

## Project 1 Report

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### Code Explanation:

The program begins by invoking the login function to sign into Paws using the credentials that must be put into the code. The login function logs in and then invokes the searchCourse function. The searchCourse function first enters the Student Center, then navigates to the search page. At the search page the program selects the semester, class subject, and career options in the dropdown boxes, inputs the class number into the text box, and unchecks the “open sections only” checkbox, and finally clicks the search button. If no sections are found, the program prints “No Matches” and exits. If sections are found, the program reads in the data and prints it to the command line. Finally the program exits.

### Technical Notes:

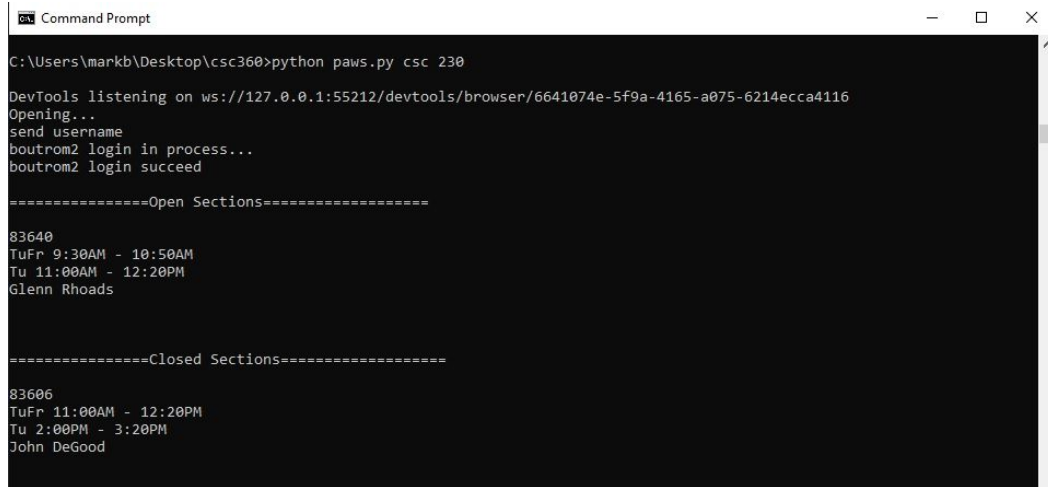
The python code utilizes the Selenium webdriver plugin in order to interact with chrome pages. Additionally, the code uses the BeautifulSoup plugin to turn the page into searchable text in order to find relevant data.

**Note: our code waits 2 seconds between every interaction with the page, this could be shortened however may result in errors due to the page failing to load within the allotted time.**

## Execution Screenshots & Synopsis:

### Execution 1: CSC 230

Here the python code navigates Paws on Chrome using the Selenium plugin. It logs into paws then navigates the class search page to find all sections of CSC 230. Once it reaches the class list page, the program reads in the data using BeautifulSoup and then prints out the data to the command line. Finally the program terminates.



```
Command Prompt
C:\Users\markb\Desktop\csc360>python paws.py csc 230

DevTools listening on ws://127.0.0.1:55212/devtools/browser/6641074e-5f9a-4165-a075-6214ecca4116
Opening...
send username
boutrom2 login in process...
boutrom2 login succeed

=====Open Sections=====

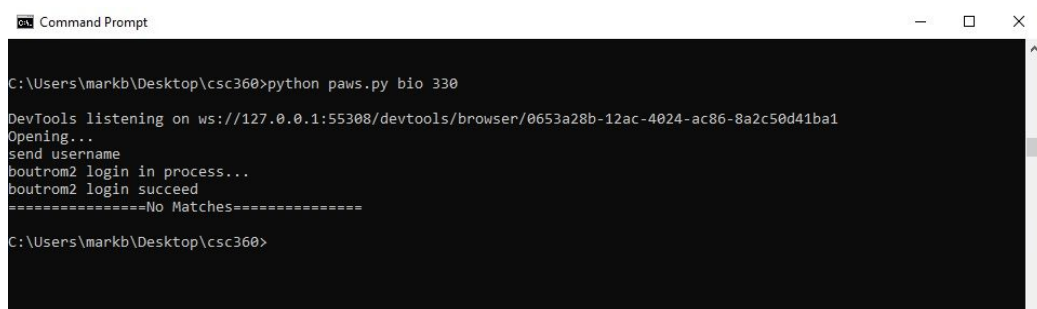
83640
TuFr 9:30AM - 10:50AM
Tu 11:00AM - 12:20PM
Glenn Rhoads

=====Closed Sections=====

83606
TuFr 11:00AM - 12:20PM
Tu 2:00PM - 3:20PM
John DeGood
```

### Execution 2: BIO 330

Here the python code similarly uses Selenium to navigate to the Paws login page and log in. Again the program navigates to the class search page and inputs BIO 330. The page returns no class listings so the program prints “No Matches” and terminates.



```
Command Prompt
C:\Users\markb\Desktop\csc360>python paws.py bio 330

DevTools listening on ws://127.0.0.1:55308/devtools/browser/0653a28b-12ac-4024-ac86-8a2c50d41ba1
Opening...
send username
boutrom2 login in process...
boutrom2 login succeed

=====No Matches=====

C:\Users\markb\Desktop\csc360>
```

### Execution 3: CSC 220

Here the python code works very similarly to Example 1. The main difference is that there are many more sections here than in that example.

```
Command Prompt
C:\Users\markb\Desktop\csc360>python paws.py csc 220
DevTools listening on ws://127.0.0.1:55258/devtools/browser/65641699-4a28-4bba-95f4-3d191a72cafa
Opening...
send username
boutrom2 login in process...
boutrom2 login succeed

=====Open Sections=====
83618
Mo 12:30PM - 1:50PM
Th 2:00PM - 3:20PM
Th 12:30PM - 1:50PM
Sharif Mohammad Shahnewaz Ferdous

83624
TuTh 5:30PM - 7:30PM
Mark Russo

83637
Fr 11:00AM - 12:20PM
Fr 2:00PM - 3:20PM
Tu 2:00PM - 3:20PM
Glenn Rhoads

=====Closed Sections=====
83613
Tu 11:00AM - 12:20PM
Tu 2:00PM - 3:20PM
Fr 11:00AM - 12:20PM
Michael Bloodgood

83611
TuFr 3:30PM - 4:50PM
Fr 2:00PM - 3:20PM
Michael Bloodgood

83623
Mo 2:00PM - 3:20PM
Mo 3:30PM - 4:50PM
Th 3:30PM - 4:50PM
Sharif Mohammad Shahnewaz Ferdous
```