# CIS18A Course Project Part 1: Documentation and Program

Company Name: Bob’s Floors Inc

Business Type: Hardware Store

Pseudocode:

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| For Class Flooring:   1. Construct scanning method for input 2. Construct m for access to method 3. Output welcome screen 4. Wait for input on welcome screen to continue 5. method class menu call 6. Print out goodbye message and program end   For Class Method:   1. Construct scanning method for input 2. Construct c for access to catalogHold 3. Construct p for access to prices 4. create variables 5. create catalog method 6. print menu for catalog 7. receive input for catalog 8. switch statement controlling program path based on choice    1. case 1 going to carpet    2. case 2 going to tile    3. case 3 going to wood    4. case 4 returning to menu    5. default error handling 9. create calc method 10. create and initialize variables 11. print out welcome screen for calculator 12. create while loop 13. ask and receive input on dimensions 14. convert doubles to ints for array usage 15. declare array 16. iterate through array placing walls 17. print char array showing walls on a 2d plane 18. calculate area 19. print area 20. ask for repeat 21. repeat while loop or exit based on user input 22. calls menu when exits while loop 23. create quote method 24. print welcome screen for quote 25. read in choice for switch statement 26. Switch statement controlling flooring type     1. carpet case        1. print carpet options        2. read in choice for carpet grade choice        3. execute switch price assignment        4. print out carpet price        5. request footage        6. read in footage        7. calculate total price        8. request color choice        9. read in color choice        10. print out quote        11. return to method menu     2. tile case        1. print tile options        2. read in choice for tile grade choice        3. execute switch price assignment        4. print out tile price        5. request footage        6. read in footage        7. calculate total price        8. request color choice        9. read in color choice        10. print out quote        11. return to method menu     3. wood case        1. print wood options        2. read in choice for wood grade choice        3. execute switch price assignment        4. print out wood price        5. request footage        6. read in footage        7. calculate total price        8. request color choice        9. read in color choice        10. print out quote        11. return to method menu     4. return to menu case     5. default case for error handling 27. create menu method 28. print menu options 29. read in menu choice 30. execute switch statement for menu choice     1. catalog case     2. calc case     3. quote case     4. case 4 for exiting method     5. default for error handling   For Class catalog Hold:   1. Construct scanning method for input 2. construct p for access to prices 3. create carpet method 4. print carpet information 5. read in character to pause before returning from function 6. create tile method 7. print tile information 8. read in character to pause before returning from function 9. create wood method 10. print wood information 11. read in character to pause before returning from function   For Class prices   1. set carpet prices strings and doubles 2. set tile prices strings and doubles 3. set wood prices strings and doubles |

Create a short documentation describing the program purpose, function, and objectives.

The purpose of this program is to assist both customers and employees in the creation and visualization of flooring quotes. Through the use of the catalog customers can view what options in flooring the company provides. This is useful for customers who do not know what they want so that they price of flooring and the different types of flooring are available to them. It will also show them which color options are available for wood and tile. This is useful for a sales associate as they do not have to memorize the information and can simply show them on a computer. The program also offers a square footage calculator for calculating how much flooring a particular customer might need. It also provides helpful visualization so that room sizes can be compared. The final tool is that this program can perform is the ability to create a quote based on the flooring type and amount that the customer wants so that they can compare the prices at Bob’s Flooring Inc to competitors and weigh their options. The technical function is simple arithmetic and a basic catalog of available options. With an easily updatable price function that changes the prices for the entire program from one spot in the code.