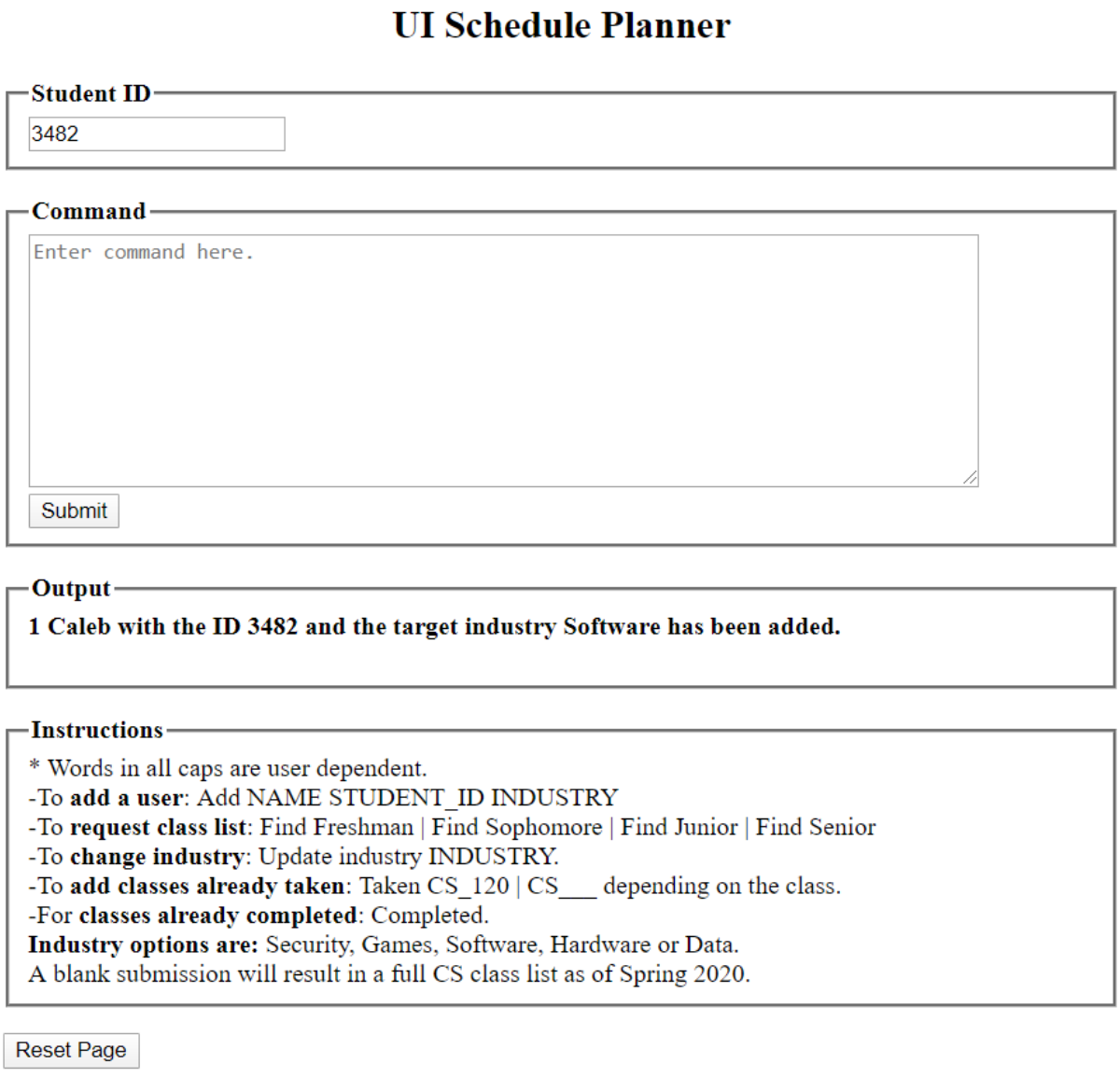
University of Idaho Scheduler

Spring 2020 (March – May)

This project aims to create a better scheduling system for students at the University of Idaho. The program allows a user to add a goal career field. From there the program recommends classes that are most fitting for that field. I used **Apache**, **MySQL** and **XAMP** to link everything and the bulk of the code was written in **PHP**.

This project was a fun change of pace from c programming. It is not a robust system, more of a proof of concept but it has a couple practical features. When a person is added to the database, they need their student ID and pick a goal industry. The database uses each student's ID as a primary key and goal industries can be changed at any point. The image below is an example of the interface in use.



The part I love most about this project is class recommendations. I find it incredibly satisfying to see class lists change depending on your interest and the classes you have taken. This program does not recommend CS II until you have taken CS I as well as other classes that the user has not completed prerequisites for. Below is an example of a recommend class list for juniors, not shown is the list of classes the user has already taken such as Calculus I and introductory CS classes.

Output

1 Searching for Junior year classes

CS_210	Programming Languages
CS_270	System Software
CS_336	Information Assurance
CS_383	Software Engineering
CS_385	Theory of Computation
MATH_175	Calculus II

This program is not secure beyond a student ID and a user could add nonsense classes or make mistakes in their commands. It is nowhere near a bulletproof system but it largely accomplishes what I set out to do.

This project was not a ton of coding, but it was a lot of new, new programs and new languages, making it a discouraging process. I had to manually add each class and twice I deleted the entire database forcing me to reenter it each time. Fortunately, by the third time I had learned some tricks to speed up this process.

This was also my first time using XAMP, Apache and MySQL. Getting everything to work together was a major hurdle itself and I had not written a line of code yet.

Looking back at this project I am incredibly satisfied with what I accomplished. The system is a fun visual of my accomplishments but most important to me is tackling so many new variables. At the beginning of this project, I really was lost, and it took some discouraging attempts to finally make progress.

You can check out the code here. I recommend lines 199 -236 of *UI_Schedule.php,* it is the SQL command I use.