

Programming Languages Project Template

1. Student/Project Information:

Student Name:	Mohamed Sherif Mohamed Mohamed
Student's Section Number:	9
Selected project:	Registration of students in college
Project description:	The project's goal is to manage student registration for subjects in the credit hour system. Every student is required to enroll in a number of subjects, and each subject has a fee. The application adds student data, and each student data contains the student id, available money, name, and name of topics chosen by the student to enroll in. Each student is required to take three subjects. Any student data may be edited, and new students may be added, using the application. Finally, the application has the ability to print a summary of the student's data.

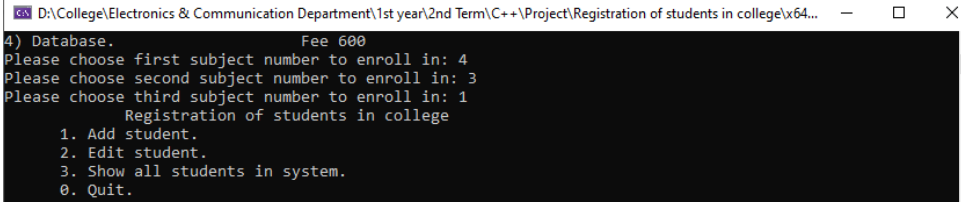
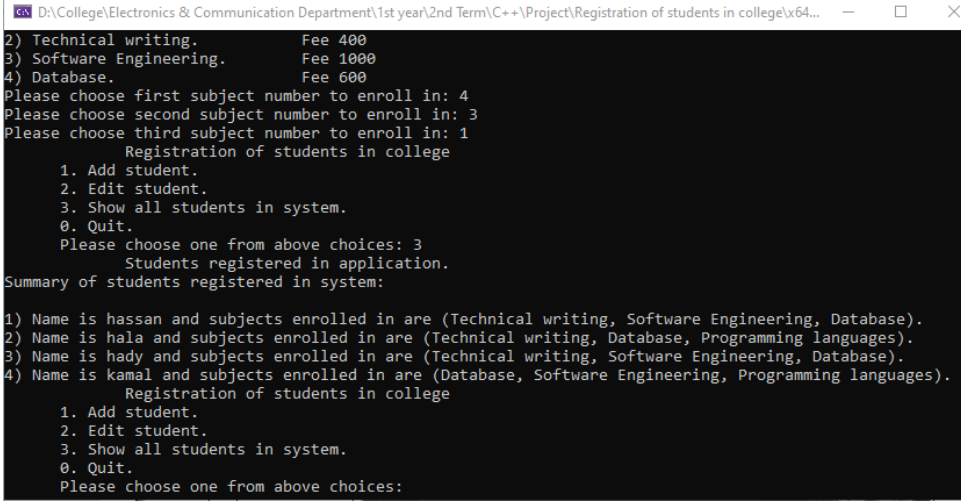
2. Code Information:

#	Line number (from-to)	Function name	Description
1	22-59	main	The main function.
2	30-36	main	Checking if the user exceeded the limit (100 student).
3	39-44 & 47-52	main	Detecting if the user didn't add any students yet.
4	26-56	main	Navigate the user to the function which achieves his choice.
5	61-69	intro	This function doesn't receive any parameters and its function is to present the main page and receives user's choice.
6	71-177	add	This function doesn't receive any parameters and its function is to

			receive id, first name, and available money of the new student.
7	74-85 207-222	add edit	Receives the id and check if the entered id had been entered before.
8	88-96 225-233	add edit	Receives the money and checking if the available money is enough or not.
9	113-116 & 139-142 274-277 & 300-303	add edit	Checking if this subject had been chosen before.
10	120-131 & 144-174 281-293 & 304-336	add edit	Checking the remaining money if it can't be enough for the subject.
11	179-201	submit	<p>This function receives three parameters (Subject Choice, Student Index, Subject Order).</p> <p>Subject choice is the subject which the student wants w enroll.</p> <p>Student index is the index of the student who will enroll to this subject.</p> <p>Subject order is the order of the subject in his list.</p> <p>Its function is to store this information to this specific student and take the fees from his money.</p>
12	203-346	edit	This function doesn't receive any parameters and its function is to receive id of the student who will be edited, his new first name, new available money, and if he wants to change his submitted subjects it changes them.
6	348-358	summary	This function doesn't receive any parameters and its function is to summarize the input students information.

3. Snapshots:

#	Description	Screenshot
1	Input values	<p>The screenshots show the following sequence of operations:</p> <ul style="list-style-type: none"> Screenshot 1: The program starts with a menu: 1. Add student, 2. Edit student, 3. Show all students in system, 0. Quit. The user chooses 1. It prompts for a new student's ID (1), first name (hassan), and available money (2000). It then lists subjects: 1) Programming languages (Fee 1000), 2) Technical writing (Fee 400), 3) Software Engineering (Fee 1000), 4) Database (Fee 600). The user chooses subject 2 for the first enrollment, 3 for the second, and 4 for the third. Screenshot 2: The user chooses 1 from the menu. It prompts for a new student's ID (2), first name (hala), and available money (2000). It lists the same subjects. The user chooses subject 2 for the first enrollment, 4 for the second, and 1 for the third. Screenshot 3: The user chooses 1 from the menu. It prompts for a new student's ID (3), first name (hady), and available money (3000). It lists the same subjects. The user chooses subject 2 for the first enrollment, 3 for the second, and 4 for the third.

		 <pre> D:\College\Electronics & Communication Department\1st year\2nd Term\C++\Project\Registration of students in college\64... 4) Database. Fee 600 Please choose first subject number to enroll in: 4 Please choose second subject number to enroll in: 3 Please choose third subject number to enroll in: 1 Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. </pre>
2	Output messages	 <pre> D:\College\Electronics & Communication Department\1st year\2nd Term\C++\Project\Registration of students in college\64... 2) Technical writing. Fee 400 3) Software Engineering. Fee 1000 4) Database. Fee 600 Please choose first subject number to enroll in: 4 Please choose second subject number to enroll in: 3 Please choose third subject number to enroll in: 1 Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. Please choose one from above choices: 3 Students registered in application. Summary of students registered in system: 1) Name is hassan and subjects enrolled in are (Technical writing, Software Engineering, Database). 2) Name is hala and subjects enrolled in are (Technical writing, Database, Programming languages). 3) Name is hady and subjects enrolled in are (Technical writing, Software Engineering, Database). 4) Name is kamal and subjects enrolled in are (Database, Software Engineering, Programming languages). Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. Please choose one from above choices: </pre>

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Error checking output

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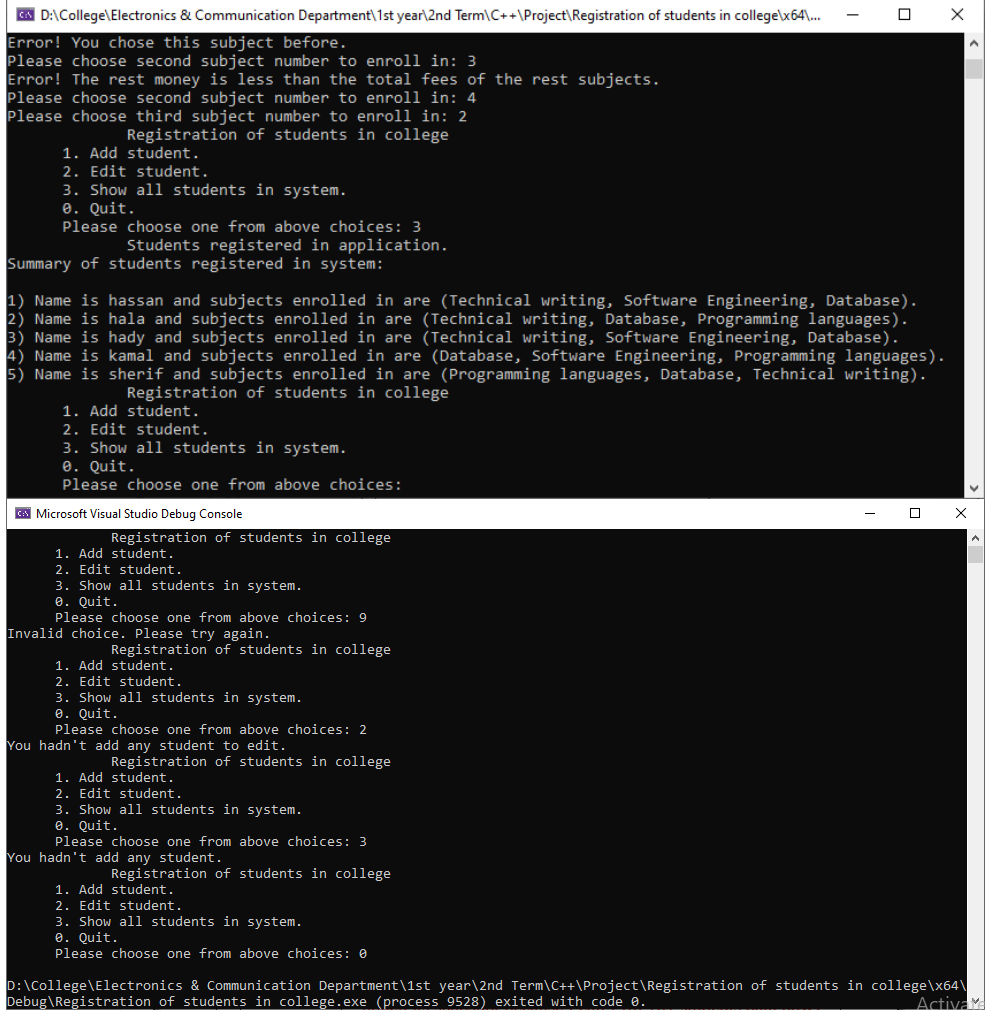
D:\College\Electronics & Communication Department\1st year\2nd Term\C++\Project\Registration of students in college\64\...
Registration of students in college
1. Add student.
2. Edit student.
3. Show all students in system.
0. Quit.
Please choose one from above choices: 1
Add a new student.
Please enter id for a new student: 1
Error! There is a student with this id.
Please enter id for a new student: 5
Please Enter student's first name: mohamed
Please Enter the available money: 1500
Error! The available money is less than the total fees of subjects.
Please Enter the available money: 4000
The available subjects:
1) Programming languages.      Fee 1000
2) Technical writing.           Fee 400
3) Software Engineering.       Fee 1000
4) Database.                   Fee 600
Please choose first subject number to enroll in: 1
Please choose second subject number to enroll in: 1
Error! You chose this subject before.
Please choose second subject number to enroll in: 3
Please choose third subject number to enroll in: 4

D:\College\Electronics & Communication Department\1st year\2nd Term\C++\Project\Registration of students in college\64\...
Please choose second subject number to enroll in: 1
Error! You chose this subject before.
Please choose second subject number to enroll in: 3
Please choose third subject number to enroll in: 4
Registration of students in college
1. Add student.
2. Edit student.
3. Show all students in system.
0. Quit.
Please choose one from above choices: 3
Students registered in application.
Summary of students registered in system:
1) Name is hassan and subjects enrolled in are (Technical writing, Software Engineering, Database).
2) Name is hala and subjects enrolled in are (Technical writing, Database, Programming languages).
3) Name is hady and subjects enrolled in are (Technical writing, Software Engineering, Database).
4) Name is kamal and subjects enrolled in are (Database, Software Engineering, Programming languages).
5) Name is mohamed and subjects enrolled in are (Programming languages, Software Engineering, Database).

Registration of students in college
1. Add student.
2. Edit student.
3. Show all students in system.
0. Quit.
Please choose one from above choices:

D:\College\Electronics & Communication Department\1st year\2nd Term\C++\Project\Registration of students in college\64\...
Registration of students in college
1. Add student.
2. Edit student.
3. Show all students in system.
0. Quit.
Please choose one from above choices: 2
Edit a student.
Please enter id for a student to edit: 5
Please Enter your student new name: sherif
Please Enter your student new available money: 2000
The chosen subjects are: Programming languages, Software Engineering, Database.
Do you want to edit them Y/N: Y
The available subjects:
1) Programming languages.      Fee 1000
2) Technical writing.           Fee 400
3) Software Engineering.       Fee 1000
4) Database.                   Fee 600
Please choose first subject number to enroll in: 1
Please choose second subject number to enroll in: 1
Error! You chose this subject before.
Please choose second subject number to enroll in: 3
Error! The rest money is less than the total fees of the rest subjects.
Please choose second subject number to enroll in: 4
Please choose third subject number to enroll in: 2

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		 <p> Error! You chose this subject before. Please choose second subject number to enroll in: 3 Error! The rest money is less than the total fees of the rest subjects. Please choose second subject number to enroll in: 4 Please choose third subject number to enroll in: 2 Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. Please choose one from above choices: 3 Students registered in application. Summary of students registered in system: 1) Name is hassan and subjects enrolled in are (Technical writing, Software Engineering, Database). 2) Name is hala and subjects enrolled in are (Technical writing, Database, Programming languages). 3) Name is hady and subjects enrolled in are (Technical writing, Software Engineering, Database). 4) Name is kamal and subjects enrolled in are (Database, Software Engineering, Programming languages). 5) Name is sherif and subjects enrolled in are (Programming languages, Database, Technical writing). Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. Please choose one from above choices: </p> <p> Microsoft Visual Studio Debug Console Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. Please choose one from above choices: 9 Invalid choice, Please try again. Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. Please choose one from above choices: 2 You hadn't add any student to edit. Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. Please choose one from above choices: 3 You hadn't add any student. Registration of students in college 1. Add student. 2. Edit student. 3. Show all students in system. 0. Quit. Please choose one from above choices: 0 D:\College\Electronics & Communication Department\1st year\2nd Term\C++\Project\Registration of students in college\x64\Debug\Registration of students in college.exe (process 9528) exited with code 0. </p> <p> + limitation error ... if the user exceeded the 100 this message will appear "Error! You exceeded the maximum number of students." Then returns to the main page (intro()). (I didn't attach its snapshot because I can't fill 101 students data now) </p>
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