***Testing and Defect Reporting Templates and Examples***

Oralpathology Website Homepage: <http://sis-teach-01.sis.pitt.edu/projects/oralpath/homepage.php>

Test Case Template

IDENTIFIER: A unique identifier for this test case, which ideally will also serve as a simple way to remember what the test case is testing. Example: VALID-PARAMETER-MESSAGE.

TEST CASE: A short description of what the test case does.

PRECONDITIONS: Any conditions which must be true before the test case is executed.

INPUT VALUES: Any input values to be passed in as part of the execution steps.

EXECUTION STEPS: The steps the tester should take to run the test.

OUTPUT VALUES: Any specific output values expected after the execution steps.

POSTCONDITIONS: Any conditions which must hold true after the execution steps have been completed. If these conditions are not met, the test fails.

Below are test cases that can be written when an automated test plan is developed.

IDENTIFIER: NO-PRACTICE-CATEGORIES-SELECTED-TEST

TEST CASE: A text box error should occur on the Practice page when attempting to begin a practice session when no categories have been selected.

PRECONDITIONS: None

INPUT VALUES: None

EXECUTION STEPS: From the Homepage, select “Practice”. From the Practice page select “Let’s begin!” before selecting any category options, leaving all categories unselected.

OUTPUT VALUES: N/A

POSTCONDITIONS: A text box will appear in the middle of the screen with a statement, “Please select at least one category.”.

IDENTIFIER: ALL-PRACTICE-CATEGORIES-TEST

TEST CASE: Select all categories from the Practice Menu.

PRECONDITIONS: None

INPUT VALUES: None

EXECUTION STEPS: From the Homepage, select “Practice”. From the Practice page select each of the following by clicking on the box only once: Bone Lesions/Tumors, Dental Anomalies, Odontogenic Cysts/Tumors, Soft Tissue Lesions/Tumors, Developmental Abnormalities, Radiology, Salivary, Syndromes, Benign Fibro-osseous Lesions, Other.

OUTPUT VALUES: N/A

POSTCONDITIONS: Each individual box will change from a white background to a blue background after each individual selection. All topics should be colored with a blue background indicating they have been selected.

A defect is any sort of error in a program which causes the system under test to do one of the following:

1. Not meet the specified requirements (functional or non-functional)

2. Return an incorrect result

3. Stop execution unexpectedly (system stability is an implicit requirement in all systems under test)

A link to “A Friendly Introduction to Software Testing” by Bill Laboon

<https://github.com/laboon/software-testing/blob/master/software-testing-laboon-ebook.pdf>

Ideally, automated tests will have been written to catch these errors. Whenever a new defect is discovered an automated test is usually created to cover the case where the defect occurred.

Since no automated testing protocol has been set up, all the following defects were discovered via manual testing. The template below is not an industry standard and can be altered to fit the needs of the developers.

Defect Reporting Template

IDENTIFIER: Unique ID often included automatically by the defect tracking software being used.

SUMMARY: A short (one sentence or less) summary of what the defect is.

DESCRIPTION: A more in-depth (can be a paragraph or more) description of the defect.

REPRODUCTION STEPS: The specific steps to reproduce the defect.

EXPECTED BEHAVIOR: What is expected to occur after the reproduction steps have been executed.

OBSERVED BEHAVIOR: What actually happened after the reproduction steps were executed.

IMPACT: How this specifically impacts a user of the software.

SEVERITY: How severe this problem is, from TRIVIAL to BLOCKER.

WORKAROUND: How to avoid triggering this defect, if known or possible.

NOTES: Any other notes that may be useful in fixing or tracking down this defect, such as system configuration, thread dumps, or logging files.

Below are examples of defects currently present in the software. It is understood that we are still in the development phase and some features are expected to be not fully working. These are just examples of how the reporting could be completed.

Oralpathology Website Homepage: <http://sis-teach-01.sis.pitt.edu/projects/oralpath/homepage.php>

IDENTIFIER: 00001 – JRK 4/4/18

SUMMARY: No access to Leaderboard page. Links lead to Homepage.

DESCRIPTION: A Leaderboard page cannot be accessed, if it yet exists, from the links provided from the options at the top-right of each webpage (except from the Homepage where those links are not options available to choose from. Any time “Leaderboard” is selected it redirects immediately to the Homepage.

REPRODUCTION STEPS: From Homepage click the “INSTRUCTIONS” box from the left-row-center of the page. From the instruction page click “LEADER BOARD” from the options at the top-right of the webpage.

EXPECTED BEHAVIOR: Upon selecting “LEADER BOARD” the page should redirect to a leaderboard page.

OBSERVED BEHAVIOR: Upon selecting “LEADER BOARD” the page redirects to the Homepage.

IMPACT: The software is still able to be used as normal, but the user will be unable to access the leaderboard at this time.

SEVERITY: The current defect is minimal severity in terms of playing the game. It is a feature not present that does not affect gameplay but will not be able to record top scores.

WORKAROUND: No known workarounds as it appears the Leaderboard page does not yet exist to be displayed and therefore cannot be accessed.

NOTES: From the Homepage this same defect occurs when selecting either of the Instructions, Practice, Play, Scorecard, and Hall of Fame options first, then the Leaderboard link. “LOGOUT” logs out of the system and the web options are not expected to be displayed.

IDENTIFIER: 00002 – JRK 4/4/18

SUMMARY: The “ATLAS” page cannot be found.

DESCRIPTION: An Atlas page cannot be accessed, if it yet exists, from the links provided from the options at the top-right of each webpage (except from the Homepage where those links are not options available to choose from. Any time “ATLAS” is selected it redirects immediately to a new web browser tab stating that the page cannot be found.

REPRODUCTION STEPS: From Homepage click the “INSTRUCTIONS” box from the left-row-center of the page. From the instruction page click “ATLAS” from the options at the top-right of the webpage.

EXPECTED BEHAVIOR: The Atlas link opens the webpage, http://www.oralpathologyatlas.net, displaying he oralpathology atlas.

OBSERVED BEHAVIOR: Upon selecting “ATLAS”, the link redirects immediately to a new web browser tab stating that the page cannot be found.

IMPACT: The user will not have access to relevant resources to assist in playing the game.

SEVERITY: Normal. This defect will be noticed by many users attempting to access the atlas.

WORKAROUND: None

NOTES: The text of the Safari web browser is:

**Safari Can’t Find the Server**

Safari can’t open the page “http://www.oralpathologyatlas.net” because Safari can’t find the server “http://www.oralpathologyatlas.net”.