**Outcomes covered 2, 3 and 4**

**Assessment task instructions**

**Part 4**

**Develop and test a small program that uses standard collection classes**

Your task here is to complete the Address Book application.

The program is intended to store Friends Name as a key and their Address as the value.

You will need to create an appropriate instance variable for the form AddressBook to store the address entries as a key pair value where the Friend Name is the key and the Address is the value. You should use an appropriate generic standard collection class with both the key and the value stored as string objects.

You should then complete the following methods.

Addentry (FriendName,Address) // Add the key and the value stored as string objects.

Findaddress(string) // Entre the friend name and find the address

DeleteCurrentEntry(string) //Use the find method and then delete the current entry

ClearAllentry() // Remove all entries include friends name and addresses

ListAll() //Display all entries include friends name and addresses

Once you have completed the implementation, you should run the attached partial acceptance test to ensure that the program behaves as expected. You should also document any errors found and how you fixed the errors.

**Partial acceptance test**

This acceptance test should be run on the completed application in Debug mode to allow you to check the expected results.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Test** | **Expected action** | **Actual action** | **Passed Y/N** |
| 1 | Click on Clear all Entries. | Should prompt for confirmation. | Prompt for confirmation. | Y |
| 2 | Confirm deletion. | Should clear all entries in collection. | Clears all entries | Y |
| 3 | Click on List All. | No entries should appear. | No entries appear | Y |
| 4 | Add new entry — Friend Name John Ross and address 2 High Street Kintore. | Should prompt ‘Entry added’ and display new entry. | Prompts and displays new entry | Y |
| 5 | Add new entry — Friend Name Harry Watson and address 25 Townhead Street Kemnay. | Should prompt ‘Entry added’ and display new entry. | Prompts and displays new entry | Y |
| 6 | Add new entry — Friend Name May Evans and address 12 West Road Ellon | Should prompt ‘Entry added’ and display new entry. | Prompts and displays new entry | Y |
| 7 | Add new entry — Friend Name John Ross and address 89 High Road Aberdeen | Should display error message such as ‘entry with key John Ross already exists’ and clear text box showing display. | Displays error message and clears text box | Y |
| 8 | Click on ‘List All’. | Should display three entries | Displays three entries | Y |
| 9 | Enter Friend Name and then click on find address button. | Should display something similar to  May Evans, 12 West Road Ellon. | Displays the name and the address | Y |
| 10 | Click on delete current entry. | Should display something similar to entry for May Evans removed. | Display the name of the contact that has been deleted. | Y |
| 11 | Click on ‘List All’. | Should display two entries | Displays two entries | Y |
| 12 | Enter May Evans and then click on find address button. | Should display something like ‘no entry with key May Evans exists’. | Displays something like ‘no entry with key May Evans exists’. | Y |
| 13 | Ensure May Evans still in find address text box and then click on delete current entry. | Should display something like ‘no entry with key May Evans to remove’. | Displays “Name is not in dictionary” | Y |
| 14 | Exit program. | Program should exit | Program exits | Y |