# REQUIREMENTS DOCUMENT

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| **Date Submitted:** | April 20, 2021 |
| **Application Title:** | Cash Register |
| **Purpose:** | This program should allow the user to select from a list of items for purchase. The program should allow the user to place these items in their cart, review their items for purchase, confirm whether they want to check out, and give them a total price. |
| **Program Procedures:** | 1. The user will be given a prompt to select which items they would like to select to put in their cart. 2. If the item is out of stock the user will be informed 3. The user will be prompted is the would like to continue shopping or check out. 4. The user will be given the total price of the item they wish to purchase. |
| **Algorithms, Processing, and Conditions:** | 1. The retailItem class:  * Declare the class * Initialize the constructor * Use the \_\_str\_\_ method to return a string indicating the objects state. * Print a line of information for each attribute * Return the information * Set the item’s description * Set the item’s inventory * Set the item’s price * Get the item’s description * Get the item’s inventory * Get the item’s price  1. The cashRegister class:  * Declare the class * Initialize the constructor * Define the itemToPurchase attribute as a list * Use a method to reset the list to nothing * Use a method to append the purchased items to the list and print a confirmation for that item * Define a method to get the total price of all the items the user wants to purchase. * **Use a for loop to iterate through each item in the list** * Return the final total * **Define a method to show the items in the list** * Print those items to the console.  1. Import each class 2. Define the main function 3. Set a variable for each retail item that is for sale according to the parameters set by the retailItem class. 4. Setting a variable for the while loop to run. 5. Use a while loop to add items the user chooses to the cart. 6. Print a user menu prompt. 7. Prompt the user to check out or continue chopping 8. Using an if statement for thePants item and setting the input to 1 9. Using an if statement to check the inventory for the given retail item 10. Using the cashRegister class to confirm that the user wants to purchase pants 11. Using the retailItems class to get the inventory of the pants 12. For each item purchased, subtract one from the inventory. 13. If the temporary inventory drops below 1 then execute the else statement 14. Using an if statement for theShirts item and setting the input to 2 15. Using an if statement to check the inventory for the given retail item 16. Using the cashRegister class to confirm that the user wants to purchase shirts 17. Using the retailItems class to get the inventory of the shirts 18. For each item purchased, subtract one from the inventory. 19. If the temporary inventory drops below 1 then execute the else statement 20. Using an if statement for theShoes item and setting the input to 3 21. Using an if statement to check the inventory for the given retail item 22. Using the cashRegister class to confirm that the user wants to purchase Shoes 23. Using the retailItems class to get the inventory of the shoes 24. For each item purchased, subtract one from the inventory. 25. If the temporary inventory drops below 1 then execute the else statement 26. Using an if statement for theBelt item and setting the input to 4 27. Using an if statement to check the inventory for the given retail item 28. Using the cashRegister class to confirm that the user wants to purchase belts 29. Using the retailItems class to get the inventory of the belts 30. For each item purchased, subtract one from the inventory. 31. If the temporary inventory drops below 1 then execute the else statement 32. Set a catch all if a wrong entry is given. 33. Give the user a prompt to checkout 34. Show the items in the cart 35. Print the final total 36. Call the main function |
| **Notes and Restrictions:** | The program will prompt the user with the given keys to execute the program. Only certain items can be purchased. |
| **Comments:** | It is possible for an item to be out of stock once a limit is reached. Classes are imported to present the required information to the user. |