ICS4U7-3B Internal Assessment Criteria B

Software Design:

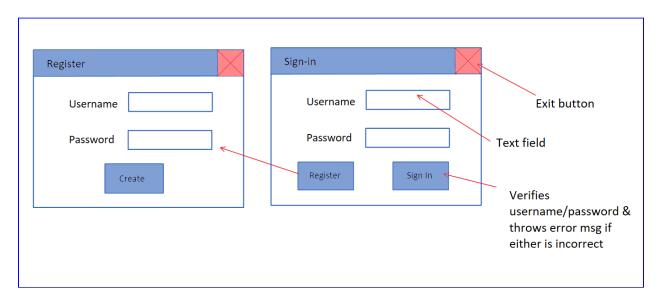


Figure 1: The diagram above shows the registration and sign-in screens planned for my product.

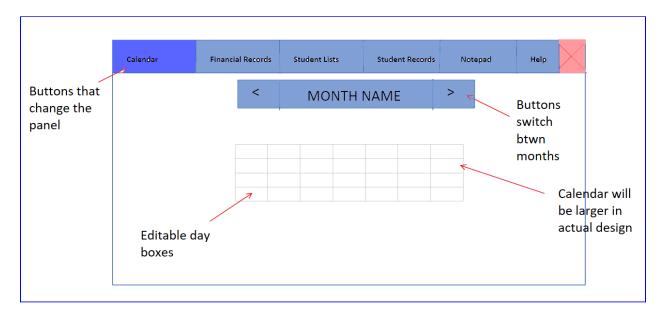


Figure 2: The diagram above shows the calendar screen planned for my product.

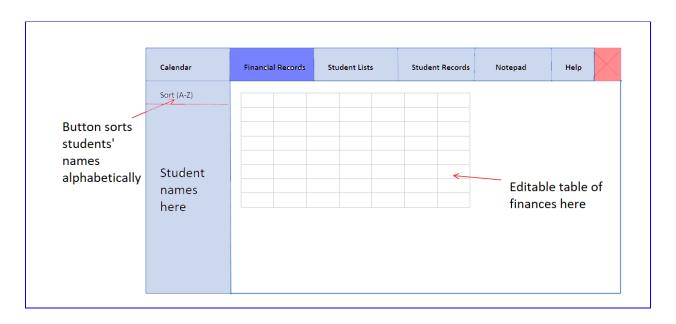


Figure 3: The diagram above shows the financial records screen planned for my product.

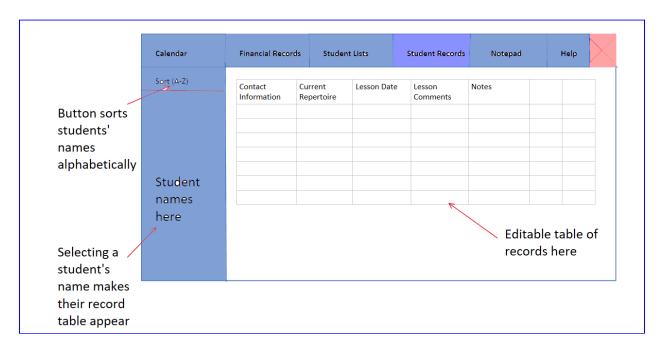
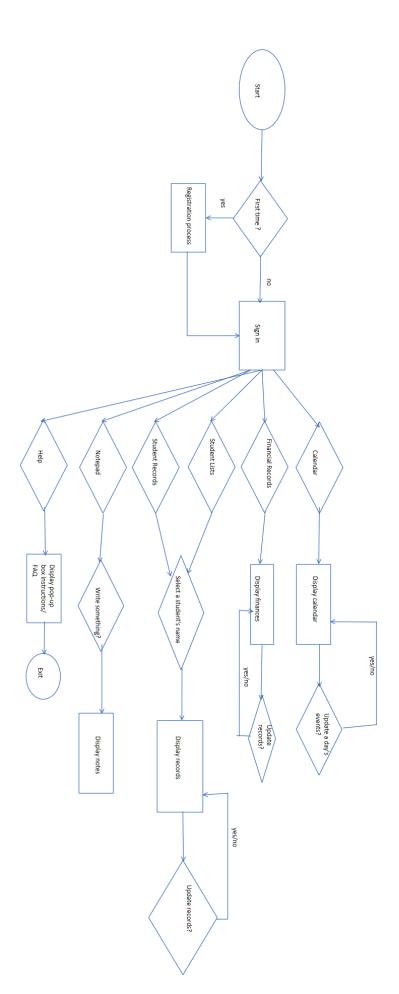


Figure 4: The diagram above shows the student records screen planned for my product.



Figure 5: The diagram above shows the notepad screen planned for my product.

Flowchart:



Functions, Examples, and Comments:

Input Data	Location
Login	
Data 1 — Username & password	
Client registers with new login information	
Example	Location
musiclover100	Login data will be stored in a text file that can
password123	be accessed to verify logins.
Calendar	
Data 1 — Adding a day's events	
Client inputs lesson information, including	
who will be attending lessons and the	
repetition frequency of each event. Client can	
also input other important dates.	
Example	Location
Date: Monday, January 16, 2020	A text file with all the inputted data will be
Event: Insert information here	saved.
Repeating: every week	
Financial Records	
Data 1 — Student names	
Client can input/update the names of students.	

Example	Location
Jenna Marbles	A text file with all the inputted data will be
	saved (names.txt).
Data 2 — Records	
Client can input payments and dates in a	
row-column table.	
<u>Example</u>	Location
Monday Tuesday Wednesday	A text file with all the inputted data will be
\$40.00 \$25.00 No payment	saved.
Student Lists	
Data 1 — Student names	
Client can input/update the names of students.	
Example	Location
Jenna Marbles	The text file (names.txt) will be accessed and
	updated accordingly.
Student Records	
Data 1 — Contact Information	
Client can input/update contact information	
for students.	
Example	Location

Email: xx	A text file with all the inputted data will be
Phone Number: yy	saved.
Data 2 — Repertoire	
Client can input/update current repertoire	
students are learning.	
<u>Example</u>	Location
Bruch's Violin Concerto No. 1 in G minor	A text file with all the inputted data will be
Beethoven's Moonlight Sonata	saved.
Data 3 — Lesson Date	
Client can update/delete lessons. Dates should	
be automatically read and printed from the	
calendar file.	
Example	Location
Tuesday, January 19, 2020 — 9:00 PM –	Information read here will not be stored nor
11:00 PM	read elsewhere.
Data 4 — Comments	
Client can write/update comments on lessons	
and progress.	
Example	Location
Jenna worked on her xx today.	A text file with all the inputted data will be

	saved.
Data 5 — Notes	
Client can write/update extra notes here.	
Example	Location
Reminder: Ask Mr. Smith for recital	A text file with all the inputted data will be
information.	saved.
Notepad	Location
Data 1 — Notes	A text file with all the inputted data will be
Client can write/update as many notes as	saved.
wanted here.	

Testing Plan:

Action Test	Result
Run the program and check if it works.	Should work without any errors.
Check registration process.	After creating a new login with the register
	button, check to see if the information is
	stored in the text file.
	Check to see if a new directory is made with
	the username.
Check the login validation process.	Check if proper error messages are outputted
	when a user inputs the incorrect username,
	password, or both.
	Check if, and only if, entering the correct
	login information allows the user to proceed
	to the homepage.
Check calendar accuracy.	Check to see if the calendar and dates display
	correctly align with a regular calendar.
Check for the addition and deletion of events.	Check if new events are correctly saved to a
	text file in the Calendar directory and if they
	can be displayed upon request.
	Check to see if events labelled "repeating"
	properly repeat and create corresponding text

	files for future dates.
	Check to see if deleting the events properly
	erases the contents of the text files.
Check addition and deletion of students in	Check to see if the addition of a new student
student lists.	creates a new text file in the Student Lists
	directory with all the inputted contact
	information.
	Check to see if the addition of new students
	adds their names to the Master List text file.
	Check to see if the deletion of a student erases
	the contents of the text file.
Check sorting process of first and last names.	Check to see if the names of the students are
	properly sorted in alphabetical order,
	depending on the selection of sorting by first
	or last names, for Student Lists, Financial
	Records, and Student Records.
Check the saving and erasure of inputted	Check to see if the save function properly
financial data.	writes to the respective text files and erases
	the files' contents when the user deletes the
	information.
Check for proper display of existing students.	Check to see if all students recorded in the

	Master List text file are properly retrieved and displayed in both the Financial Records screen and the Student Records one.
Check search function.	Check to ensure the proper position of the student's name is outputted when the user requests a search for them.
Check saving of notepad input.	Check to see that input in the Notepad screen is saved to a text file and can be retrieved.
Check for varying help boxes.	Check to see that different help boxes with screen-specific instructions correctly display when the user presses the help button on different screens.