

Final Project User Manual

Software Engineering

CSCI 4320

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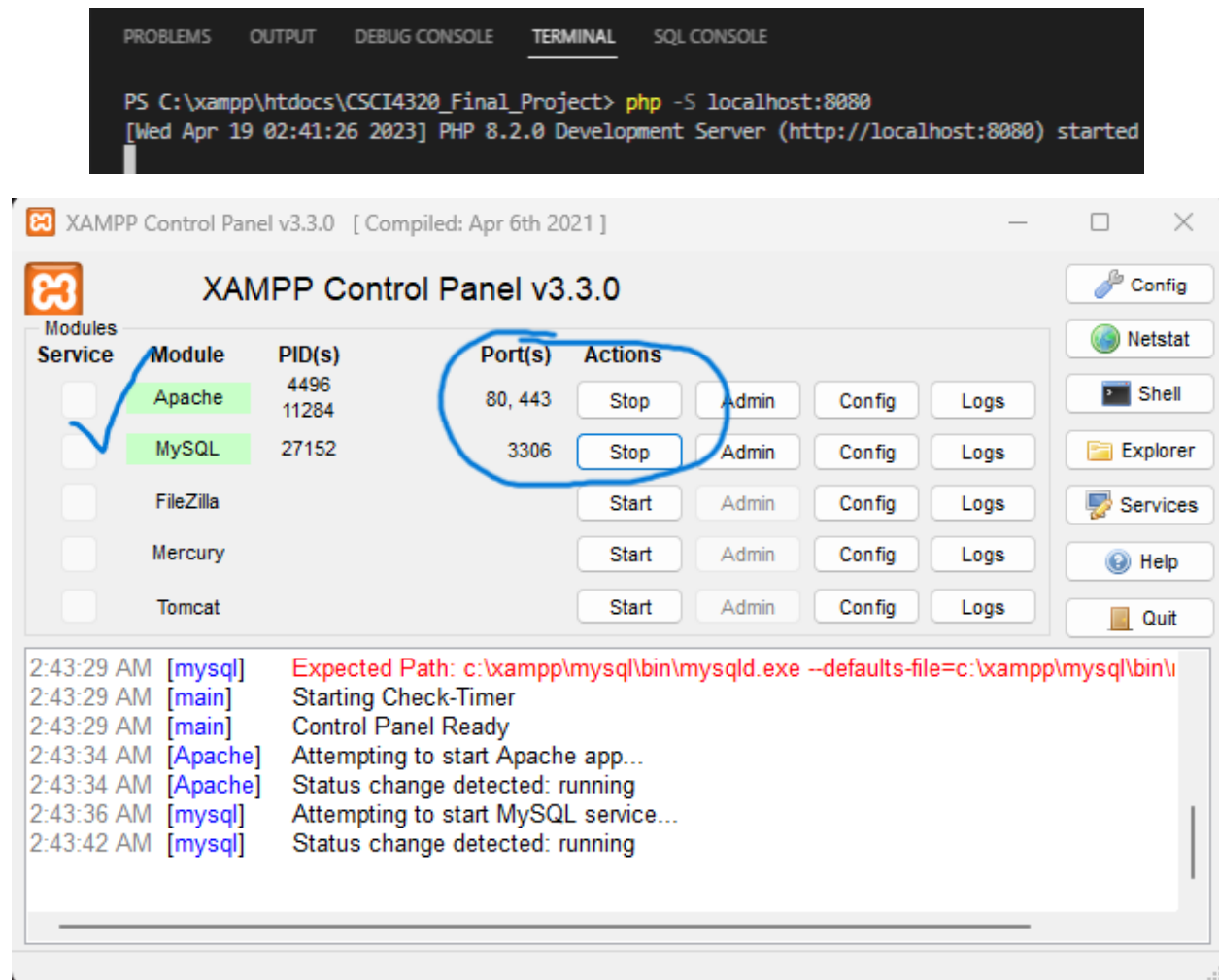
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Getting Started

This program is run through a web server. This program utilizes PHP and HTML to create the forms and process the user's information, and then sends that information to a MySQL database via phpMyAdmin; a web-based server for accessing a MySQL database.

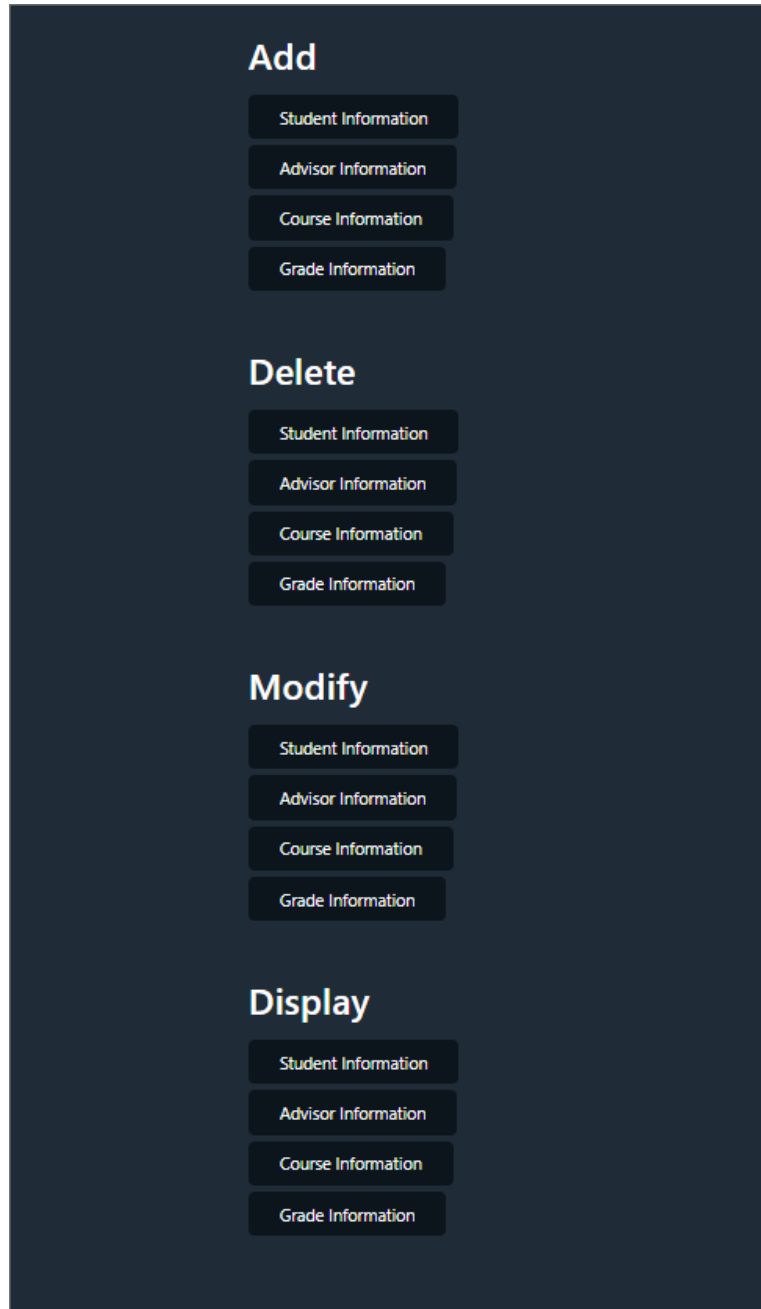
To get started utilizing this program, we must first start a local server. Open a terminal on your computer and run the command: "php -S localhost:8080" (you must first install PHP if you do not already have it. It can be installed from <https://www.php.net/>). Once the server is up and running, we open XAMPP and start the Apache and MySQL module services to connect our server to the MySQL database (again, you must download XAMPP if you do not already have it installed. It can be downloaded from <https://www.apachefriends.org/>).



Once that is all set up, we are ready to access our database and utilize the program. You can minimize the terminal and XAMPP control. Now, open a web browser and search <http://localhost:8080/MainMenu.html>.

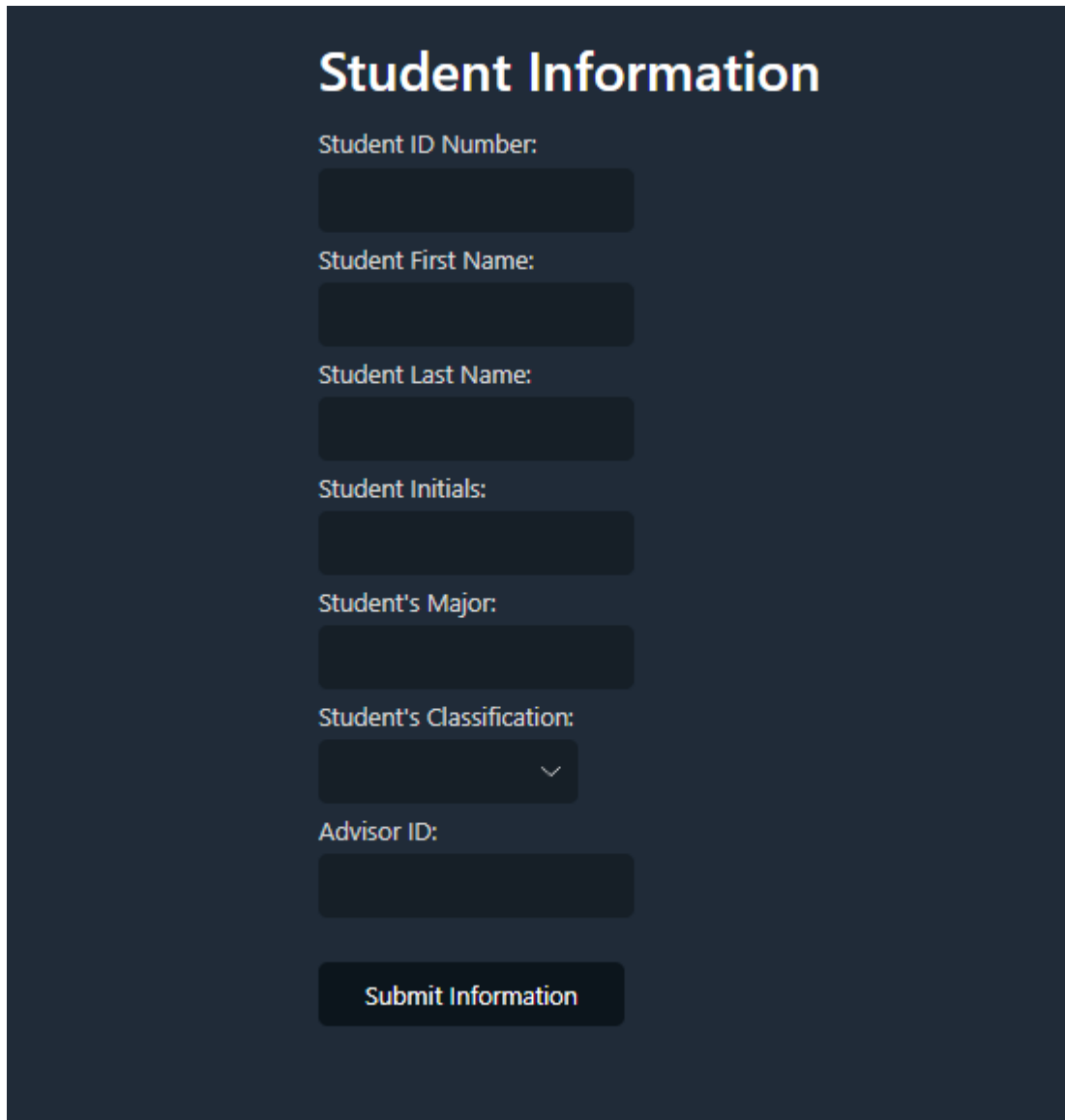
Main Menu

We are immediately introduced to the main menu screen. Here, we find that we can access every function that the program has to offer. There are four distinct functions; “Add”, “Delete”, “Modify”, and “Display”. Under each function, there are specific tables that we can either add to, delete from, modify, or display (query). These tables are the student, advisor, course, and grade tables.



Adding Records

Adding records to the various tables is straight forward. Select which table you would like to add to. You will then be brought to a new page. For example, if you were to enter the “Add Student Information” page, you are greeted with all the available fields that can be entered for a student in the student table followed by a submit button at the bottom. Enter the information necessary and then click submit to save it to the table. This goes for the other three add tables as well.

A screenshot of a web form titled "Student Information" on a dark blue background. The form contains several input fields and a submit button. The fields are labeled: "Student ID Number:", "Student First Name:", "Student Last Name:", "Student Initials:", "Student's Major:", "Student's Classification:", and "Advisor ID:". The "Student's Classification:" field is a dropdown menu with a downward arrow. At the bottom of the form is a button labeled "Submit Information".

Student Information

Student ID Number:

Student First Name:

Student Last Name:

Student Initials:

Student's Major:

Student's Classification:

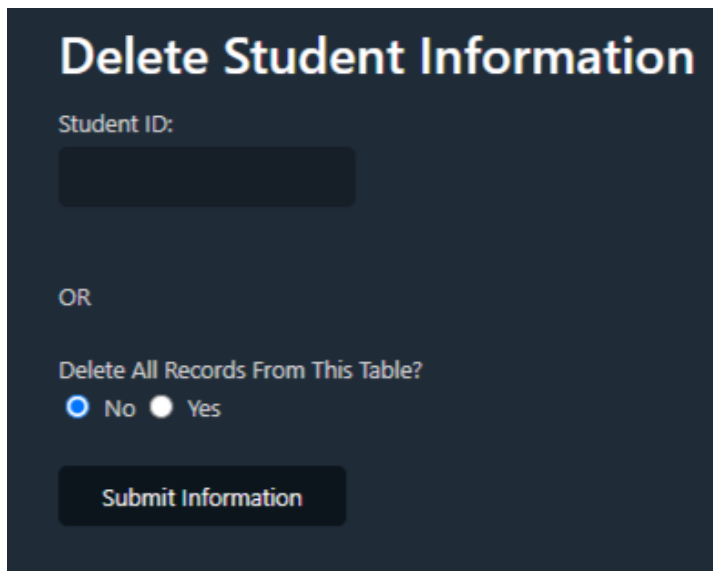
Advisor ID:

Submit Information

Deleting Records

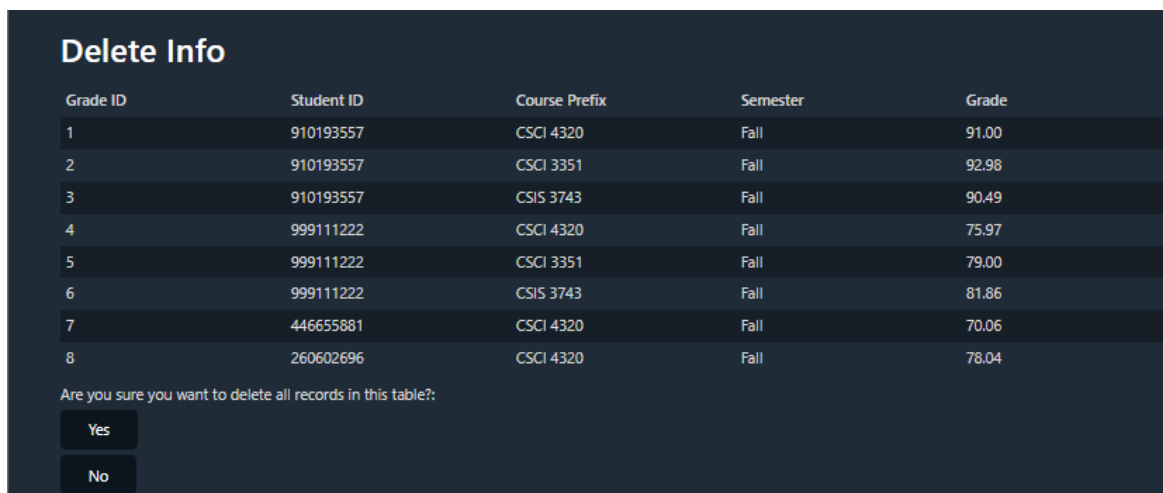
In order to delete a record, the record in question must first exist. Assuming that we have already added records to one or more of the four tables, we can click on any of the four Delete Information buttons. We will then be taken to a page that will ask us to enter an identifying key for the record we want to delete (Student ID, Advisor ID, Course Prefix, and Grade ID). Alternatively, we are also given the option to delete all the records in the specific table. Only one can be entered though; either enter the identifying key or select to delete all records. Once a decision has been made, we are brought to a page that previews the data that is about to be deleted, asking one last time if we are sure if we want to delete the data. We are given the option to either follow through with the deletion or to turn back and return to the previous page. Click Yes if you want to delete the record or No to be sent back to the previous page.

Delete student form:



The form is titled "Delete Student Information" in a large, bold, white font. Below the title, there is a label "Student ID:" followed by a dark rectangular input field. Below this, the word "OR" is displayed. Then, there is a label "Delete All Records From This Table?" followed by two radio buttons: "No" (which is selected, indicated by a blue dot) and "Yes" (which is unselected, indicated by a grey dot). At the bottom of the form is a dark rectangular button with the text "Submit Information" in white.

Delete records verification page:



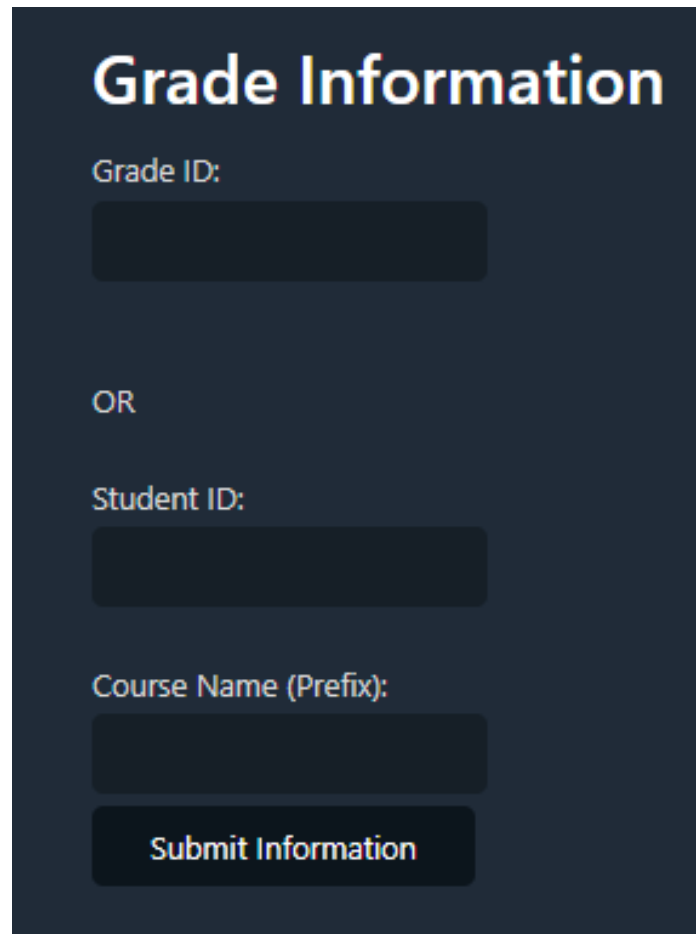
The page is titled "Delete Info" in a bold, white font. Below the title is a table with five columns: "Grade ID", "Student ID", "Course Prefix", "Semester", and "Grade". The table contains eight rows of data. Below the table, there is a label "Are you sure you want to delete all records in this table?:" followed by two buttons: "Yes" and "No".

Grade ID	Student ID	Course Prefix	Semester	Grade
1	910193557	CSCI 4320	Fall	91.00
2	910193557	CSCI 3351	Fall	92.98
3	910193557	CSIS 3743	Fall	90.49
4	999111222	CSCI 4320	Fall	75.97
5	999111222	CSCI 3351	Fall	79.00
6	999111222	CSIS 3743	Fall	81.86
7	446655881	CSCI 4320	Fall	70.06
8	260602696	CSCI 4320	Fall	78.04

Modifying Records

Modifying data in the database takes a similar approach to that of deleting records. When we click on any of the buttons, we are once again brought to a page asking for an identifying key, or in some cases, asking for two identifying keys. Using the Modify Grades Information page as an example, we can see that we are being prompted to either enter the Grade ID of the specific record. However, if we don't know the Grade ID yet, we can still search for a record by entering the Student ID and Course Prefix of the grade record in question. Once we have submitted the information, if the record exists, we are brought to a page that will then display all the information for that specific record. The text boxes will already be populated with the current information, and from there, we are able to modify the information to our liking. At the bottom, we are given the option to submit our changes, or to return to the previous page to modify a different record. Click submit information to finalize your changes or press the return button to modify a different record.

Modify grade information form:



The image shows a web form titled "Grade Information" on a dark blue background. The form has a light blue border. It contains three input fields: "Grade ID:", "Student ID:", and "Course Name (Prefix):". Each input field is a light blue rectangle. Below the "Student ID:" field is a "Submit Information" button, which is a light blue rectangle with the text "Submit Information" in black. The form is centered on the page.

Grade Information

Grade ID:

OR

Student ID:

Course Name (Prefix):

Submit Information

Page where we can modify the record's information:

Modify Info

Grade ID:
2

Student ID:
910193557

Course Name (Prefix):
CSCI 3351

Semester:
☒ Fall ☐ Fall
☐ Spring ☐ Summer

Grade:
92.98

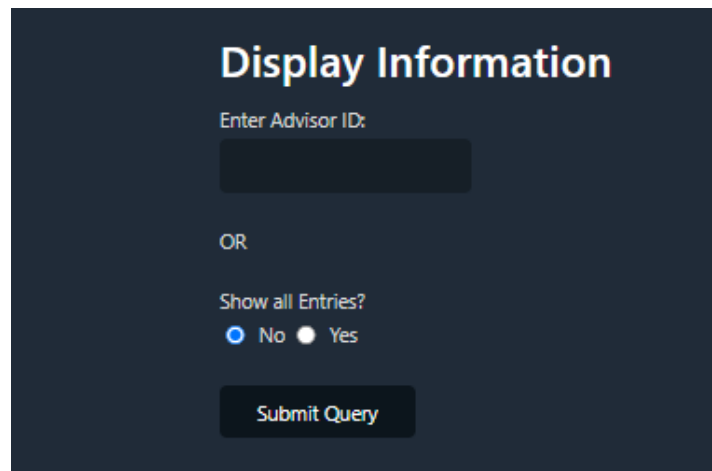
[Submit Information](#)

Modify A Different Record?
[Return To Modify Form](#)

Displaying (Querying) Records

Similarly, to the Delete Information pages, the Display Information pages prompt us to either enter an identifying key or select to show all entries at once. Also, like the Delete Information Pages, we cannot choose to show all entries while also entering an identifying key. We must choose to enter one or the other. Once we have entered our information, we are brought to a page that will retrieve the record(s) in question. For a single advisor and/or student record query, we are shown a little more information than just the single record. For the advisor query, we are shown the advisor's information, but we are also shown in a separate table all the students that are being advised by that advisor. Similarly in the student query, we are shown the student's record as well as all the courses that student has taken. At the bottom of the page, we are asked if we'd like to make another query or to return to the main menu.

Display advisor information form:



The image shows a web form titled "Display Information" on a dark blue background. It has two input options: "Enter Advisor ID:" followed by a text input field, and "OR" followed by "Show all Entries?" with radio buttons for "No" (selected) and "Yes". At the bottom is a "Submit Query" button.

Advisor's record and the students they advise:

Search Result

Advisor's Info:

Advisor ID	Last Name	First Name	Initials	Job Title	Department
123456	Yousif	Nabil	NY	Professor	Computer Science

Students advised by this advisor:

Student ID	Last Name	First Name	Major	Classification
000000000	Fodder	John	Interior Design	Freshman
426684753	Clarke	Caitlin	Chemistry	Sophomore
446655881	Doo	Scooby	Animal Science	Freshman
493943759	Parrish	Serentiy	SP	Freshman

Do Another Search?

Return To Search Form

Return to Main Menu

Student's record and the courses they have taken:

Search Result

Student Information:

Student ID	Last Name	First Name	Initials	Major	Classification	Advisor ID
910193557	Johnson	Jarred	JJ	Computer Science	5th Year Senior	232527

Courses taken by this student:

Grade ID	Course Prefix	Course Name	Credit Hours	Semester
1	CSCI 4320	Software Engineering	3	Fall
2	CSCI 3351	Assembly Language	3	Fall
3	CSIS 3743	Web Development	3	Fall

Do Another Search?

[Return To Search Form](#)

[Return to Main Menu](#)

In the case of the Display Student Information page, we are also given the ability to display student records based on their major and their classification as well. Just make sure that you only pick one method of displaying information; you cannot search a record by entering a student ID and a major. Only one field can be filled out for this query.

Query by student information page:

Display Information

Search By Student ID:

OR

Search by classification:

OR

Search by Major:

OR

Show all Entries?

☒ No ☐ Yes

[Submit Query](#)

Results for querying by classification:

Search Result						
Student ID	Last Name	First Name	Initials	Major	Classification	Advisor ID
111222333	Morant	Ja	JM	Sports Management	Sophomore	232527
334455668	Goods	Megan	MG	Cosmetology	Sophomore	292725
426684753	Clarke	Caitlin	CC	Chemistry	Sophomore	123456
753951486	Ashford	Robby	RA	Journalism	Sophomore	222111

Do Another Search?

[Return To Search Form](#)

[Return to Main Menu](#)

Results for querying by major:

Search Result						
Student ID	Last Name	First Name	Initials	Major	Classification	Advisor ID
272325	Wilder	Vontae	VW	Computer Science	Senior	232527
910193557	Johnson	Jarred	JJ	Computer Science	5th Year Senior	232527

Do Another Search?

[Return To Search Form](#)

[Return to Main Menu](#)