



The image shows a macOS-style window titled "Manager Login". The window has a light gray background and rounded corners. At the top, there is a dark gray title bar with three colored window control buttons (red, yellow, green) on the left and the text "Manager Login" in the center. Below the title bar, the text "Examination Management System" is centered in a large, dark gray font. Underneath this, there are two input fields. The first is labeled "Username:" and contains the text "admin". The second is labeled "Password:" and contains ten black dots, indicating a masked password. Both input fields have a thin blue border. Below the password field, there is a "Login" button with a gray gradient and rounded corners.

Manager Login

Examination Management System

Username:

Password:

Login

Manager Login Page

There is a manager account created automatically

Username:	admin
Password:	comp3111

[illegible]

Course Management Page

The list under label “Teacher:” show all the Teacher registered in the system.

Add / Update teacher to the Course via Course Management Page

1. Manager clicks on the course you want to modify
2. Manager clicks on the teacher from the list under label “Teacher:” you want to add
3. Manager clicks “modify” to save the change

Remove teacher from the Course via Course Management Page

1. Manager clicks on the course you want to modify
2. Manager clicks [Remove Teacher]
3. Manager clicks “modify” to save the change

Add / Remove teacher to Course via Course Management Page

There are two lists storing students, under the label of student, when the manager clicks on the Course.

- The upper list shows all the registered students enrolled into this course
- The upper list shows all the registered students not enrolled into this course

Add a student to the Course

1. Manager clicks on the student you want to add in the lower list
2. Manager clicks “^ Add”
3. After modifying, manager clicks “modify” to save the change

Remove a student from the Course

4. Manager clicks on the student you want to add in the upper list
5. Manager clicks “v Remove”
6. After modifying, manager clicks “modify” to save the change

Limitation: Each Course can handle at most one Teacher, and the Course ID are unique

SystemDatabase.java

The SystemDatabase translates the classes into json files using the Gson library and save under the /data folder

The classes in SystemDatabase are static because it is more convenient for other classes to read and use those function.

Other classes read student, teacher manager and course data from SystemDatabase, and update, register, create student, teacher manager and course to SystemDatabase.

The file structure is as following,

/data

 /account

 /student

 /teacher

 /manager

 students.json

 teachers.json

 managers.json

 /course

 courses.json

students.json, *teachers.json*, *managers.json*, and *courses.json* save the list of students, teachers, managers and courses respectively.

[username].json will be saved under *student*, *teacher* and *manager* folder to store each account's information.

[courseID].json will be saved under *course* folder to store each course's information.

The Course object also saves **Exam** and **Grade** object