Grades Application

TestIng Documentation

Gavin Byrne

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# Introduction

The following document has been created to log the process of testing the Grades Application designed and developed by the author Gavin Byrne.

In order to effectively test said application the author was required to first research unit testing as a whole. This research would then be used to make a determination on the most efficient and effective way to test the grades application.

Once this determination is made the relevant test cases and logs will be compiled and added to this document.

# Research

Unit testing is a level of testing where individual units/ components of a software are tested. The purpose is to validate that each unit of the software performs as designed.

A unit is simply the smallest testable part of the application. In object oriented programing a unit would be a method.

In general unit testing is performed by the developer themselves. It is the first form of testing performed in the development lifecycle and uses predominantly the White Box Method.

White Box testing is a method whereby the internal structure, design and implementation of the item being tested is known to the tester.

Therefore it makes sense for the developer to be the one to unit test applications or code they themselves have created.

Unit testing can be automated or it can be done manually. The tester or developer will usually choose depending on the software being tested.

For example a mathematical or scientific based piece of software with many different formulas and algorithms built in to it would likely be suited to automated testing whereas a UI based software dependant on user input may be more suited to manual testing.

Whichever approach and methodology is ultimately settled on the fact remains that unit testing is a must in software development. The resultant test cases act as “help file” for future developers while any new case files ensure the software meets requirements.

# Testing Method

Due to the grades application being dependant almost solely on user input it will be tested manually.

The application has four main sections (forms) that provide different functions. Therefore the test cases will be split and designed around each form individually.

# Testing – Student

## Test Cases – Student

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Purpose of Test Case** | **Description** | **Post Conditions** |
| 1.1 | Test Student number loads | At runtime student number should auto populate | New and random Student number to be generated |
| 1.2 | Test subject list loads | At runtime combo-box should fill with subjects | Subjects stored in db to load to UI |
| 1.3 | Test date of birth format | Input method should only accept dd/mm/yyyy | Date format accepted when student added |
| 1.4 | Test subject functionality | Test add/remove subject | A subject is written to or removed from list-box |
| 1.5 | Test Add Student frontend | Test logic in button accepts user data | A success message and reset form |
| 1.6 | Test Add student backend | Test if data is written to db | New student added to student table |

## Test Log – Student

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.1 | Dataset 1 | Normal | Enter Student ID | N/A | New Student ID populated | New Student ID populated | Pass |  |
|  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.2 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | New Student Subjects | N/A | Dropdown populated with Subjects | Dropdown populated with Subjects | Pass |  |
|  | | | | | | | | |
| 1.2 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | New Student Subjects | N/A | No subjects load, Error message advising user of issue | No subjects load, Error message advising user of issue | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.3 | Dataset 1 | Normal | Date of birth | Any Valid |  | | | |
|  | | | All others | Any Valid | Student added to db, Success Message | Student added to db, Success Message | Pass |  |
|  | | | | | | | | |
| 1.3 | Dataset 2 | Abnormal | Date of birth | None |  | | | |
|  | | | All others | Any Valid | Message asking user for valid DOB | Message asking user for valid DOB | Pass |  |
|  | | | | | | | | |
| 1.3 | Dataset 3 | Abnormal | Date of birth | 01/13/2011 |  | | | |
|  | | | All others | Any Valid | Message asking user for valid DOB | Message asking user for valid DOB | Pass |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.4 | Dataset 1 | Normal | New students subjects | Any Valid | Subject added to subject list | Subject added to subject list | Pass |  |
|  | | | | | | | | |
| 1.4 | Dataset 2 | Abnormal | New students subjects | None selected | Message asking user to select a subject | Message asking user to select a subject | Pass |  |
|  | | | | | | | | |
| 1.4 | Dataset 3 | Abnormal | New students subjects | Duplicate selection | Message stating subject already added | Message stating subject already added | Pass |  |
|  | | | | | | | | |
| 1.4 | Dataset 4 | Abnormal | Subjects list | None selected | Option to remove unavailable | Option to remove unavailable | Pass | Right click -> Remove |
|  | | | | | | | | |
| 1.4 | Dataset 5 | Normal | Subjects list | Any Valid | Subject removed from list | Subject removed from list | Pass | Right click -> Remove |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
|  |  |  |  |  |  |  |  | |
| 1.5 | Dataset 1 | Normal | Student First Name | Any Valid |  | | | |
|  | | | All others | Any Valid | Receive a success message, form resets | Receive a success message, form resets | Pass |  |
|  | | | | | | | | |
| 1.5 | Dataset 2 | Abnormal | Student First Name | Blank |  | | | |
|  | | | All others | Any Valid | Receive an info message warning of blank field | Receive an info message warning of blank field | Pass |  |
|  | | | | | | | | |
| 1.5 | Dataset 3 | Normal | Student Address | Any Valid |  | | | |
|  | | | All others | Any Valid | Receive a success message, form resets | Receive a success message, form resets | Pass |  |
|  | | | | | | | | |
| 1.5 | Dataset 4 | Abnormal | Student Address | Blank |  | | | |
|  | | | All others | Any Valid | Receive an info message warning of blank field | Receive an info message warning of blank field | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.6 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | All | Any Valid | Receive a success message, form resets | Receive a success message, form resets | Pass |  |
|  | | | | | | | | |
| 1.6 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | All | Any Valid | Receive an info message warning of SQL error | Receive an info message warning of SQL error | Pass |  |

## Issue Log – Student

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Issue Title** | **Type** | **Priority** | **Receipt Date** | **Originators Name** | **Assigned To** | **Status** |
| 1 | No Issues Detected In Test Phase | N/A | High | 20/04/2016 | Gavin Byrne | N/A | Open |
|  |  |  |  |  |  |  |  |

# Testing – Lecturer

## Test Cases - Lecturer

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| --- | --- | --- | --- |
| **Test Case** | **Purpose of Test Case** | **Description** | **Post Conditions** |
| 1.1 | Test subject number loads | At runtime subject number should auto populate | New and incremented subject number to be generated |
| 1.2 | Test lecturer ID loads | At runtime lecturer ID should auto populate | New and incremented Lecturer ID to be generated |
| 1.3 | Test show/hide Lecturer button | Visibility of section should be controllable by user | Add lecturer section usable, user to have ability to hide |
| 1.4 | Test search lecturers | Test users ability to search by name or ID | If lecturer found loads relevant data to form else user advised |
| 1.5 | Test add subject frontend | UI should handle any user errors | Confirmation for user that operation was a success |
| 1.6 | Test add subject backend | details entered by user should be enter to db | db updated successfully |
| 1.7 | Test add lecturer frontend | UI should handle any user errors | Confirmation for user that operation was a success |
| 1.8 | Test add lecturer backend | details entered by user should be enter to db | db updated successfully |
| 1.9 | Test add subject+lecturer frontend | UI should handle any user errors | Confirmation for user that operation was a success |
| 2.0 | Test add subject+lecturer backend | details entered by user should be enter to db | db updated successfully |

## Test Log - Lecturer

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.1 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | New Subject ID | N/A | New Subject ID field auto populated | New Subject ID field auto populated | Pass |  |
|  | | | | | | | | |
| 1.1 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | New Subject ID | N/A | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.2 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | New Lecturer ID | N/A | New Lecturer ID field auto populated | New Lecturer ID field auto populated | Pass |  |
|  | | | | | | | | |
| 1.2 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | New Lecturer ID | N/A | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.3 | Dataset 1 | Normal | Show/Hide Lecturer | N/A | Toggles lecturer data between visible and not | Toggles lecturer data between visible and not | Pass |  |

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| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.4 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | Lecturer ID | Any Valid | Found ID populated in Chosen Lecturer ID field | Found ID populated in Chosen Lecturer ID field | Pass |  |
|  | | | | | | | | |
| 1.1 | Dataset 2 | Abnormal | Database connection | Connected |  | | | |
|  | | | Lecturer ID | Any Invalid | Error message advising user lecturer wasn't found | Error message advising user lecturer wasn't found | Pass |  |
|  | | | | | | | | |
| 1.4 | Dataset 2 | Abnormal | Database connection | Connected |  | | | |
|  | | | New Lecturer ID | Blank | Error message advising user to fill in valid data | Error message advising user to fill in valid data | Pass |  |
|  | | | | | | | | |
| 1.4 | Dataset 3 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | New Lecturer ID | N/A | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.5 | Dataset 1 | Normal | New Subject Name | Any Valid | Success Message displayed to user | Success Message displayed to user | Pass |  |
|  | | | | | | | | |
| 1.5 | Dataset 2 | Abnormal | New Subject Name | None selected | Message asking user to enter a subject | Message asking user to enter a subject | Pass |  |
|  | | | | | | | | |
| 1.5 | Dataset 3 | Abnormal | New Subject Name | Duplicate selection | Message stating subject already exists | Message stating subject already exists | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.6 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | New Subject Name | Any Valid | Subject added, Success Message displayed to user | Subject added, Success Message displayed to user | Pass |  |
|  | | | | | | | | |
| 1.6 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | New Subject Name | Any Valid | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.7 | Dataset 1 | Normal | New Lecturer Email | Any Valid |  | | | |
|  | | | All Others | Any Valid | Success Message displayed to user | Success Message displayed to user | Pass |  |
|  | | | | | | | | |
| 1.7 | Dataset 2 | Abnormal | New Lecturer Email | Blank |  | | | |
|  | | | All Others | Any Valid | Error message advising user to fill in valid data | Error message advising user to fill in valid data | Pass |  |
|  | | | | | | | | |
| 1.7 | Dataset 3 | Abnormal | New Lecturer Address | Blank |  | | | |
|  | | | All Others | Any Valid | Error message advising user to fill in valid data | Error message advising user to fill in valid data | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.8 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | All New Lecturer fields | Any Valid | Lecturer added, Success Message displayed to user | Lecturer added, Success Message displayed to user | Pass |  |
|  | | | | | | | | |
| 1.8 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | All New Lecturer fields | Any Valid | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.9 | Dataset 1 | Normal | New Lecturer Email | Any Valid |  | | | |
|  | | | All Others | Any Valid | Success Message displayed to user | Success Message displayed to user | Pass |  |
|  | | | | | | | | |
| 1.9 | Dataset 2 | Abnormal | New Lecturer Email | Blank |  | | | |
|  | | | All Others | Any Valid | Error message advising user to fill in valid data | Error message advising user to fill in valid data | Pass |  |
|  | | | | | | | | |
| 1.9 | Dataset 3 | Abnormal | New Subject Name | Blank |  | | | |
|  | | | All Others | Any Valid | Error message advising user to fill in valid data | Error message advising user to fill in valid data | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 2.0 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | All fields | Any Valid | Lecturer and Subject added, Success Message displayed to user | Lecturer and Subject added, Success Message displayed to user | Pass |  |
|  | | | | | | | | |
| 2.0 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | All fields | Any Valid | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

## Issue Log - Lecturer

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Issue Title** | **Type** | **Priority** | **Receipt Date** | **Originators Name** | **Assigned To** | **Status** |
| 1 | No Issues Detected In Test Phase | N/A | High | 20/04/2016 | Gavin Byrne | N/A | Open |
|  |  |  |  |  |  |  |  |

# Testing – Grades

## Test Cases - Grades

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Purpose of Test Case** | **Description** | **Post Conditions** |
| 1.1 | Test search students | Test users ability to search by name or ID | If student found loads relevant data to form else user advised |
| 1.2 | Test add subject or grade frontend | UI should handle any user errors | Confirmation for user that operation was a success |
| 1.3 | Test add subject or grade backend | details entered by user should be enter to db | db updated successfully |

## Test Log - Grades

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.1 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | Student ID | Any Valid | Student details populated in grid view | Student details populated in grid view | Pass |  |
|  | | | | | | | | |
| 1.1 | Dataset 2 | Abnormal | Database connection | Connected |  | | | |
|  | | | Student ID | Any Invalid | Error message advising user student wasn't found | Error message advising user student wasn't found | Pass |  |
|  | | | | | | | | |
| 1.1 | Dataset 3 | Abnormal | Database connection | Connected |  | | | |
|  | | | Student ID | Blank | Error message advising user to fill in valid data | Error message advising user to fill in valid data | Pass |  |
|  | | | | | | | | |
| 1.1 | Dataset 4 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | Student ID | N/A | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.2 | Dataset 1 | Normal | Subject Title | Math |  | | | |
|  | | | Grade | 99 | Success Message displayed to user | Success Message displayed to user | Pass |  |
|  | | | | | | | | |
| 1.2 | Dataset 2 | Abnormal | Subject Title | Blank |  | | | |
|  | | | Grade | 99 | Error message advising user to select a subject | Error message advising user to select a subject | Pass |  |
|  | | | | | | | | |
| 1.2 | Dataset 3 | Abnormal | Subject Title | Math |  | | | |
|  | | | Grade | 200 | Error message advising user to fill in a valid grade | Error message advising user to fill in a valid grade | Pass |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.3 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | All fields | Any Valid | Lecturer and Subject added, Success Message displayed to user | Lecturer and Subject added, Success Message displayed to user | Pass |  |
|  | | | | | | | | |
| 1.3 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | All fields | Any Valid | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

## Issue Log - Grades

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Issue Title** | **Type** | **Priority** | **Receipt Date** | **Originators Name** | **Assigned To** | **Status** |
| 1 | No Issues Detected In Test Phase | N/A | High | 20/04/2016 | Gavin Byrne | N/A | Open |
|  |  |  |  |  |  |  |  |

# Testing – Reports

## Test Cases - Reports

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Purpose of Test Case** | **Description** | **Post Conditions** |
| 1.1 | Test report form formatting | Formatting of labels dependant on form state | text and formatting of labels should match user selected options |
| 1.2 | Test run report frontend | UI should handle any user errors | Confirmation for user that operation was a success |
| 1.3 | Test run report backend | details entered by user should be enter to db | db updated successfully |

## Test Log - Reports

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.1 | Dataset 1 | Normal | Report Type | None | Label text is green and says "Report Parameters Go Here" | Label text is green and says "Report Parameters Go Here" | Pass |  |
|  | | | | | | | | |
| 1.1 | Dataset 2 | Normal | Report Type | Student ID | Label text is red and says "Please Enter Student ID" | Label text is red and says "Please Enter Student ID" | Pass |  |
|  | | | | | | | | |
| 1.1 | Dataset 3 | Normal | Report Type | Subject Name | Label text is red and says "Please Enter Subject Name" | Label text is red and says "Please Enter Subject Name" | Pass |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.2 | Dataset 1 | Normal | Report Type | Subject Name |  | | | |
|  | | | Search Parameter | Math | Creates report where user wants in CSV format | Creates report where user wants in CSV format | Pass |  |
|  | | | | | | | | |
| 1.2 | Dataset 2 | Abnormal | Report Type | None |  | | | |
|  | | | Search Parameter | Math | Error message advising user to select a report to run | Error message advising user to select a report to run | Pass |  |
|  | | | | | | | | |
| 1.2 | Dataset 3 | Abnormal | Report Type | Subject Name |  | | | |
|  | | | Search Parameter | Blank | Error message advising user to fill in a subject name | Error message advising user to fill in a subject name | Pass |  |
|  | | | | | | | | |
| 1.2 | Dataset 3 | Abnormal | Report Type | Subject Name |  | | | |
|  | | | Search Parameter | Any Invalid | Error message advising user that the subject wasn't found | Error message advising user that the subject wasn't found | Pass |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | | | **Inputs** | | **Results** | | **Pass/Fail** | **Comments** |
| **Test Case** |  | **Type** | **Field** | **Value** | **Expected** | **Actual** |  | |
| 1.3 | Dataset 1 | Normal | Database connection | Connected |  | | | |
|  | | | All fields | Any Valid | Report created and success message shown to user | Report created and success message shown to user | Pass |  |
|  | | | | | | | | |
| 1.3 | Dataset 2 | Abnormal | Database connection | Disconnected |  | | | |
|  | | | All fields | Any Valid | Error message advising user of SQL issue | Error message advising user of SQL issue | Pass |  |

## Issue Log - Reports

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Issue Title** | **Type** | **Priority** | **Receipt Date** | **Originators Name** | **Assigned To** | **Status** |
| 1 | No Issues Detected In Test Phase | N/A | High | 20/04/2016 | Gavin Byrne | N/A | Open |
|  |  |  |  |  |  |  |  |

# Summary

In summary the Grades Application was broken down into four sections according to both the UI layout and its functionality. These four sections were in turn broken down to their smallest working parts or units.

Using these units a number of test cases, designed to provide the application the opportunity to break, were designed.

Test logs were then created based upon the test cases. These contained the unit to be tested and varied number of datatypes to be fed into the application.

The test logs were completed manually. The tester/developer worked through each section and unit providing the application numerous iterations of both valid and invalid data.

Finally Issue logs were created as a place to log any failed tests. These logs also contain information on the priority of the issue found and who it may have been assigned to.

# Conclusion

The developer and author of this document, who carried out this series of unit tests, is of the opinion that while the application did pass all tests there may be cause for further testing by a third party. This is to ensure that no bugs have been missed due to bias or familiarity.

After the application has passed this second round of unit testing approval has been given to move to the next stage of testing/development.