### **Test Results Documentation**

The Study Buddy system has four use cases in total.

## Test case #001: Registration and Enter Basic Personal Info

For the registration process, there were several bugs encountered during the implementation stages as well as during testing.

1. Unfilled fields of information still allowed the student to proceed to the home page if they selected the "Register" button.

These bugs were resolved in the following ways:

1. This bug that was accounted for in the code to avoid this loophole by adding it as a special case (if unfilled fields all or some, throw error message)

## Test Case #002: Login

Encountered bugs:

1. The Student could not log out of the account after logging in as a logout function was not created.

These bugs were resolved in the following ways:

1. A logout feature was added to the system. On selection the students status in the database automatically changes to inactive.

#### Test case #003: Select Studying Preferences

There were no encountered bugs for the select studying preferences use case.

# Test case #004: Find Compatible Study Buddy

During the matching process in the Study Buddy system, several bugs that were not initially accounted for were encountered. These bugs were identified mainly by the software developers who proceeded to fix the bugs by adjusting the code. In this use case, the encountered bugs were the following:

- 1. The student searching for a study buddy would receive themselves as a suggested study buddy option
- 2. Study buddy matches appearing in the '100% match' section also appeared again in the 'almost 100% match' section
- 3. Study buddies would be chosen from all the students in the database, even if the student was not online/logged into account (that student might not be available for a study session and yet would be matched as though they were).

Test case #004 - Find Compatible Study Buddy uncovered these bugs mainly through step 1. These bugs were fixed in the following ways:

- 1. This bug existed as the system would scan through the whole database, which included the student who is searching for a study buddy. The bug was fixed by comparing the netID of the found match with the netID of the student searching for a match. The match is only displayed if the two netIDs are different.
- 2. Truth tables in the code were revised such that a suggested match would not be suggested twice (if the student has been displayed as a suggestion, do not choose them again to display on the screen). This ensured that a study buddy that has been suggested would not be suggested more than once.
- 3. An activity feature was added to the system through the database. This feature was connected to the student's account login. If the student is logged in, the database automatically changes their status to active, and hence available to be matched. If the student logs out, status changes automatically to inactive. If the student logs in and does not log out but does not have the study buddy web page open they are also considered inactive. The matching function was then adjusted to only select students to be matched if they are active (i.e. logged in).