

# COMP1000 C1 W2 Report

The following document has been started for you. The intention is to list tests that need to be performed in order to evidence which requirements have been met. It is important to be honest and only claim something works if you can evidence it. Note that the assessor will be running a whole batch of tests on your code.

Task A already has sufficient test coverage.

Tasks B-D have been started, but you will need to add more tests. You should include test cases where the user enters both valid and invalid parameters.

## Task A:

Perform the following tests in sequence from the command line:

Test	Expected Result	Passed?
Delete <code>computing.txt</code> if present Run <code>querydb.exe</code> with the following parameters: <code>-db computing.txt -showAll</code>	Error that displays: Cannot open file <code>computing.txt</code>	Y
Run <code>querydb.exe</code>	Generates a test database <code>computing.txt</code> Writes "Creating starter database for testing" in the terminal Inspect <code>computing.txt</code> with text editor to confirm 3 entries as shown below:  #RECORD #SID 12345 #NAME Jo Kingly Blunt #ENROLLMENTS COMP101 COMP102 COMP105 COMP110 COMP150 #GRADES 54.0 67.5 33.1 78.4 47.1 #PHONE 44-1234-567890  #RECORD #SID	Y

	<pre> 14351 #NAME     Bee Hyve #ENROLLMENTS     COMP101 COMP102 COMP105 COMP110 COMP155 COMP165 #GRADES     84.3 54.7 91.4 80.4 40.5 67.5  #RECORD #NAME     Gee Rafferty #ENROLLMENTS     ELEC101 ELEC133 COMP101 PROJ101 GIT101 #SID     15309 #GRADES     95.0 37.5 55.0 65.5 0.0 </pre>	
<p>Run querydb.exe with the following parameters:          -db computing.txt -showAll</p>	<p>Displays the following:</p> <pre> SID:     12345 NAME:     Jo Kingly Blunt ENROLLMENTS:     COMP101 COMP102 COMP105 COMP110 COMP150 GRADES:     54 67.5 33.1 78.4 47.1 PHONE:     44-1234-567890  SID:     14351 NAME:     Bee Hyve ENROLLMENTS: </pre>	Y

	COMP101 COMP102 COMP105 COMP110 COMP155 COMP165 GRADES: 84.3 54.7 91.4 80.4 40.5 67.5  SID: 15309 NAME: Gee Rafferty ENROLLMENTS: ELEC101 ELEC133 COMP101 PROJ101 GIT101 GRADES: 95 37.5 55 65.5 0	
Run querydb.exe with the following parameters: -db computing.txt -sid 12345	Displays the complete single record with sid equal to 12345  SID: 12345 NAME: Jo Kingly Blunt ENROLLMENTS: COMP101 COMP102 COMP105 COMP110 COMP150 GRADES: 54 67.5 33.1 78.4 47.1 PHONE: 44-1234-567890	Y
Run querydb.exe with the following parameters: -db computing.txt -sid 12346 -db computing.txt -sid 12346 -n -db computing.txt -sid 12346 -g -db computing.txt -sid 12346 -p	Should report there is no record with student ID 12346.	Y
Run querydb.exe with the following parameters: -db computing.txt -sid abc12	Should report that the student ID must be an integer	Y
-db computing.txt -sid 12345 -n	Should display only the name for student with ID 12345 (Jo Kingly Blunt)	Y

-db computing.txt -sid 12345 -g	Should display only module codes and grades for student with ID 12345	Y
-db computing.txt -sid 12345 -p	Should display only the phone number for student with ID 12345 (44-1234-567890)	Y
-db computing.txt -sid 14351 -p	Show indicate there is no phone number for this student	Y

## Task B

Perform the following tests in sequence from the command line: (note that not all tests have been written – you will likely want to add more).

Test	Expected Result	Passed?
Delete <code>computing.txt</code> if present Run <code>addrecord.exe</code> with the following parameters: <code>-db computing.txt -showAll</code>	Error that displays: Cannot open file <code>computing.txt</code>	N
Run <code>addrecord.exe</code>	Generates a test database <code>computing.txt</code>	Y
<code>-db computing.txt -add -sid 54321 -name John Doe -enrollments COMP201 COMP202 -grades 78.5 90.0 -phone 44-9876-543210</code>	Record Added Successfully	Y
<code>-db computing.txt -add -sid invalid_sid -name John Doe -enrollments COMP201 COMP202 -grades 78.5 90.0 -phone 44-9876-543210</code>	Error message indicating that the SID must be an integer	Y
<code>-add -sid 54321 -name John Doe -enrollments COMP201 COMP202 -grades 78.5 90.0 -phone 44-9876-543210</code>	Error message indicating that the database file is missing.	Y
<code>-db computing.txt -showAll</code>	Display all records, including the newly added record.	Y

## Task C

Perform the following tests in sequence from the command line: (note that not all tests have been written – you will likely want to add more).

Test	Expected Result	Passed?
Delete <code>computing.txt</code> if present Run <code>updaterecord.exe</code> with the following parameters: <code>-db computing.txt -showAll</code>	Error that displays: Cannot open file <code>computing.txt</code>	N
Run <code>updaterecord.exe</code> with no parameters	Generates a test database <code>computing.txt</code>	Y
Update records  <code>-db computing.txt -update -sid 12345 -name Updated Name -enrollments COMP201 COMP202 -grades 85.0 92.5 -phone 44-9876-543210</code>	Record updated successfully.	Y
Update record with invalid SID  <code>-db computing.txt -update -sid invalid_sid -name Updated Name -enrollments COMP201 COMP202 -grades 85.0 92.5 -phone 44-9876-543210</code>	Error message indicating that the SID must be an integer.	Y
Update a Non- Existent record  <code>-db computing.txt -update -sid 99999 -name Updated Name -enrollments COMP201 COMP202 -grades 85.0 92.5 -phone 44-9876-543210</code>	No record with SID=99999 was found Record with SID=99999 not found. No update performed.	Y
Update without database file  <code>-update -sid 12345 -name Updated Name -enrollments COMP201 COMP202 -grades 85.0 92.5 -phone 44-9876-543210</code>	Error message indicating that the database file is missing.	Y



## Task D

Perform the following tests using Qt Creator in the order listed: (note that not all tests have been written – you will likely want to add more).

Test	Expected Result	Passed?
Run the application for the first time	No records displayed Forward and back button should be disabled.	N
Click File->Open	This should present a standard File Open Dialog, which allows the user to browse and select a new database	N
Click File->Open, browse and select the default data computing.txt, then click cancel	No records displayed Forward and back button should be disabled.	N
Click File->Open, browse and select the default data computing.txt, then click Open	First record should be displayed (ID 12345) Forward button should be enabled; the back button should be disabled.	N
Click the forward button >>	The next record should be displayed (ID 14351) . The back and forward buttons should both be enabled	N
Click the forward button >>	The next record should be displayed (ID 14351) . The forward button should be disabled. The back button should be enabled	N
Double click a table entry and change the grades for all modules to 0.0; Then click File->Save	The entry for the student with ID 14351 should have zero grades against each module in the database file computing.txt	N