CMPT 371- Team 3 Triage Report

Triage Summary for Incremental Deliverable 4

Conducted on March 19th, 2017

Introduction

This report has been conducted for the end of Incremental Deliverable 4 to summarize the status of all outstanding issues and create a prioritized list of tasks for Incremental Deliverable 5. We will also note the overall status of our issue tracking and solutions for the logged issues.

Outstanding Issues

Below is a listing of outstanding issues as of the end of ID4, in order from highest to lowest priority as tasks for ID5. The number represents the order in which they were logged in the Issue Tracking for Git Hub.

- **#100   Send Message Receiver Error**
    - This issue is caused by the way we are closing our copy objects. Though this error does not affect usability directly, it sheds light on a possible memory issue due to not garbage collecting unused objects. This issue should have a high priority for ID5.

- **#91 Copies aren't deleting**
    - This issue is related to issue #100 and should be taken into account when proceeding to fix that issue.
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- **#99 Assertion failed on compare approximate**
    - This issue has unknown origins. Though it does not prevent usability this is a serious issue and should be solved soon

- **#98 Brightness and contrast go into infinity**
    - This issue occurs when manipulating images and should be given priority as it is preventing the effectiveness of a crucial feature of the project

- **#96 Images randomly grow on hands**
  - This issue occurs at times when the user is manipulating images. It appears to only be repeatable on the Oculus 1 station, which means it could be related to the setup of the machine.

- **#93 Tray has no limit**
  - The tray of thumbnail images has no boundaries and can thus extend into the floor and beyond infinity. This can be fixed with implementation of a scrolling feature in the next ID.

- **#92 Enlarging images too much crashes unity**
  - This issue can crash the program and must be given high priority, but can be easily fixed by giving a range clamp on the input to the resizing function.

- **#90 Quaternion to matrix conversion Error**
  - This issue appears to be caused by an external Oculus library we are using. We need to figure out why this is happening and if it is affecting any of our features.

- **#87 Close does not deactivate**
  - This issue is caused when a user closes one of the images. The close button "sticks" on and closes any other images interacted with. This is a serious inconvenience and reduces usability.

- **#84 Can't see the other side of an image/copy**
  - The reverse side of an image is invisible. This is major as it causes copies to be lost in the virtual space. This is likely a setting of the Sprite Renderer component on the copy object. Research should be done on how to change the rendering settings on the copy.

- **#79 Minimize doesn't fully minimize**
  - When the minimize button is pressed, only some of the menus are minimized. This should be fixed soon as it prevents the full functionality of the minimize feature.

- **#65 Design Document Overhaul**
  - This issue is related to the status of our Design Documentation. Due to recent bug fixes, some parts of the system were redesigned and need to be documented formally. This is critical as it will prevent misunderstandings in the future

- **#46 Change positions of instantiated Copy objects in Display.cs to prevent overlap**

- This issue is caused by users creating new copies of images and will be fixed by a planned feature implementation for ID5. This will have a high priority as it can cause confusion in the workspace.
- **#101 App ID Error**
  - This is caused by the Oculus hardware not being registered to an account. This has no effect on our software, but should be looked into.

- **#97 Non-convex mesh collider with non-kinematic rigidbody Error**
  - This is an issue caused in Unity's physics engine and is related to the way we are manipulating objects. This is not a crucial error, but it uses deprecated code and so may cause problems later and should be fixed if possible.

- **#95 Collider is too big on the hand**
  - The collider we are using for interaction with buttons is too big and is causing users to click unintended buttons. This is a simple fix that will be fine tuned in user testing.

- **#94 Copies can be manipulated while grabbed**
  - This can cause unintended manipulations to images and should be fixed. This should be a trivial fix.

- **#89 Buttons load in different sizes**
  - This is caused when the user loads the application with the Oculus headset in an incorrect position. This is an issue related to UI tweaking.

- **#88 Space between selection and copy**
  - This issue is caused when a user selects an image and it is highlighted. The highlight appears to be behind the image and can look strange at different angles. This does not prevent any functionality.

- **#86 Thickness of copies increases**
  - This issue can be seen when resizing a copy. Copies are meant to be flat 2-dimensional objects, but they become thicker during resizing. This is a trivial fix.

- **#85 Non-Existent playback error**
  - This issue is caused occasionally by Unity on startup. It does not prevent any functionality and may be just be a Unity specific issue.

- **#83 Back panel on menus disappear**
  - This issue is caused when the user leaves the center of the space. This issue is a UI tweaking issue and does not prevent any functionality.

- **#82 Buttons clickable from behind**
  - This issue is caused when the user leaves the center of the space. This should be investigated more to determine if a fix is possible

- **#81 Error "Blender not found"**
  - This issue is related to the custom object meshes created for the UI. Unity appears to have a problem with the blender files used in these meshes. This prevents no functionality, but should be fixed to allow a more appealing UI to be created.
- **#80 "Minimize" should change to "Maximize"**
  - The minimize button causes some confusion when clicked as users expect there to be a "Maximize" option. This is a trivial fix.

- **#78 Filter button is not in the correct position**
  - One of the UI buttons appears in the wrong place. This is a trivial fix.

- **#77 Image copies have the same name**
  - This issue is caused in the Unity editor hierarchy and is generally bad practice, but has no effect on the code at this time. This is a trivial fix.

- **#76 Selector shows through tray**
  - A selected Copy's highlight shows through tray objects and causes confusion. This is related to rendering layers and should be a simple fix.
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- **#75 Refactor button instantiation code in DisplayMenu() in Dashboard.cs**
  - This is an issue with code readability and optimality but does not affect functionality.

- **#72 Quit button to ceiling/out of the way location**
  - This is a user preference issue for the location of the quit button to make it accessible but not too easy to press. This affects no functionality and should be a trivial fix
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- **#61 Selection of buttons not visualized**
  - When a user selects a button, there is no visual feedback that the button has been pressed. This can cause confusion to the user, but does not prevent any functionality.

- **#54 Unable to parse error YAML in Unity**
  - This is caused by Unity metadata files and does not prevent any functionality. This is likely caused by git merging of the metadata.

- **#52 Warnings in Cloud Build compilation**

- This is caused by a variety of things and should be looked into

Overall Issue Status

Overall Issues Logged for Project

- Resolved
- Unresloved
- Pending Review

14.6%

39%

46.3%
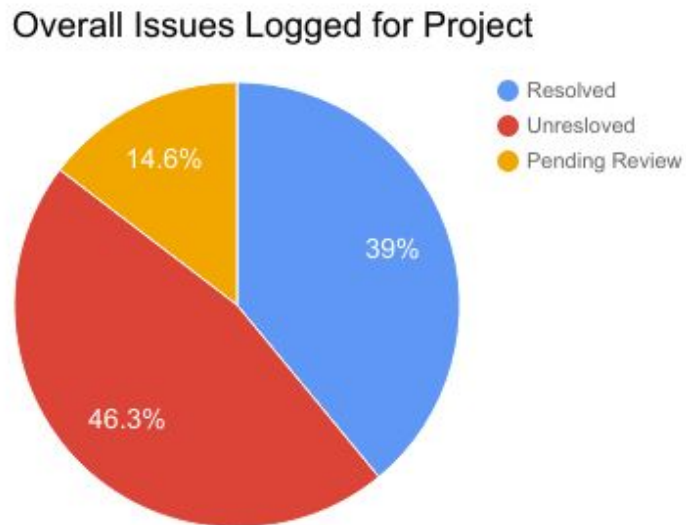
Fig 1: *Since the beginning of the project we have logged 82 issues,32 of which have been resolved, 12 of which are pending review. Issues pending review are issues that have been solved but not yet signed off by a member of the testing team.*

Issues Logged for ID4

Legend:
- Resolved
- Unresloved
- Pending Review

8.2%
20.4%
71.4%
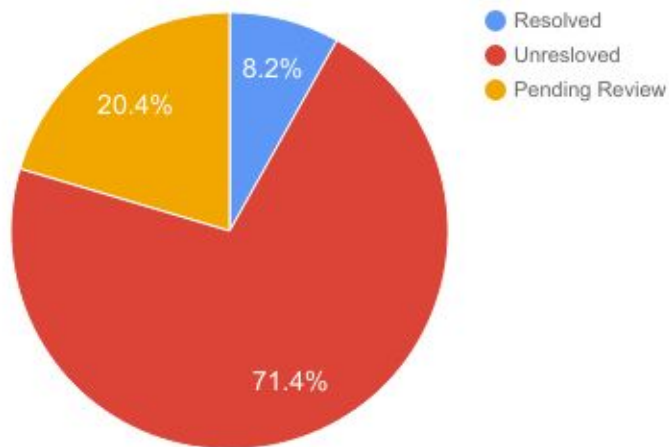
Fig2: *Since the beginning of ID4 we have logged 49 issues, 4 of which have been resolved, 10 of which are pending review. Issues pending review are issues that have been solved but not yet signed off by a member of the testing team.*