

COEN 11 Lab 2

Steps

1. Open up Terminal and connect to the Linux computers:
ssh -l username linux.dc.engr.scu.edu
2. Go to COEN 11 directory: ***cd coen11***
3. Make a file: ***vi lab2.c***
4. Compile the file: ***gcc -o lab2 lab2.c***
5. Test your file: ***./lab2***

```

1 #include <stdio.h>
2 #include <string.h>
3
4 #define SIZE 10
5 #define LENGTH 20
6
7 int count = 0;
8 int size[SIZE];
9 char names[SIZE][LENGTH];
10
11 void insert(void);
12 void delete(void);
13 void list(void);
14
15 int main() {
16     int input;
17
18     printf("Welcome to the Surf Lesson Scheduler!\n\n");
19     printf("(1) Schedule Appointment\n");
20     printf("(2) Remove Appointment\n");
21     printf("(3) List Schedule\n");
22     printf("(0) Exit\n\n");
23
24     while(1) {
25         scanf("%d", &input);
26
27         switch(input) {
28             case 0:
29                 return 1;
30             case 1:

```

```

31                 insert();
32                 break;
33             case 2:
34                 delete();
35                 break;
36             case 3:
37                 list();
38                 break;
39             default:
40                 printf("That command is not valid.\n");
41                 printf("1, 2, or 3 are valid commands\n\n");
42                 break;
43         }
44     }
45     return 1;
46 }
47
48 void insert() {
49     //TODO: Read in name and group size and add to schedule
50 }
51
52 void delete() {
53     //TODO: Read in number (scanf) and remove oldest appoint with
54     //      that group size
55 }
56
57 void list() {
58     //TODO: list out the schedule
59 }
60

```

Requirements

3 global variables: **count**, **name** array, **size** array

4 functions: `main()`, `input()`, `delete()`, `list()`

main() ~ has an infinite loop (`while(1)`) with a `scanf()` that reads in an input and a switch statement to act on that input

input() ~ reads in a name and a group size and adds them to respective arrays

delete() ~ reads in a number, deletes the first appointment with that group size, and shifts the arrays up to close the gap; if the count is 0, inform the user; if the group size is not in the schedule, inform the user

list() ~ lists out the schedule

Demo and submit source code to Camino

When Submitting the Code...

Add comment at the top of the page with...

- Your name
- Course title
- Lab number
- Lab time and date

```
/* Emma Allegrucci  
 * COEN 10  
 * Lab 5  
 * Monday 2:15pm  
 */
```

Helpful Resources

*** “The C Programming Language, 2nd Edition” ***

C: <https://devdocs.io/c/>

C: https://www.tutorialspoint.com/c_standard_library/index.htm

Terminal commands:

<https://cheatography.com/davechild/cheat-sheets/linux-command-line/>

Vim commands: <https://vim.rtorr.com/>

