Supplementary Note

Assumption

I assume the following in my Task 1 implementation:

1) As there is no case handling for students to enroll in courses, Students are enrolled in all courses in our system. Students are assumed to be able to take any exams created and published from all courses.
2) Students are assumed only to be able to conduct 1 exam at 1 time, that student cannot participate in 2 exams at the same time. Once students start their exam, only after they finish and submit their exam they can take another one.

Extra Implemented Features

1) Students set Password
   Students have the following limitations when set their Password
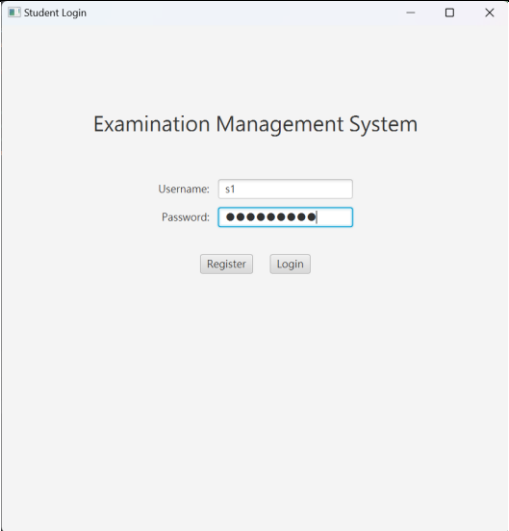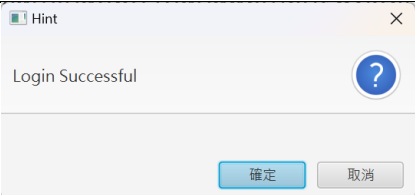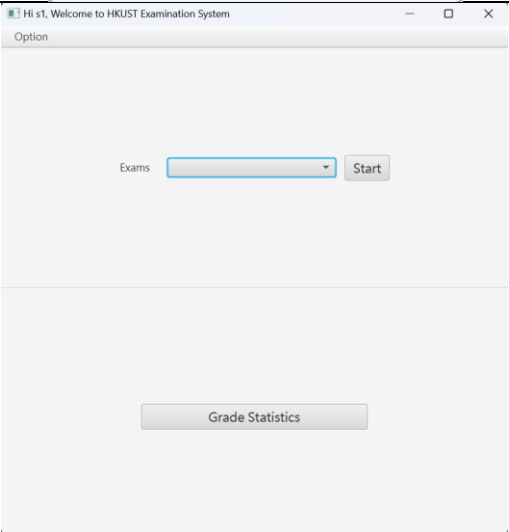
   Password should contain:
   1. At least 1 special character from "!@$%^&*_+<>/-"
   2. At least 1 number from 0 to 9
   3. At least 1 small letter from a to z
   4. At least 1 capital letter from A to Z
   5. No blank space

2) Clickable Question Cell in Question Side Column in Student Start Exam Screen
   Clicking Question cell in Question Column on the left side will make the Student Start Exam Screen change to display content for that question.

3) Students Conduct Exam Time's up
   When Students have no remaining time to complete their exam (i.e. Time's up), Student's attempt will be automatically submitted.

4) Students View Grade
   Students can view the percentage of correctness for each question type for every exam conducted by clicking their submission row in the grade table displaying the list of exams conducted.

Screenshot for sample input and output
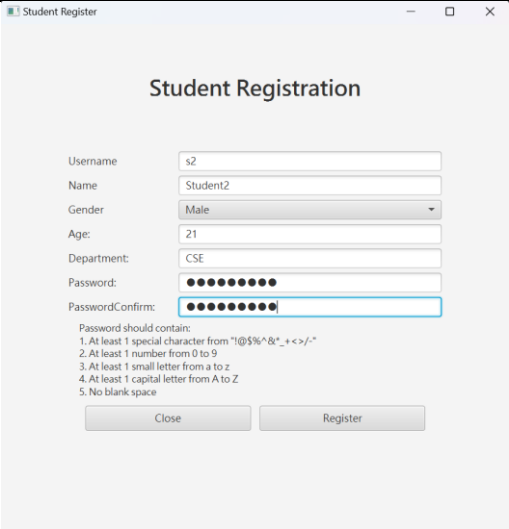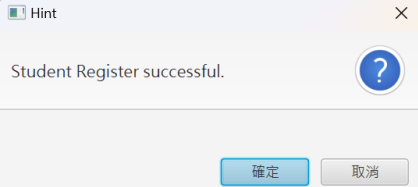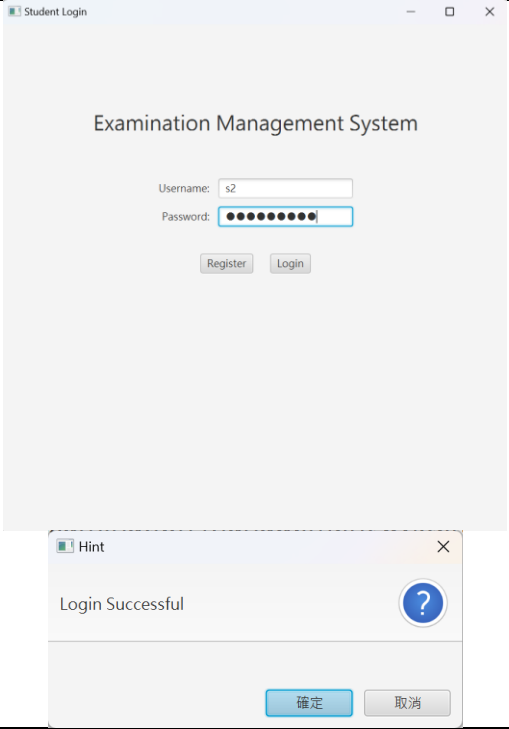
TASK 1.1: Handling the student's login

Basic Flow

Student login to system	
Student Type in Username & Password	
Successful Login Message Box display	
Go to Student Main Screen	

Alternative Flow
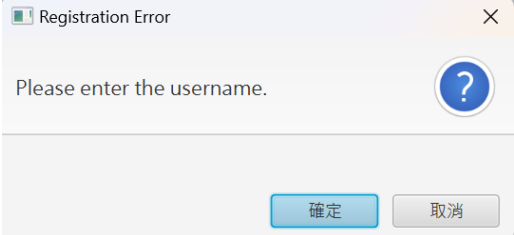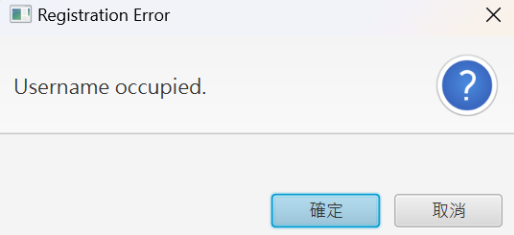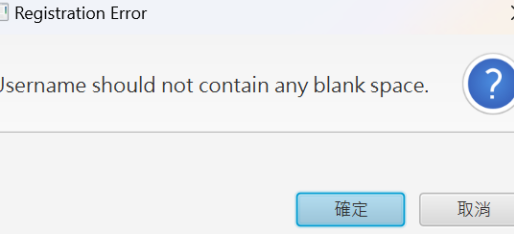
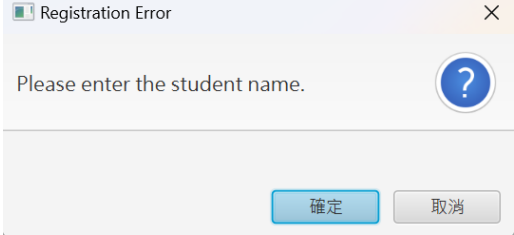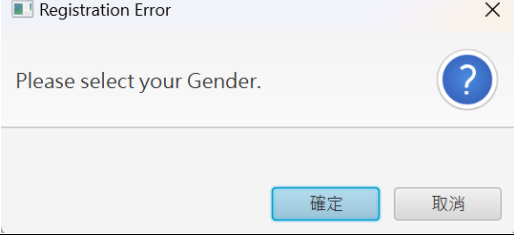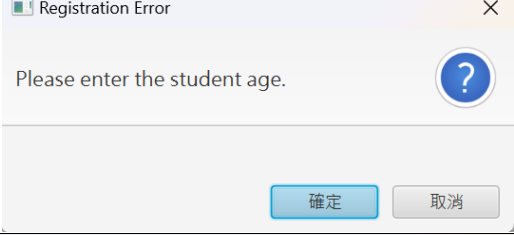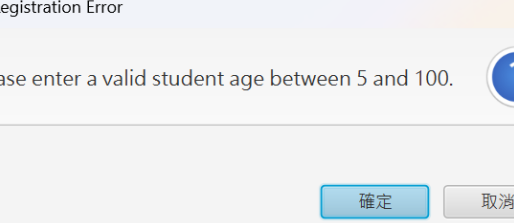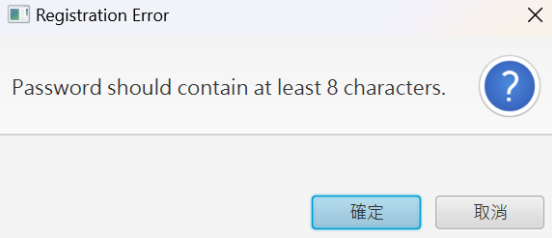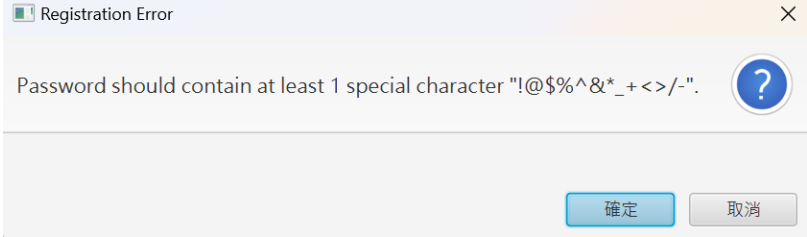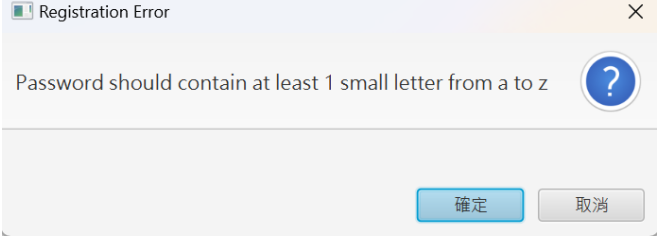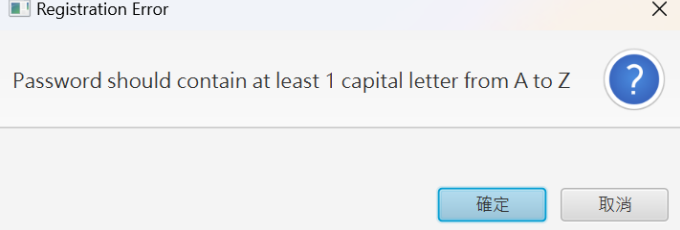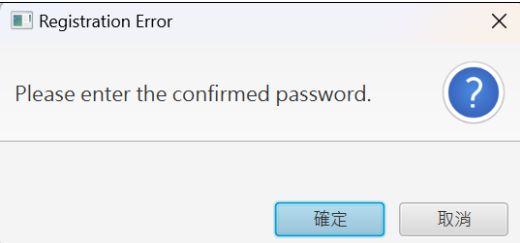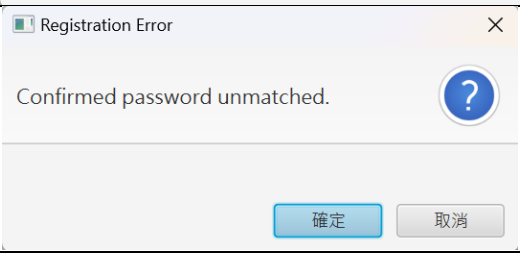|	Student login to system with incorrect Username / incorrect Password	
Student type in Username & Password		
Login Error Message Box display		
Remain in Student Login Screen		
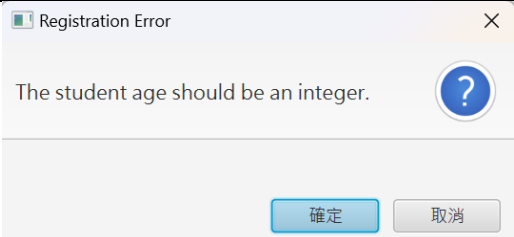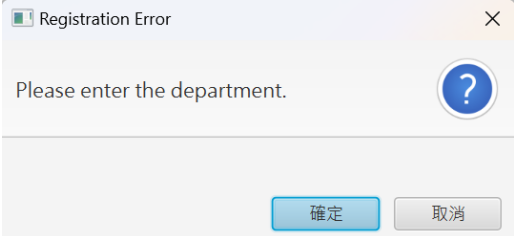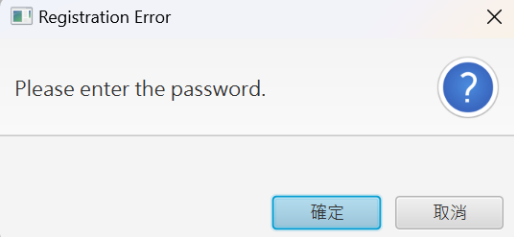
TASK 1.1.1: Handling the student's registration

Basic Flow

Student register an account	
Student type in Username, Name, Age, Department, Password & PasswordConfirm and select Gender	
Successful Register Message Box display	
Student can login with registered account	

Alternative Flow

Student register an account with problematic inputs		
Student did not type in Username	Registration Error ✕ Please enter the username. ? 確定　取消	
Student type in Username occupied by others	Registration Error ✕ Username occupied. ? 確定　取消	
Student inputted Username contains blank space(s)	Registration Error ✕ Username should not contain any blank space. ? 確定　取消	
Student did not type in Name	Registration Error ✕ Please enter the student name. ? 確定　取消	
Student did not select Gender	Registration Error ✕ Please select your Gender. ? 確定　取消	
Student did not input Age	Registration Error ✕ Please enter the student age. ? 確定　取消	
Student input invalid number for Age	Registration Error ✕ Please enter a valid student age between 5 and 100. ? 確定　取消	

Student input non-numeric input for Age		**Registration Error** ✕ The student age should be an integer. ❓ 確定　取消
Student did not input Department		**Registration Error** ✕ Please enter the department. ❓ 確定　取消
Student did not input Password		**Registration Error** ✕ Please enter the password. ❓ 確定　取消
Student input Password with less than 8 characters		**Registration Error** ✕ Password should contain at least 8 characters. ❓ 確定　取消
Student input Password without special characters		**Registration Error** ✕ Password should contain at least 1 special character "!@$%^&*_+<>/-". ❓ 確定　取消
Student input Password without small letters		**Registration Error** ✕ Password should contain at least 1 small letter from a to z ❓ 確定　取消
Student input Password without capital letters		**Registration Error** ✕ Password should contain at least 1 capital letter from A to Z ❓ 確定　取消

Student did not input PasswordConfirm		**Registration Error** ✕ Please enter the confirmed password. ❓ 確定　　取消
Student input unmatched PasswordConfirm		**Registration Error** ✕ Confirmed password unmatched. ❓ 確定　　取消

TASK 1.2: Quiz selection screen

Student choose which exam to conduct	
Current Outstanding Exam	
Exam Choices in ChoiceBox in Main Screen Note: s1 haven't conducted any exam yet	
Student Start to conduct MATH1000-Exam	

TASK 1.2.1: Exam screen

Student (s1) start Exam (MATH-1000-Exam)

Exam Detail for MATH1000-Exam	
Exam Screen	
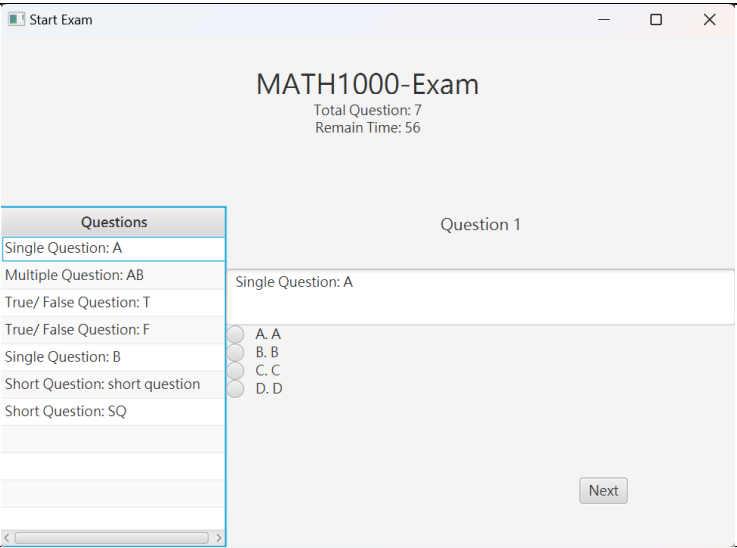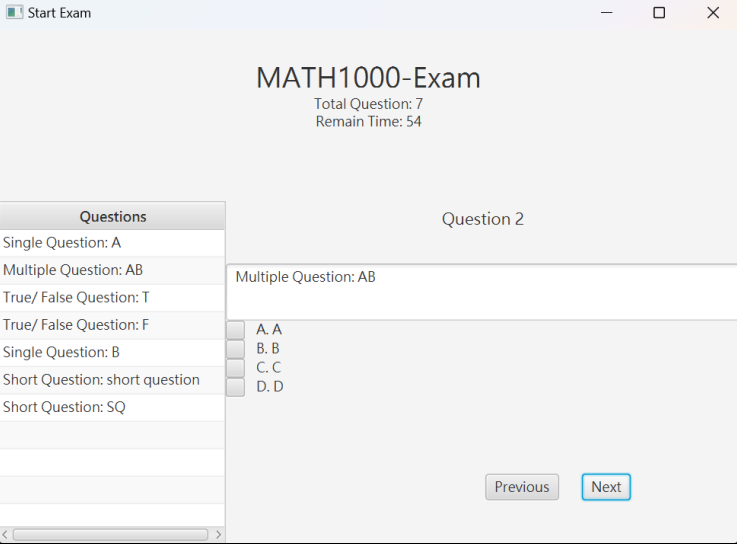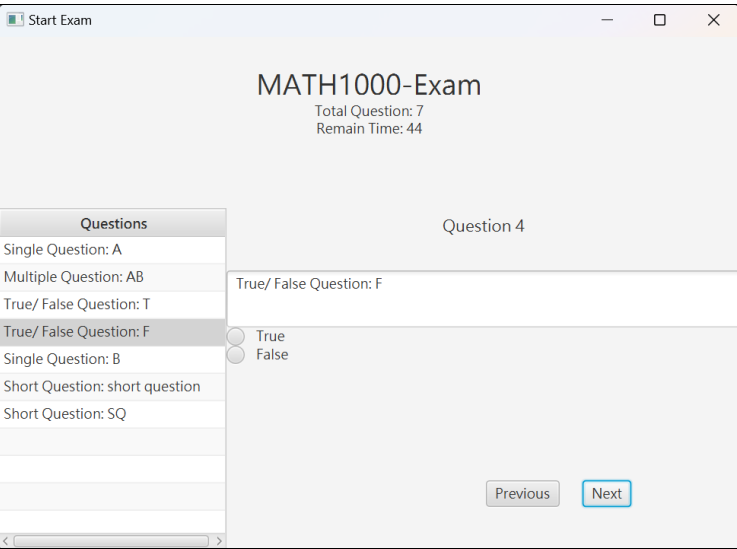
TASK 1.2.1.1: Previous, Next Button and Question Cell OnClick action (Switching Question)

	Student click Next Button
Before	
After	

	Student click Previous Button
Before	

After	

Student click Question Cell

Before (Question 4 to be clicked)	
After	

TASK 1.2.1.2: Question Display for different Question Types
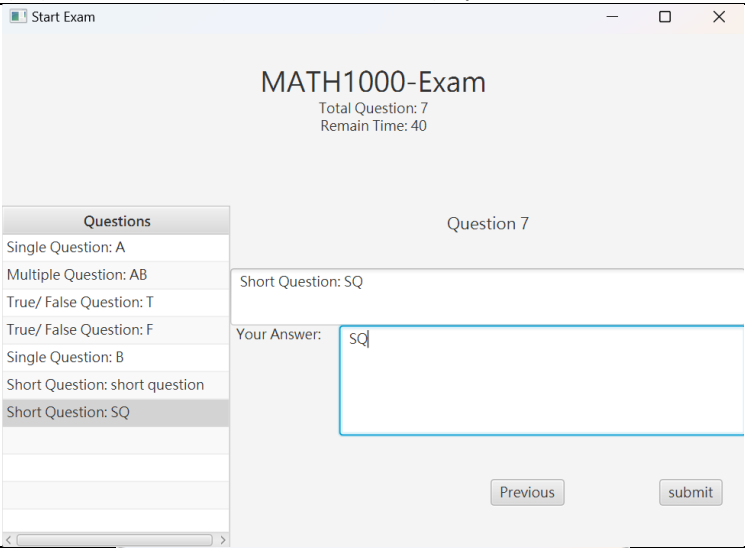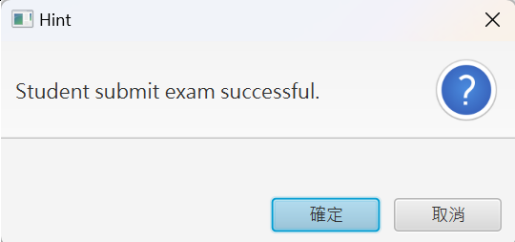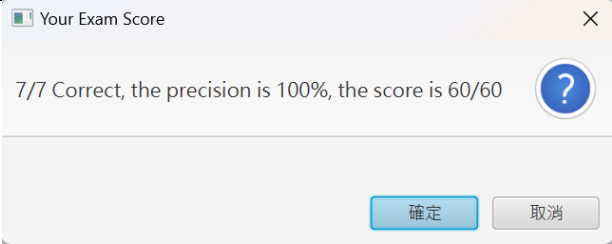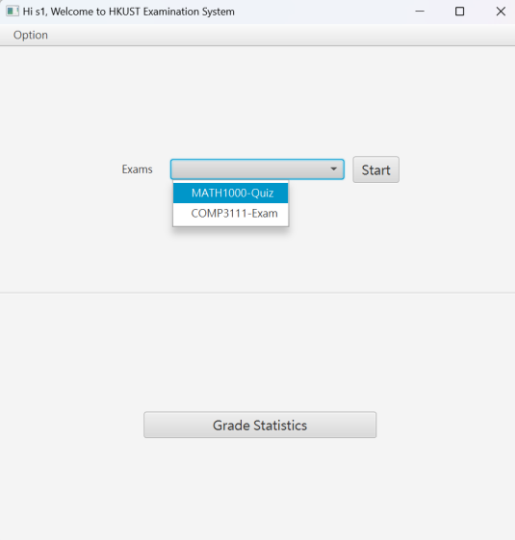
	Single-selected Multiple Choice Question
Radio Buttons	
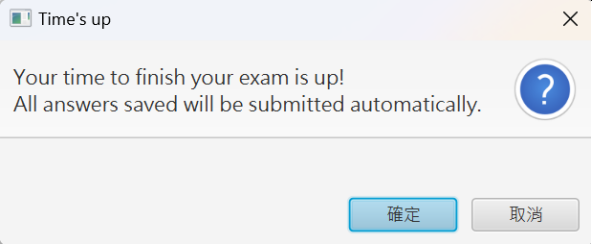
	Multiple-selected Multiple Choice Question
Checkboxes	

True / False Question
Radio Buttons True / False Options only	

Short Question
TextField for student inputting answer	

TASK 1.2.1.3: Student Submit Exam

	Student (s1) Submit Exam (MATH1000-Exam) by Submit Button
Before	
After	
Score Message Box	

Student (s1) Submit Exam (MATH1000-Exam) automatically after Time's Up	
Message Box	
After	*Same as Submit manually using Submit Button

TASK 1.3: Show the Grade Statistics

Student's (s1) Grade Statistics Screen after taking MATH1000-Exam, MATH1000-Quiz, COMP3111-Exam

TASK 1.3.1: Course Filter
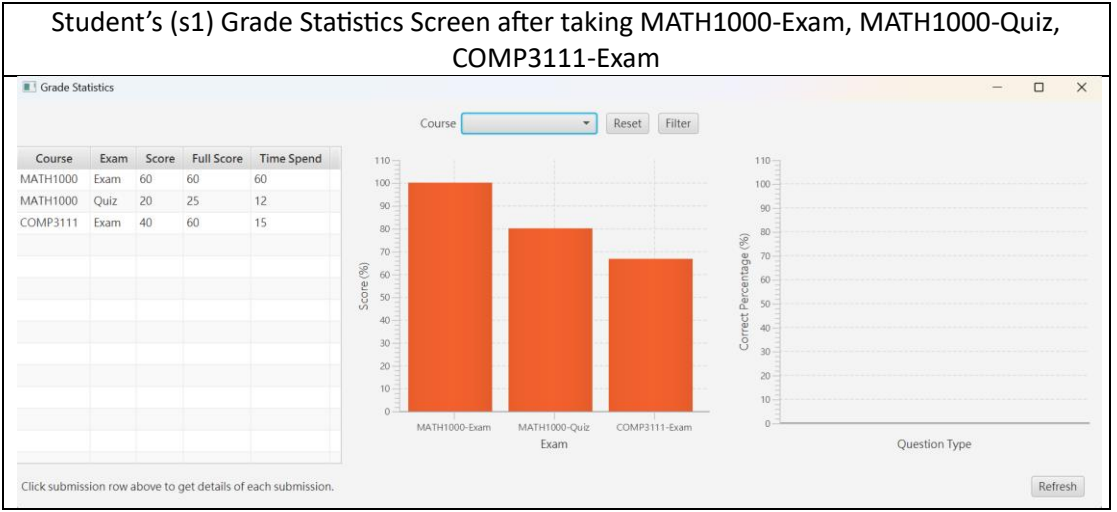
Student filter MATH1000	
Before	
After	
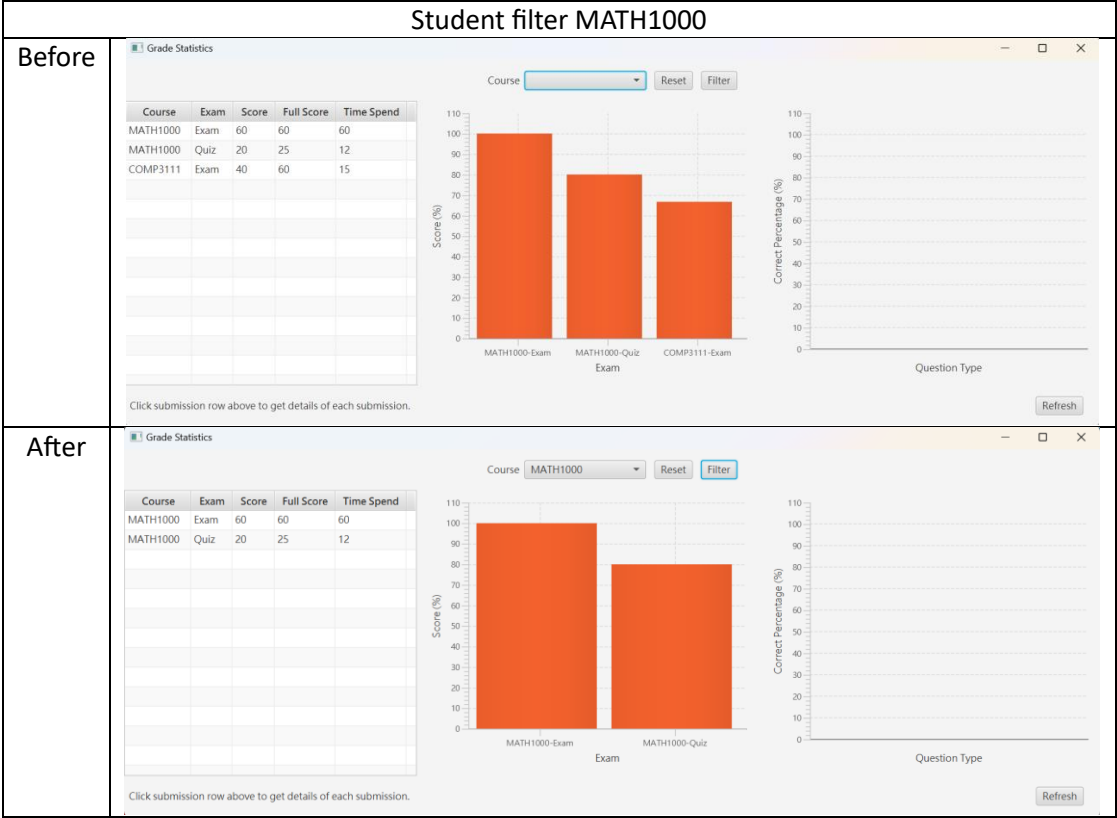
TASK 1.3.2: Reset and Refresh Button onClick action

Student click Reset Button	
Before	
After	

Student click Refresh Button	
Before	
After	

TASK 1.3.3: Submission row onClick action

Student click MATH1000-Quiz submission
Before	
After	