**Manage Furniture Inventory**

Load Furniture Inventory

Perform Each Task

Save Furniture Inventory

**Load Furniture Inventory**

Do the following for each product in the furniture inventory while the inventory is not full

Get current itemID from file

Get current itemQuantityAvailable from file

Get current itemPrice from file

Get current itemNote from file

**Perform Each Task**

Do the following while userChoice is not ‘F’

Get Choice

Perform Choice

**Get Choice**

Do the following while userChoice is not ‘A’ and ‘B’ and ‘C’ and ‘D’ and ‘E’ and ‘F’

Display “What would you like to do: Add a product [A], Delete a product [B], Increase

the quantity of a product [C], Decrease the quantity of a product [D], Start a customer bill [E], or Quit and save the furniture inventory [F]? “ to user

Get userChoice from user

**Perform Choice**

When userChoice is ‘A’

Add Product

When userChoice is ‘B’

Delete Product

When userChoice is ‘C’

Increase Quantity of a Product

When userChoice is ‘D’

Decrease Quantity of a Product

When userChoice is ‘E’

Generate Bill

**Add Product**

When the furniture inventory is not full

Get Item ID

Search for Matching Item ID

Add Nonmatching Product Information

When the furniture inventory is full

Display “The furniture inventory is full! You need to delete at least one item before you

can add any more.” to user

**Get Item ID**

Display “Enter item ID number: “ to user

Get searchItemID from user

**Search for Matching Item ID**

Search the itemIDs for the searchItemID

**Add Nonmatching Product Information**

When searchItemID is found

Display “Item ID is already in use!” to user

When searchItemID is not found

Set new itemID to searchItemID

Do the following while new itemQuantityAvailable is less than 0

Display “Enter VALID item quantity (No negative item quantities are allowed): “

to user

Get new itemQuantityAvailable from user

Do the following while new itemPrice is less than 0

Display “Enter VALID item price (No negative item prices are allowed): “ to user

Get new itemPrice from user

Display “Enter item note: “ to user

Get new itemNote from user

Display new itemNote, “ have been added to the furniture inventory.” to user

**Delete Product**

Get Item ID

Search for Matching Item ID

Perform Deletion

**Perform Deletion**

When searchItemID is not found

Display “Item was not found. Try again!” to user

When searchItemID is found

Display corresponding itemNote, “ have been deleted from the furniture inventory.” to

user

Delete corresponding itemID

Delete corresponding itemQuantityAvailable

Delete corresponding itemPrice

Delete corresponding itemNote

**Increase Quantity of a Product**

Get Item ID

Search for Matching Item ID

Get Item Quantity to Add

**Get Item Quantity to Add**

When searchItemID is not found

Display “Item was not found. Try again!” to user

When searchItemID is found

Do the following while addItemQuantityAvailable is less than 0

Display “Enter the quantity you would like to add to the current

quantity of “, corresponding itemNote, “ (Do not enter a negative quantity): “ to user

Get addItemQuantityAvailable from user

Set corresponding itemQuantityAvailable to corresponding itemQuantityAvailable +

addItemQuantityAvailable

Display addItemQuantityAvailable, “ “, corresponding itemNote, “ has/have been

added! Bringing its total item quantity to “, corresponding itemQuantityAvailable to user

**Decrease Quantity of a Product**

Get Item ID

Search for Matching Item ID

Get Item Quantity to Remove

**Get Item Quantity to Remove**

When searchItemID is not found

Display “Item was not found. Try again!” to user

When searchItemID is found

Do the following while removeItemQuantityAvailable is less than 0

Display “Enter the quantity you would like to remove from the current

quantity of “, corresponding itemNote, “ (Do not enter a negative quantity): “ to user

Get removeItemQuantityAvailable from user

When corresponding itemQuantityAvailable - removeItemQuantityAvailable is less than

0

Display “Quantity to remove was not accepted since it brings the quantity of that

item down to a negative number.” to user

When corresponding itemQuantityAvailable - removeItemQuantityAvailable is greater

than or equal to 0

Set corresponding itemQuantityAvailable to corresponding

itemQuantityAvailable - removeItemQuantityAvailable

Display removeItemQuantityAvailable, “ “, corresponding itemNote, “ has/have

been removed! Bringing its total item quantity to “, corresponding itemQuantityAvailable to user

**Generate Bill**

Get Customer Name

Get Customer Address

Get Customer City, State, Zip

Get Item ID

Search for Matching Item ID

Get Item Quantity

Calculate Subtotal

Calculate Tax

Calculate Total

Display Customer Information

Display Furniture Heading

Display Furniture Summary

Display Bill Totals

**Get Customer Name**

Display “Enter customer name: “ to user

Get customerName from user

**Get Customer Address**

Display “Enter customer address: “ to user

Get customerAddress from user

**Get Customer City, State, Zip**

Display “Enter the city, state, and zip code of the customer: “ to user

Get customerCityStateZip from user

**Get Item Quantity**

When searchItemID is found

Do the following while itemQuantity is less than 0 or greater than corresponding

itemQuantityAvailable

Display “Enter the quantity of “, corresponding itemNote, “ that the

customer wants (Do not enter a negative quantity or a quantity that is more than what is available): “ to user

Get itemQuantity from user

**Calculate Subtotal**

Set subtotal to 0.00

When searchItemID is found

Set subtotal to itemQuantity \* corresponding itemPrice

**Calculate Tax**

Set tax to subtotal \* 0.08

**Calculate Total**

Set total to subtotal + tax

**Display Customer Information**

Display “Customer Name: “, customerName to user

Display “Customer Address: “, customerAddress to user

Display “Customer City, State, and Zip Code: “, customerCityStateZip to user

**Display Furniture Heading**

Display “Item ID”, “Item Description”, “Item Quantity Purchased”, “Price Per Item” to user

**Display Furniture Summary**

When searchItemID is found

Display corresponding itemID, corresponding itemNote, itemQuantity, corresponding

itemPrice to user

**Display Bill Totals**

Display “Subtotal: “, subtotal to user

Display “Tax (8.0%): “, tax to user

Display “Total: “, total to user

**Save Furniture Inventory**

Do the following for each product in the unsaved furniture inventory

Append current itemID to file

Append current itemQuantityAvailable to file

Append current itemPrice to file

Append current itemNote to file