Addison Beck – Program 1 Part 2

Functionality must include:

o User must be to add objects to the inventory collection (which then also updates the data file)

o User must be to edit existing objects in the inventory collection (which then updates the data file)

o User must be to delete objects from the inventory collection (which then updates the data file)

o User can Search for (and display) a specific object of the class from the collection based on user input (This function must implement an equality method within the class)

o User can Display All objects currently in the inventory collection - Sorted in Alphabetical order by an instance variable of your choice (This function must implement a “compare to” method within the class)

o User can Display All objects currently in the inventory collection – Sorted by a different instance variable of your choice ( This function must use a comparator method within the application )

Design and Plan the inventory application that will allow the required functionality described above.

1. Identify all of the functionality that must be included for this project
   1. Adding objects
   2. Edit existing objects
   3. Delete objects
   4. Search & display objects
   5. Display all objects (sorted)
2. For each item identified in (1) above:
   1. What controls are required?
      1. Adding objects
         1. An add button
         2. Input fields for each property
      2. Editing objects
         1. List of objects
         2. Populated fields to edit
         3. A save button
      3. Deleting objects
         1. List of objects
         2. A delete button
      4. Searching and displaying objects
         1. List of objects or search box
         2. Output control
      5. Displaying all objects
         1. “Display All” button
         2. Output control
   2. What input is needed?
      1. Adding objects
         1. Definitions for each property
      2. Editing objects
         1. An object selection
         2. Edited properties
      3. Deleting objects
         1. A property selection
      4. Searching and displaying objects
         1. A property selection
      5. Displaying all objects
         1. Nothing
   3. What outputs are expected?
      1. Adding objects
         1. An object to be added
      2. Editing objects
         1. An object to be modified
      3. Deleting objects
         1. An object to be removed
      4. Searching and displaying objects
         1. An object’s details to be displayed
      5. Displaying all objects
         1. All object details to be displayed
   4. Detail the process(es) that are required to get from input to output?
      1. Adding objects
         1. Saving user input to an object call in a collection
         2. The selector box to populate with the new object
      2. Editing objects
         1. An existing object to have properties overwritten with updated information
      3. Deleting objects
         1. An existing object to be removed from the collection
         2. An existing object to be removed from the displayed list of object
      4. Searching and displaying objects
         1. A selected object index should have all details ToStringed and displayed in an output fields
      5. Displaying all objects
         1. Same as above but with all objects
   5. What input validation needs to be included?
      1. Adding objects
         1. All input meets datatype requirements
         2. All fields are given values of some kind
      2. Editing objects
         1. New input meets datatype requirements
         2. No field is left blank
      3. Deleting objects
         1. None
      4. Searching and displaying objects
         1. None
      5. Displaying all objects
         1. None
   6. What error checking needs to be included?
      1. Adding objects
         1. If a field is left blank, fill it with a default
         2. If a field doesn’t meet datatype requirements, return.
      2. Editing objects
         1. If a field is left blank, fill it with a default
         2. If a field doesn’t meet datatype requirements, return.
      3. Deleting objects
         1. None
      4. Searching and displaying objects
         1. None if objects are displayed in a listbox
      5. Displaying all objects
         1. None
3. What should the interface look like to allow the required functionality while also being user friendly and following good interface design principles?
   1. This could probably be done in one screen, but may end up needing more. All input fields would be located at the top in a group, all with buttons underneath them. Under that would be two list boxes – one with a summary of all items in a collection, and one for details with output. When a list item is selected, it’s details display in the output, and it’s fields open up to be edited.
4. What additional items need to be included to have a professional application?
   1. Splash Screen
      1. Splash screen on startup
   2. Short-Cut keys
      1. Tab index
   3. Menus
      1. None probably
   4. Tool-Tips
      1. Tool tips on each button, input field, and the list boxes
   5. Etc.