Assignment #3

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Repo: github.com/diavillalpando/CS-392-Assignments

Book

Read Ch.3

- Complete 1-30 multiple choice,
    1. B
    2. D
    3. C
    4. B
    5. A
    6. B
    7. C
    8. D
    9. B
    10. A
    11. B
    12. B
    13. D
    14. A
    15. B
    16. A
    17. D
    18. B
    19. D
    20. A
    21. C
    22. D
    23. B
    24. C
    25. B
    26. D

27. A
28. C
29. D
30. B

- Complete 1-10 T/F:
    1. F
    2. T
    3. T
    4. F
    5. T
    6. T
    7. T
    8. T
    9. F
- Complete Programming Problems 3.10, 3.14

Read Ch. 4

- Complete 1-20 multiple choice:
    1. C
    2. B
    3. D
    4. A
    5. C
    6. B
    7. C
    8. A
    9. B
    10. A
    11. B
    12. C
    13. A
    14. C
    15. B
    16. D
    17. B
    18. A
    19. B
    20. B
- Complete 1-10 T/F:

1. F
2. F
3. T
4. T
5. T
6. F
7. F
8. F
9. T
10. F

- Complete Programming Problems 4.1, 4.5

Read Ch. 5

- Complete 1-14 multiple choice:
    1. A
    2. B
    3. B
    4. D
    5. A
    6. C
    7. B
    8. D
    9. C
    10. B
    11. C
    12. D
    13. B
    14. C
- Complete 1-9 T/F:
    1. T
    2. T
    3. T
    4. F
    5. T
    6. T
    7. T
    8. F
    9. F
- Complete Programming Problems 5.6, 5.11

Worksheet

This worksheet is to be done in collaboration with your project team. As you work with each other try to determine if the individuals you work with would be suitable partners for your final groups. I will be assigning groups in the near future, but you may come to me with your own suggestions.

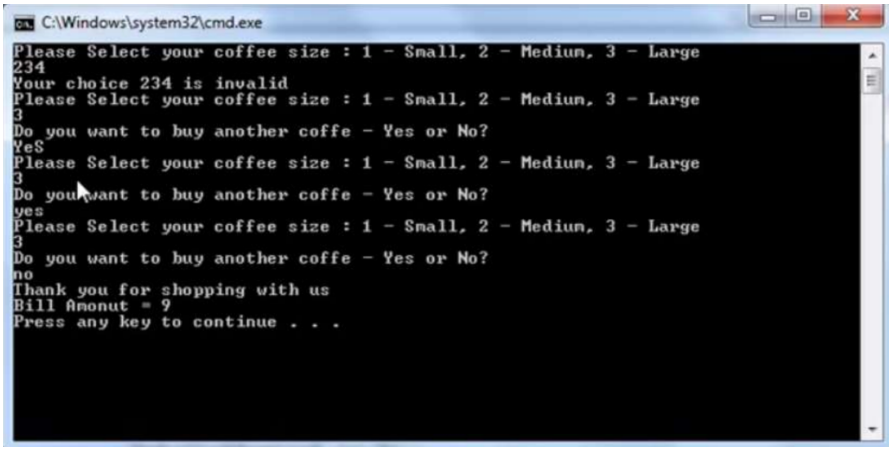
1. Switch and do/while: Coffee Ordering Program.

Write a program with a menu that allows a user to purchase coffee of 3 sizes, Small, Medium, and Large.

The user should be prompted to purchase coffees from a menu like. "`Please select your coffee size. Enter (1) for small, (2) for medium, (3) for large.`" Use a switch statement to generate this prompt.

The user should also be given the opportunity to purchase additional coffees. Use a do/while loop to continue prompting the user if they want more coffee. They should enter `yes` or `no` and be able to do so with case insensitivity.

Sample User Interaction (feel free to make up your own):



2. Additional Practice: BMI Calculator. Console vs. GUI Programming

Write a Console program to prompt the user for their gender, height, weight, and age.

1. Print their BMI to the console.

2. Reimplement as a GUI App. Choose your own design, but please include a button for program initiation, textboxes for data entry and a Label for displaying the results.

3. Second Grade Flash Card App

Implement a GUI Based Second Grade Flash Card App. The App will provide students with ten random math questions, either addition or subtraction. For subtraction, always ensure the top number is larger than the bottom. Students will enter their response in a Text Box. Use a Single Form. Your program will generate 10 random problems, students will enter the answer into the Text Box, then press submit.

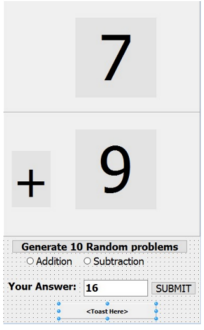
If the student gets a problem correct, a label at the bottom should say, “Correct!”, the problem should also automatically change to the next question.

If the user enters an incorrect answer or anything that raises an exception, eg, typing in letters or a big number, the problem should not change, but a message at the bottom should say “Incorrect, try again.”

If the user gets the problem incorrect 3x’s they just be taken to the next problem, and the message should say, “Let’s try something different.”

After 10 submissions the student’s score should be displayed in a popup message. If students got a problem wrong, but eventually got it right, they should be given credit for getting it right.

Don’t worry about telling students which problems they got right or wrong, or giving them immediate or delayed feedback. Provide a descriptive Storyboard for your App. Much of the design and user interaction is up to you, but feel free to use the template below as a guide. You may need to do some simple documentation research for things like random integer generation.



Storyboard for Math App

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