## **Working Prototype Known Problems Report**

#### Startup

- -Action: When the program is started an error message is thrown but will not crash the system.
  - -Reason: The window size is big and may exceed the size of the computer screen.
  - -Fix: Make the default window size smaller.

### Weight Paint:

- -Action: When the weight paint button is pressed it opens up a file browser and does not add in any weight paint to the overall algorithm.
  - -Reason: Feature not properly implemented in the overall system.
- -Fix: Can be fixed with the algorithm being changed to accommodate a 2D array like in ImportedImage.h changing weight to a 2D array and other sections of the 3D generator.
- Action: Occasional crashes when the mouse is clicked on the weight paint screen.
- -Reason: If the current aspect ratio of the image of the side is different from the image that is chosen in the file browser there will be a vector index out of bounds error.
- -Fix: By removing the image file browser and finding a way to connect the side image to the weight image we can prevent a different aspect ratio and an index out of bounds error from happening.

## Picture Preview/Editor

- -Action: Color picker (3 Hotkey) does not pick the color for the background
- -Reason: Feature not properly implemented in the overall system due to it being prone to crashing.
  - -Fix: Can be fixed by implementing the tool into the overall 3D model algorithm.
- -Action: Color Selector does not select the color for output images
- -Reason: Feature not properly implemented in the overall system due to it being prone to crashing. .
  - -Fix: Can be fixed by implementing the tool into the overall 3D model algorithm.
- -Action: Nullify Color Selector does not select the color to nullify:
- -Reason: Feature not properly implemented in the overall system due to it being prone to crashing. .
  - -Fix: Can be fixed by implementing the tool into the overall 3D model algorithm.

# **Preview Generator:**

-Action: Crash on certain pairs of resolution and size

Reason: Occasionally depending on the pair and image the algorithm does not get enough image to create a side. This will make the system push in a blank side that can cause a crash due to a null pointer exception.

Fix: A check for null pointers in the system that result in an error message instead of a crash.

-Action: Crashes if the images can't form a picture.

Reason: If the images can't form a 3D picture it will pass in empty sides and a lack of a null pointer check crashes the system.

Fix: Add in a null pointer check into the system that prevents crashes.

-Action: Will not generate an image if the images are too big.

Reason: The image is so big that the camera for the model is within the model which creates a blank image.

Fix: Allow for the camera to zoom in and zoom out of an image.

-Action: Will not generate if images don't have a background

Reason: The current algorithm has it set that if the pixel is not touching a null node it will delete it. Since there are no pixels to be nullified, all the pixels are not touching a null node which means all of it is deleted and a dark image is sent through.

Fix: Change the algorithm to take into account solid colors.

Action: Occasionally the image will not be connected creating a gap 3D model

Reason: Some of the loops are not finding loops when they should be finding loops causing a gap in the system.

Fix: Change around settings in the model menu as a user