ECE 361 Homework #2 -- Recursion, Abstract Data Types (ADT), Stacks and Queues

This assignment will be worth 100 points and is due by 10:00 PM on Sunday 25-Oct-2020

No late assignments accepted after 11:59 on Sun, 25-Oct - I am planning to review the solutions in class on Mon, 26-Oct

After completing this assignment students should have:

- Demonstrated basic knowledge of Recursion
- Gained experience developing and using reusable ADT's (Abstract Data Types)
- Developed and tested a stack-based application

Introduction

This assignment should be completed by 10:00 PM on Sun 25-Oct-2020. We are using GitHub classroom for this assignment so make sure you make a final push to your GitHub repository for the assignment before the deadline. Source code for your programming solutions should have a .c extension. Header files should have a .h extension. Your transcripts (bash terminal log files) should be submitted as text files (.txt) by either redirecting the output from your shell to a file or by using the "tee" command to direct output to both the console and a file (ex: $echo "hello world" | tee hellow orld.txt). Name all of the files in the repository with descriptive names. Be sure your code is organized well, uses meaningful variable names, and includes comments that aid in understanding the code.

NOTE: Each of your console log files should start with a whoami command so we can identify the originator of the log.

You will submit your work via a private repository using GitHub classroom. We would also like you to submit an archive (.zip) after your final commit to GitHUB to your D2L Homework #2 dropbox.

NOTES:

- If you decide to leverage (borrow) existing code for your solutions other than the code we provided please acknowledge the source. We know how to use Google, too, so copying existing code from the web without acknowledging the source will lead to serious consequences if you are caught cheating.
- You may collaborate with your classmates in the design of the application in Problem #2, but you are all expected to submit original work. You should do, and submit, your own work for Problems #1 and #3 (no collaboration) There is a difference between collaboration and copying - you don't want to be caught doing the latter since that could affect both your final grade and the grade of the student you copied from.
- Please post questions on the assignment to the Homework #2 discussion forum on D2L. Doing so helps your fellow students understand the assignment, makes it easier for Dhaksha and I to keep up with questions, and avoids the risk that your question will slip out of our view. You may post anonymously in the forum.

Assignment:

Not much to say here. The 3 problems are described in hw 2.pdf