# Peer Testing Response - Modular and Unit Testing

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In response to bugs and errors that are discovered during Peer testing, the developer will use a combination of Modular and Unit testing with respect to the nature of the bug. Desk Checking will first be used to review the logic of the Module or Unit in question. If this method does not reveal the cause of the bug or error, Other methods such as the Visual Studio testing feature may be deployed.

# Test 1 - Edit Notes Critical Bug:



The problem seems to have occurred after the user clicked 'Save'. Therefore, the Save unit will be the first to be checked.

Unit Testing - 'Save' unit:

Desk Checking - Upon reviewing the function for saving a visit, it has become apparent that there is no decision statement to determine if save is being clicked for the first time or not. This means that a new visit entry is created each time save is clicked

## Solution

A decision statement must be put in place to determine if the visit is new or if it has been previously saved.

## Test 1 - Add Patients Major Error:



The problem seems to be caused during the execution of the patient adding function, this suggests that the add function must be investigated as a unit first in the interest of time.

Desk Checking - Upon examining the unit it has been made apparent that there is a lack of format checking for the date of birth.

A date checking function needs to be created to ensure that the date of birth is valid.

# Test 2 - Add visits Critical Bug:

| Add Visits | Clicking 'Save' while leaving the | Not Yet Fixed | Critical |
|------------|-----------------------------------|---------------|----------|
|            | 'Reason' field empty causes the   |               |          |
|            | program to hang.                  |               |          |

The issue seems to most likely originate from the 'Save' button function - probably failing to check if the fields are empty before sending them to the server. Will investigate the individual unit first.

Unit Testing - 'Save' Button:
Desk Checking - As expected, a quick desk check of the 'Save' button function revealed that there was nothing to check if data existed in both fields.

A guick error catch was put in place with an info box that reminds the user to fill in the fields.

# Test 2 - View Patient Critical Error:



It seems unclear what may have caused this error. It is quite likely that the error was caused by the developer accidentally deleting all client images when resetting a server for testing. The developer is lead to believe this is likely as no functions delete client images other than the 'delete client' function. The error had never before been encountered but was encountered without exception during Test 2 after a runtime crash required a server reset. While external human error must be taken into account, it is nevertheless crucial to investigate the error. A modular desk check will be conducted on the relevant units. If no further results are found, the bug will be considered caused by manual error and will be tagged as 'Fixed' for the time being. If the error is encountered again during testing, further methods such as drivers will be deployed.

# Modular Testing - View Patient Module:

Desk Checking - A review of the inter relationship of all related profile image functions yielded no results.

# Unit Testing - All View Patient Units:

Desk Checking - A review of the 'Command\_18', 'SendClientImageCommand', 'HandleClient', 'Window\_Loaded', and 'HandleProfileImage' units yielded no results.

# Modular Testing - Add Profile Image Module:

Desk Checking - A review of the inter relationship of related add profile image functions yielded no results.

# Unit Testing - All Add Profile Image Units:

Desk Checking - A review of the 'bdrImage\_Drop', 'bdrImage\_MouseDown', 'SendClientImage', 'HandleClient', and 'Command\_26' units yielded no results.

The error is considered to be a manual error for the time being. Meanwhile, an error catch was put in place to ensure that if a listed image is for whatever reason not present, the server states that the image was not found and moves on.

# Test 2 - Add Patient Major Error:



It seems that the error is caused as there is no catch present for if the user does not select a file and simply closes the selection window. A desk check unit test will be conducted to reveal if this is the issue.

Unit Testing - Image Selection Unit:

Desk Checking - There was no checking present not only in this unit but anywhere in the application, to check if a file was selected by the user before attempting to access the file.

Solution

Error catching was introduced in three separate units to ensure that a file is selected. If a file is not selected, the program simply returns the function.