviation: 0.8

Conversion Table

Grades	Marks
A+	4.3
A	4
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0

If you want to view report of your instructed subjects, first select the subjects and class, then select the exam to view the report. A report with the same format as "view by subject" in class teacher mode. You may also store the report by clicking "Generate Report".

↓ ↓

Home / View Reports / Subjects

Please choose subjects

Active Subjects and Archive Subject(s) you have instructed before

Subject Id	Subject name	Class	Year	Semester	Status	Operate
2019_1_4E_Chinese Language	Chinese Language	4E	2019	1	active	✏
2020_2_9C_E-sport	E-sport	9C	2020	2	active	✏

Home / View Reports / Subjects / Class: 4E Year: 2019 Semester 1

Please choose Exams

Marked Exams are shown below

Exam Date	Exam Time	Duration	Operate
2020-12-06	21:14	120	✏
2020-12-07	06:15	90	✏

Home / View Reports / Class / Class: 5A Year: 2020 Semester 1 / English / Exam Date: 2020-12-16 Time: 16:00

Generate Report

Result Report

Year : 2020
Semester : 1
Class : 5A
Subject : English
Exam-Date : 2020-12-16
Exam-time : 16:00

Student Results

| Student Name	Grade
David Yeung	A+
Hugo Lee	B-

Mean Grade: 3.5
Standard Deviation: 0.8

4. Admin Interface

If you were an admin, there are mainly 2 operations you can do. You can view and modify the student's or teacher's accounts. You can add a new student or teacher or achieve their account. Also, you can manage the class through this system.
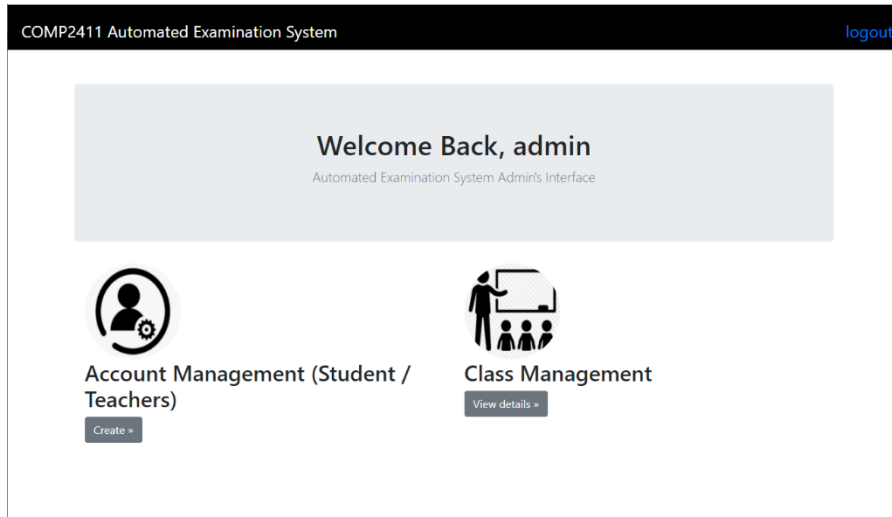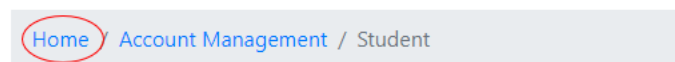

1) Managing student's and teacher's accounts
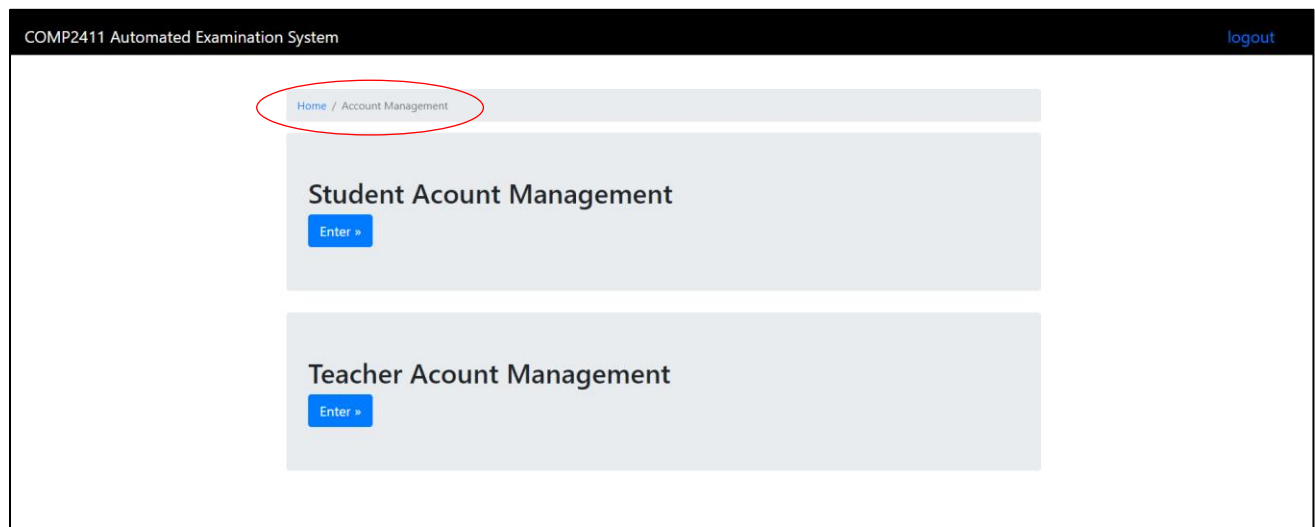
After you enter the Account Management Interface, first you need to choose to modify student's or teacher's accounts. Clicking the 'Enter' button to enter the management interface that you want.

By the way, if you want to back to the previous page, click the blue text in the directory list.

2) Student management Interface

If you choose to manage the student account, you will see the above web page. To add a new student, you can click the 'New Student' button, then there will be a pop-up window for you to enter the student name, username and password. After inputting the information, click 'Submit' to create a new student account, or click 'close' to cancel this action.

If the students do not study anymore, you can archive the student's account. Noting the selected box in front of the student_id to mark who you want to archive, then click 'Archive Student' to archive the student's account(s). All records related to the student, including class enrolment records, examination results, and attempt data will be archived.

3) Teachers management Interface

Active teachers

[New Teachers] [Archive Teachers]

	Teacher id	Teacher name	username	status
☐	47	Ms. Ho	msho	active

Archived teachers

Teacher id	Teacher name	username	status
42	Ms. Wong	Mswong	archived
43	Ms. Chan	mschan	archived
44	Ms. Yeung	msYeung	archived
45	Ms. Li	msli	archived
46	Ms. Cheung	mscheung	archived

The method of managing teacher's accounts is similar to managing students. Following the above steps then you can access to the same result for teachers.

If the teacher is archived, all subjects and class he/she is instructing, exam paper records will be archived.

4) Class Management Interface

Active Class(es)

New Class Archive Class Delete Class

	Class id	Year	Semester	Class teacher	status	Operate
☐	4A	2020	1	Ms. Chan	active	✎
☐	5A	2020	1	Ms. Yeung	active	✎
☐	5B	2020	1	Ms. Chan	active	✎
☐	7A	2020	1	Ms. Chan	active	✎
☐	9C	2020	2	Ms. Ho	active	✎

Archive Class(es)

Class id	Year	Semester	Class teacher	status	Operate
1A	2020	1	Ms. Ho	archived	✎
4A	2019	2	Ms. Ho	archived	✎

Deleted Class(es)

Class id	Year	Semester	Class teacher	status	Operate
1B	2019	1	Ms. Ho	deleted	✎

In this interface, you can view the status and information of classes, create new classes, archive and delete classes.

If you want to archive and delete class(es), first select the class by selection box, then click the 'Archive Class' (Yellow button) or 'Delete Class' (Red button) to execute your operation.

For archive records, all subject records, examination records, enrolment records under the class will be archived, while for deleting records, all subject records, examination records, enrolment records will be deleted.

New Class   ×

class ID: (e.g. 5A, 6A)

Year   ⌄

Semester   ⌄

Teacher   ⌄

Ms. Ho

                                                              Close

To create a new class, you need to click the 'New Class' button and fill in the information in the pop-up window to create a class. Year, Semester and Teacher attributes are selected choices.

Remember, each teacher should instruct one class only at the same time. But they can teach more than one subject in different classes. If you create a second class for the existed teacher, you will receive a warning from a pop-up window:

localhost:3500 顯示

Teacher can only belong to 1 class actively ! Please archive/delete old record before adding this record.

確定

Delete Class

Year	Semester	Class teacher	status
2021	3	Mr.W, pw: www	active
2020	1	Ms. Chan	active
2020	1	Ms. Yeung	active

5) Managing students and subjects in a class

1) Managing students
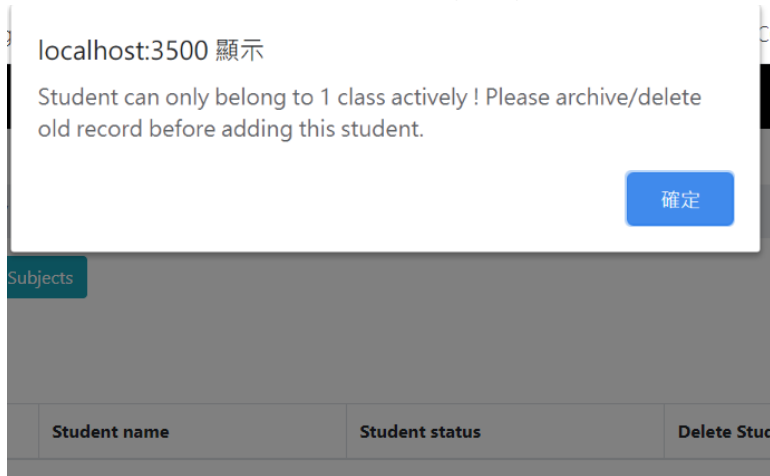

To manage the students and subjects in a class, click the 'operate' field which is at the right-hand side column of each class row. Then, you would see the above interface. Similar to other operations, you can add, archive and delete students in a class. Also, like class management, if the student is archived / deleted, the system will undergo cascade archive or deletion.

Please remind that each student can only attend one class. So there will pop-up alert window if you add a student who already has class.

Here is a demonstration of assigning duplicate student into different classes:

localhost:3500 顯示

Student can only belong to 1 class actively ! Please archive/delete old record before adding this student.

確定

Subjects

Student name	Student status	Delete Stud

2) Managing subjects

Manage Students   Manage Subjects

Active Subjects

Archive Subject

☐	Subject id	Subject Name	Teacher name	subject status	delete subject
☐	2020_2_9C_Physics	Physics	Ms. Ho	active	🗑
☐	2020_2_9C_Biology	Biology	Ms. Ho	active	🗑
☐	2020_2_9C_Chemistry	Chemistry	Ms. Ho	active	🗑
☐	2020_2_9C_Chinese	Chinese	Ms. Ho	active	🗑
☐	2020_2_9C_English	English	Ms. Ho	active	🗑
☐	2020_2_9C_Math	Math	Ms. Ho	active	🗑
☐	2020_2_9C_LiberalStudies	LiberalStudies	Ms. Ho	active	🗑
☐	2020_2_9C_BAFS	BAFS	Ms. Ho	active	🗑
☐	2020_2_9C_Econ	Econ	Ms. Ho	active	🗑

Add Subject:

Subject Name   Choose teacher ...

Submit

If you click the 'Manage Subjects' button (Cyan colour one), you can add new subjects, archive and delete them. To add a new subject to class, you need to input the Subject name and select the teacher who is going to teach this subject for this class. Then click 'submit' button to update the record of subject of this class.