

Bug Report

Bug ID	01
Test Case ID	06
Description	When we delete a user the other users IDs don't update accordingly
Steps to Reproduce	1.Delete a user from DB 2.Check the IDs of the Users that got shifted
Expected Output	All IDs of the users that follows the deleted user shall be reduced by 1
Actual Output	All IDs remain the same after shifting the users
Root Cause	There is no line that decrements the shifted user IDs in the delete_user fcn
Suggested Fix	Add a command to decrement the IDs of the shifted users while shifting them.

Bug ID	02
Test Case ID	07, 08
Description	When the delete fcn overwrites the last user. It clear all sections but the ID section it remains the same aka. 4
Steps to Reproduce	<ol style="list-style-type: none"> 1. Fill the DB with users. 2. Delete all of them 3. Check the IDs of all user in the DB
Expected Output	The database should be empty
Actual Output	The Last element will still hold it's ID and If Bug01 is still not resolved so all other users will have the same ID (of the last user)
Root Cause	The ID of the last user is not reseted to default after clearing it.
Suggested Fix	While clearing the Last user, assign it's ID to the default value.

Bug ID	03
Test Case ID	09
Description	Attempt to delete out of range user (max + 1)
Steps to Reproduce	<ol style="list-style-type: none">1. Delete the (max +1) user2. Check the function return3. Check the current_user variable before and after
Expected Output	<p>The database should not be affected.</p> <p>The functions shall return FALSE</p> <p>The current_user counter shall not be changed</p>
Actual Output	<p>The fcn returns TRUE</p> <p>The current user is decremented</p>
Root Cause	<p>The comparison is not well handled to exclude element after the last (array length)</p>
Suggested Fix	<p>Reevaluate the condition and exclude the element after the last correctly</p>

Bug ID	04
Test Case ID	12
Description	Adding max participants to a course
Steps to Reproduce	<ol style="list-style-type: none"> 1. Add participants to a course to fill it 2. Check the function return 3. Check the Enrollment of all users in the course
Expected Output	<p>The function shall return true for all participants</p> <p>The enrollment of all participants for this course shall be true.</p>
Actual Output	<p>The fcn did not add the last participant</p> <p>The enrollment for last participant remained FALSE</p>
Root Cause	The participants condition that keeps the course from exceeding max participant is not accurate
Suggested Fix	Reevaluate the condition and include the boundary

Bug ID	05
Test Case ID	13
Description	Adding the same user to the same course more than max course capacity
Steps to Reproduce	1. Add the same user to the same course more than max course capacity
Expected Output	The function should add the course to the Enrollments and remain TRUE
Actual Output	The function has added the course to the Enrollments but did not return true after several tries
Root Cause	The add to course function increments NumberOfEnrolledStudents in a course even if the user is already enrolled before
Suggested Fix	Add a condition that checks if the user is enrolled before and return without editing anything if so.

Bug ID	06
Test Case ID	14
Description	Testing DBM Deleting course reservation using valid data
Steps to Reproduce	<ol style="list-style-type: none"> 1. Call DBM_DeleteReservation() 2. Set the valid inputs to be deleted.
Expected Output	The function should remove the course from the Enrollments for the user
Actual Output	The function has not removed the course from the Enrollments for the user
Root Cause	There is a == instead of = in the expression responsible for change the value of the Enrollment
Suggested Fix	Replace the == with = to let the change happen.

Bug ID	07
Test Case ID	17
Description	Testing Course registration Add student to course using valid data
Steps to Reproduce	<ol style="list-style-type: none"> 1. Call AddStudentToCourse() 2. Set the inputs provided in the test case
Expected Output	The function should add user to the courses and return Enrolled
Actual Output	<p>The project exits with code (process 11036) exited with code -1073741819</p> <p>Which is Access violation</p>
Root Cause	<p>The AddStudentToCourse fcn expected Course_id, Student_id respectively.</p> <p>But the Prototype have an order mismatch and expects student_id, course_id</p>
Suggested Fix	Reorder the parameters of the prototype

Bug ID	08
Test Case ID	20
Description	Testing Course registration Add student to course using invalid student id (not created)
Steps to Reproduce	<ol style="list-style-type: none"> 1. Call AddStudentToCourse() 2. Set the inputs provided in the test case
Expected Output	The function should not add user to the courses and return AlreadyEnrolled
Actual Output	The function has added user to the courses and returned Enrolled
Root Cause	The DBM_AddToCourse does not handle not created user cases.
Suggested Fix	Add code that handles the not created users cases

Bug ID	09
Test Case ID	26
Description	Testing Add Account Functionality with Valid Data, Name length = 32
Steps to Reproduce	<ol style="list-style-type: none"> 1. Call Add_Account (&Test_Valid_User); 2. Set the inputs provided in the test case
Expected Output	The function should Add the account to the database
Actual Output	The function has NOT Added the account to the database
Root Cause	The string does not handle 32 character names + null terminator
Suggested Fix	Make the string size 33

Bug ID	10
Test Case ID	58
Description	Testing Add Account Functionality with username length = max
Steps to Reproduce	<ol style="list-style-type: none"> 1. Call Add_Account (&Test_Valid_User); 2. Set the inputs provided in the test case
Expected Output	The function should Add the account to the database
Actual Output	The function has NOT Added the account to the database
Root Cause	The string does not handle 32 character names + null terminator
Suggested Fix	Make the string size 33

Bug ID	11
Test Case ID	61
Description	Testing Add Account Functionality with password length = max
Steps to Reproduce	<ol style="list-style-type: none"> 1. Call Add_Account (&Test_Valid_User); 2. Set the inputs provided in the test case
Expected Output	The function should Add the account to the database
Actual Output	The function has NOT Added the account to the database
Root Cause	The string does not handle 32 character names + null terminator
Suggested Fix	Make the string size 33

Bug ID	12
Test Case ID	69
Description	Testing Delete Account with Test user id = max id + 1
Steps to Reproduce	<ol style="list-style-type: none"> 1. Call Delete Account (Test_id); 2. Set the inputs provided in the test case
Expected Output	The function should NOT affect the database and return false
Actual Output	The function has affected the database and returned TRUE
Root Cause	The Condition that handles the MAX user limit is not precise to exclude the max_users
Suggested Fix	Reevaluate the condition to exclude Max_Users from being deleted.

