HomeAway Exercise 2 Code Analysis/ White Box Testing

Bug1: Even if an user doesn’t have the right to add recipient to a particular message, it might be able to. When the user is grouped with another user which has permission to modify as ‘true’. As shown in the corresponding test.

Bug 2: Even if an user doesn’t have ‘Permission to modify Recipients’ = true; it might be able to do so, if a message has ‘add recipient allowed’ = true for that user. If the user is grouped with another user with ‘Permission to modify Recipients’ = true; As shown in the corresponding test, Test 2.

Bug 3: Even if an user doesn’t have ‘Permission to modify Recipients’ = true; it might be able to do so, if a message has ‘add recipient allowed’ = true for that user. If the user is grouped with itself; ; As shown in the corresponding test, Test 3.

Why it these were not caught in the test? : The test did not had variation in test data and tested the code through the happy path.

Test 1:

1. Create two user objects; user1 and user2.
2. User1.setHasPermissionToModifyRecipients(false)
3. User2.setHasPermissionToModifyRecipients(false)
4. Create a Message object; badMessage
5. badMessage.setAddRecipientAllowed(user1, true)
6. badMessage.setAddRecipientAllowed(user2, false)
7. Add the badMessage to Messages list
8. Now call the ‘addRecipientToAllMessages(messages, user1, user2)’
9. **Expected Result: result.size() = 1; Actual Result: = 0**

Test 2:

1. Create two user objects; user1 and user2.
2. User1.setHasPermissionToModifyRecipients(**true**)
3. User2.setHasPermissionToModifyRecipients(false)
4. Create a Message object; badMessage
5. badMessage.setAddRecipientAllowed(user1, true)
6. badMessage.setAddRecipientAllowed(user2, **true**)
7. Add the badMessage to Messages list
8. Now call the ‘addRecipientToAllMessages(messages, user1, user2)’
9. **Expected Result: result.size() = 1** //Since ‘user2’ does not have permission to modify recipients; **Actual Result: = 0**

Test 3:

1. Create one user object; user1
2. User1. setHasPermissionToModifyRecipients(**false**)
3. Create a Message object; badMessage
4. badMessage.setAddRecipientAllowed(user1, true)
5. Add the badMessage to Messages list
6. Now call the ‘addRecipientToAllMessages(messages, user1, user1)’
7. **Expected Result: result.size() = 1** //Since ‘user1’ does not have permission to modify recipients; **Actual Result: = 0**