Note: This new bug report format was introduced after Alice version 2.4, and some of the earlier bug reports do not contain enough information to accurately create the report in this new format. Some of the missing information includes the resolved date of the bug fixes, a proper description of the bug (including screen shot), and bug fixed without actual code or a good description on how the bug was fixed.

Note: This bug report does not include all the bug fixes from Alice version 2.0 to 2.2 as those reports were documented on paper.

Note to self: Some of these bug reports are very confusing, not sure what they are about and some do not have proper documentation on how the bugs were fixed. Need to revise the bug report in the future.

# Table of contents (CTRL+ click to follow link)

#### Alice 2.4 (Aug 1, 2013)

- 1. Gallery bug
- 2. Auto restart for Linux
- 3. "Int a" bug
- 4. Event bug
- 5. Say bubble bug
- 6. Export Video bug
- 7. Thumbnail bug (MAC)
- 8. Buggy tab look and feel
- 9. Preferences path
- 10. PointOfView bug
- 11. Create parameter/variable bug
- 12. Cannot double click to open a file in MAC
- 13. Cannot double click to open a file when Alice is already opened (MAC)
- 14. Disable He/She builder
- 15. Model Camera bug
- 16. New Name, Splashscreen, aboutAlice image, and Alice license
- 17. Save As Web Page feature
- 18. New Feature Added Symbol keys to "when <key> is typed, do <method>" event

### Alice 2.4.1 (Dec 5, 2013)

1. StackOverflowError in recursion

#### Alice 2.4.2 (Dec 13, 2013)

- 1. While < Condition > is true not working
- 2. Adding additional language file
- 3. Auto Update to better distribute update to users
- 4. MAC file association bug
- 5. Importing and exporting model (a2c) files with extended characters in folder
- 6. Unable to drag a function to the condition of an If statement
- 7. JOGL model shading
- 8. Tutorial Bug
- 9. Skin Texture bug
- 10. Transparency Bug
- 11. Tutorial Maker
- 12. List bug
- 13. Color bug
- 14. Set pose bug
- 15. Array length in loop condition
- 16. Update issue with the type of variable
- 17. Scripting
- 18. AmbientLightBrightness not working in JOGL
- 19. Extended character showing up different on MAC
- 20. Export Code For Printing bug

## Alice 2.4.3 (German Language Update – June 17, 2015)

- Created an Alice version with the German Languages.
- Fixed the language file to include parameters and avoid string concatenation.
  - 1. Set Dummy at Camera bug
  - 2. Multiple Linux bug
  - 3. NullPointerException when dragging models from tree (MAC)
  - 4. Multiple sound bug
  - 5. Multiple Movie Maker bug
  - 6. Weird ClassCastException (Swing-related)
  - 7. Tool tip and popup menu bug on MAC
  - 8. Serious memory leak
  - 9. Text Output and Error Console bug
  - 10. Drag and Drop (MAC) bug
  - 11. Cannot create input stream from filename with extended character
  - 12. Print tile does not print unicode characters

- 13. Problems in language file
  14. Dummy object bug
  15. Print Function bug
  16. Redo AWTUtilities to provide support for MAC and Linux
  17. On the USE In the International Control of the International Contr
- 17. Option+Click

#### **Alice 2.4**

Title: Gallery bug Report No: 2.4 - 1 Status: Partially resolved Resolved Date: Aug 1, 2013

## **Related Report:**

None.

## **Description:**

Object (from gallery) gets inserted to the middle of the screen (not to where the user drags to) on MAC. Image not appearing when dragging models from gallery to world editor. Requires dll.

## **Comments:**

Added a mouse listener to edu. cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 846

This is so the getModifiers() method in edu.cmu.cs.stage3.awt.AWTUtilities.java can get the mouse modifier if Alice fails to load the AWTUtilities dll file.

Modified edu.cmu.cs.stage3.awt.AWTUtilities.java so it behaves like the dll when Alice fails to load the dll file.

Need work: isCursorShowing isKeyPressed and other related methods **Title: Auto restart for Linux** 

**Report No:** 2.4 - 2

**Status:** 

**Resolved Date:** 

# **Related Report:**

Report No. ????

# **Description:**

Auto restart still not implemented for Alice Linux version. Need to set path to point to file location.

#### **Comments:**

```
Added code to edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 1528

String file = JAlice.getAliceHomeDirectory().getParent().toString()+"/Required/run-alice";

if (new java.io.File(file).exists()) {

   Runtime.getRuntime().exec( file );
} else {

   edu.cmu.cs.stage3.swing.DialogManager.showMessageDialog

        ("Missing Alice executable in Alice directory. Please restart Alice manually.");
}
```

Title: "Int a" bug Report No: 2.4 - 3 Status: Resolved

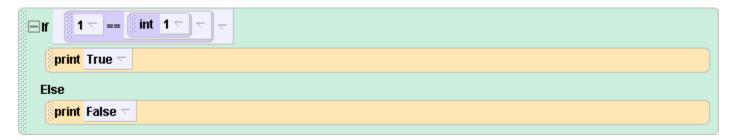
Resolved Date: Aug 10, 2013

## **Related Report:**

None.

## **Description:**

This statement always result to Alice printing False. This is because the number is evaluated as an object, and the two objects are Double and Integer. The result of the comparison is therefore false.



#### **Comments:**

Added code in edu.cmu.cs.stage3.alice.core.question.AbstractIsEqualTo.java line 47 so the Integer is cast to double and the value is compared rather than the object itself.

Included this code in a try/catch block so other non integer values will be evaluated correctly.

```
try {
    double a = Double.valueOf(aValue.toString());
    double b = Double.valueOf(bValue.toString());
    if ( a == b ) return true;
    else return false;
} catch (Exception e) {
        return false;
}
```

Title: Event bug Report No: 2.4 - 4 Status: Resolved

Resolved Date: Aug 30, 2013

## **Related Report:**

None.

#### **Description:**

When an event like "While a key is pressed" and "Let the arrow keys move subject" is interrupted by a question dialog box like "Ask user for a string", Alice fails to recognize that the key was released and the action will still be performed even after the dialog box is closed. This event behaves like "When <a key> is pressed" rather than "While <a key> is pressed".

# create new event

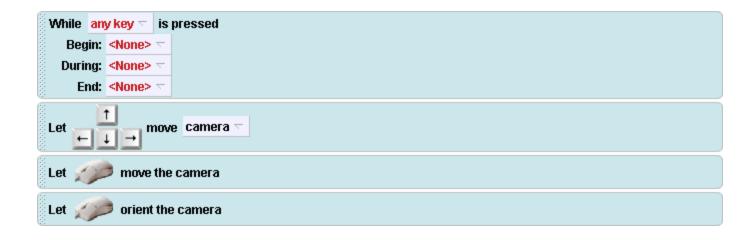
When the world starts
When a key is typed
When the mouse is clicked on something
While something is true
When a variable changes
Let the mouse move objects
Let the arrow keys move subject
Let the mouse move the camera
Let the mouse orient the camera

#### **Comments:**

Created a temp variable in edu.cmu.cs.stage3.alice.AuthoringTool line 853 so the global event listener can track key pressed and key release events and set the variable appropriately.

## C:\...\Alice 2.4\Required\resources\common\StandardResources.py

- "edu.cmu.cs.stage3.alice.core.behavior.WorldStartBehavior": "When the world starts",
- "edu.cmu.cs.stage3.alice.core.behavior.WorldIsRunningBehavior" : "While the world is running",
- "edu.cmu.cs.stage3.alice.core.behavior.KeyClickBehavior" : "When <keyCode> is typed",
- "edu.cmu.cs.stage3.alice.core.behavior.KeyIsPressedBehavior": "While <keyCode> is pressed",
- "edu.cmu.cs.stage3.alice.core.behavior.MouseButtonClickBehavior": "When <mouse> is clicked on <onWhat>",
- "edu.cmu.cs.stage3.alice.core.behavior.MouseButtonIsPressedBehavior" : "While <mouse> is pressed on <onWhat>",
- "edu.cmu.cs.stage3.alice.core.behavior.ConditionalBehavior" : "While <condition> is true",
- "edu.cmu.cs.stage3.alice.core.behavior.ConditionalTriggerBehavior": "When <condition> becomes true",
- "edu.cmu.cs.stage3.alice.core.behavior.VariableChangeBehavior": "When <variable> changes",
- "edu.cmu.cs.stage3.alice.core.behavior.DefaultMouseInteractionBehavior": "Let <mouse> move <objects>",
- "edu.cmu.cs.stage3.alice.core.behavior.KeyboardNavigationBehavior": "Let <arrowKeys> move <subject>",
- "edu.cmu.cs.stage3.alice.core.behavior.MouseNavigationBehavior" : "Let <mouse> move the camera",
- "edu.cmu.cs.stage3.alice.core.behavior.MouseLookingBehavior": "Let <mouse> orient the camera",



## While a key is pressed

Modified edu.cmu.cs.stage3.alice.core.behavior.AbstractConditionalBehavior.java line 81 and 99 so the code uses the AuthoringTool temp variable when determining if a key is pressed and released.

# Let the arrow keys move subject

Modified edu.cmu.cs.stage3.alice.core.behavior.KeyboardNavigationBehavior line 82 so Let cursor keys move subject works correctly when interrupted by a question dialog box.

# Let the mouse move the camera

Throwing nullpointerexception because renderTarget is null. Modified

edu.cmu.cs.stage3.alice.core.manipulator.RenderTargetModelManipulator.java line 105 to check for null.

Modify edu.cmu.cs.stage3.alice.core.behavior.MouseNavigationBehavior line 184. Added mouseActive = false and commented out the rest so it can detect mouse release.

# <Let the mouse orient the camera>

Only turning camera left and right. I think it should also do up and down.

Modify edu.cmu.cs.stage3.alice.core.behavior.MouseLookingBehavior line 154. Commented out the rest so it can detect mouse release.

Title: Say bubble bug Report No: 2.4 - 5 Status: Resolved

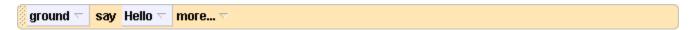
Resolved Date: Sept 2, 2013

## **Related Report:**

None.

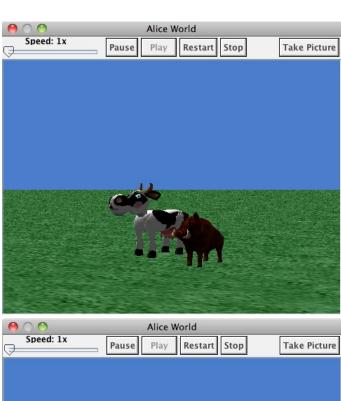
## **Description:**

The <Object> say bubble is causing some lighting issue when the world is played. Everything in the world seems to turn dark when the code is executed. Lighting issue is caused by shdingStyle set to flat or smooth. Currently, the JOGL code is not implemented for these shading styles.



#### **Comments:**

edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.appearanceProxy.java Added code to for shading options.



\*Screenshot with lightning issue



\*Screenshot without lightning issue

Title: Export Video bug Report No: 2.4 - 6 Status: Resolved

Resolved Date: Sept 8, 2013

## **Related Report:**

None.

## **Description:**

User was able to type the path and filename with the extension in the filename text box. This caused an error because Alice expects a file name, thus will try to create a file with the wrong name format. Need a name checker for the Filename field of the movie maker.



#### **Comments:**

Output error if user does not have permission to create frames folder in the current location. edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 2266 make sure dir.canWrite() is true

Added a document listener at edu.cmu.cs.stage3.alice.authoringtool.dialog.CaptureContentPane.java line 464 and the checkFileName() method at line 380.

The filename will appear red and the record button will be disabled if the name is invalid.

## (Not confirmed)

We also have a problem with Export Video. The movie seems to capture a frame that is offset from the playtime window. The movie maker uses the Robot class to capture frames, so users cannot move the window since the robot class captures a fixed location.

Title: Thumbnail bug (MAC)

**Report No:** 2.4 - 7 **Status:** Resolved

Resolved Date: Sept 10, 2013

# **Related Report:** Report No. ????

# **Description:**

Thumbnail saves the area where the camera navigation bar is, so the top of the actual render window is cut off. The image also appears to be larger than the actual render.

## **Comments:**

Modified edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.RenderTarget.java line 178 java.awt.Dimension d = getSize(); int width = d.width, height = d.height; m\_renderContext.m\_height = height; m\_renderContext.m\_width = width;



\* Screenshot from Alice 2.2



\* Screenshot from Alice 2.3



\* Screenshot from Alice 2.4

Title: Buggy tab look and feel

Report No: 2.4 - 8 Status: Resolved

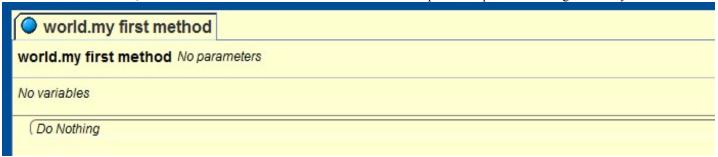
Resolved Date: Sept 10, 2013

## **Related Report:**

None.

## **Description:**

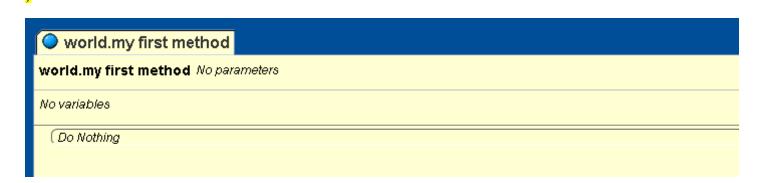
Without an initial refresh, Alice does not notice that there is 1 tab on the tabbed panel and paints the background all yellow.



### **Comments:**

Changed edu.cmu.cs.stage3.alice.authoringtool.util.AliceTabbedPaneUI.java line 69 so it removes the yellow background behind the tab

if (tabAreaBackground.equals(new java.awt.Color(255, 255, 210)) && tabPane.getTabCount() > 0 && tabAreaHeight == 0) { tabAreaHeight = 50;



Title: Preferences path Report No: 2.4 - 9 Status: Resolved

Resolved Date: Sept 11, 2013

# **Related Report:** Report No. ????

## **Description:**

Some users are running Alice from a removable drive and the drive letter is not always the same. We need a way to save the preferences.xml file so the user will have all the preferences information with them even when running Alice from other location. Currently, Alice saves the preferences information in the user's home directory <u>lalice</u> folder.

## **Comments:**

We should allow relative path to be placed in the config file so Alice can place the .alice2 folder at a network/removable drive. Modified edu.cmu.cs.stage3.alice.authoringtool.JAlice.java line 590 to set the directories correctly.

if( directory != null) {
 aliceUser = new java.io.File( directory, ".alice2" ); // directory from config file
}

Title: PointOfView bug Report No: 2.4 - 10 Status: Resolved

Resolved Date: Sept 25, 2013

## **Related Report:**

None.

#### **Description:**

Alice cannot load the pointOfView property value for objects in the editor window.

Example:

```
ground set point of view to camera more...
```

Throws error at edu.cmu.cs.stage3.alice.core.Property.java line 569 No such class - Javax.vecmath.Matrix4d.

#### **Comments:**

edu.cmu.cs.stage3.alice.core.Property.java line 569 Created a Matrix44 and set value of type to the matrix.

```
if (type.equals(javax.vecmath.Matrix4d.class)){
        String [] t = text.split(",|\n");
        edu.cmu.cs.stage3.math.Matrix44 m = new edu.cmu.cs.stage3.math.Matrix44();
        m.m00 = Double.valueOf(t[0]);
        m.m01 = Double.valueOf(t[1]);
        m.m02 = Double.valueOf(t[2]);
        m.m03 = Double.valueOf(t[3]);
        m.m10 = Double.valueOf(t[4]);
        m.m11 = Double.valueOf(t[5]);
        m.m12 = Double.valueOf(t[6]);
        m.m13 = Double.valueOf(t[7]);
        m.m20 = Double.valueOf(t[8]);
        m.m21 = Double.valueOf(t[9]);
        m.m22 = Double.valueOf(t[10]);
        m.m23 = Double.valueOf(t[11]);
        m.m30 = Double.valueOf(t[12]);
        m.m31 = Double.valueOf(t[13]);
        m.m32 = Double.valueOf(t[14]);
        m.m33 = Double.valueOf(t[15]);
        return m;
}
```

Title: Create parameter/variable bug

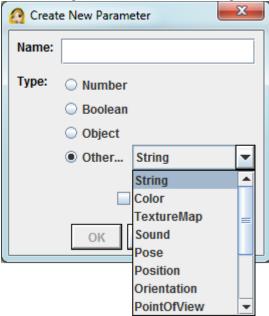
**Report No:** 2.4 - 11 **Status:** Resolved

Resolved Date: Sept 26, 2013

# **Related Report:** Report No. ????

# **Description:**

The Other... parameter/variable does not update correctly causing Alice to insert a wrong type for the variable.



## **Comments:**

Change edu.cmu.cs.stage3.alice.authoringtool.util.TypeChooser.java line 151 to check for the parameter/variable type. Added refreshValuePanel(); in edu.cmu.cs.stage3.alice.authoringtool.dialog.NewNamedTypeElement.java line 177.

Title: Cannot double click to open a file in MAC

**Report No:** 2.4 - 12 **Status:** Resolved

Resolved Date: Oct 6, 2013

## **Related Report:**

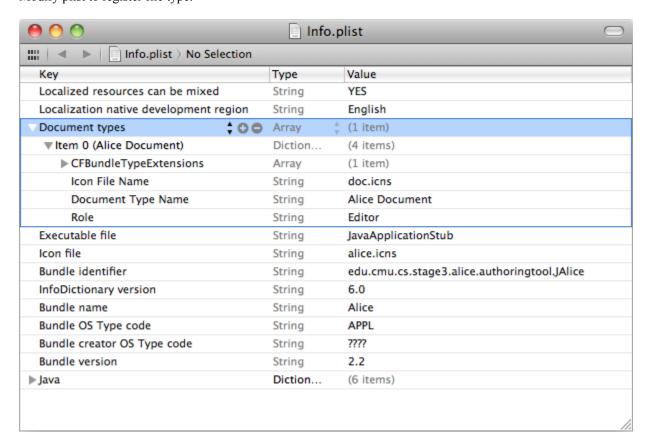
None.

#### **Description:**

Users cannot double click on an Alice world file to open the file in Alice like on Windows. Arguments are not passed to the alice.jar file

#### **Comments:**

Modify edu.cmu.cs.stage3.alice.authoringtool.JAlice line 531 to include a file listener. Modify plist to register file type.



Title: Cannot double click to open a file when Alice is already opened (MAC)

**Report No:** 2.4 - 13 **Status:** Resolved

Resolved Date: Oct 15, 2013

# **Related Report:**

Report 1.4 - 12.

## **Description:**

If a user double click a file when Alice has already started, the file will not open in that Alice.

#### **Comments:**

Title: Disable He/She builder

**Report No:** 2.4 - 14 **Status:** Resolved

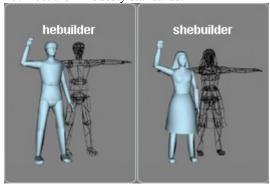
Resolved Date: Oct 29, 2013

## **Related Report:**

None.

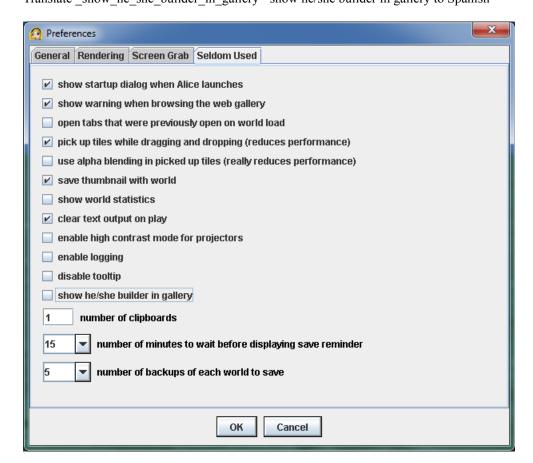
#### **Description:**

Yosef Skolnick (yskolnick@gmail.com), a Jewish Ultra-Religious High School feels that some of the models in the he/she builder do not meet their modesty standards.



#### **Comments:**

Added a checkbox in preferences menu to enable He/She builder from the gallery (uncheck by default). Added JAlice.java line 187 to set checkbox default value Added PreferencesContentPane.java line 131, 789, 1948, 1977, and 2057 to create checkbox Added GalleryViewer.java line 818, 903 and 2728 to check checkbox before adding He/She builder to gallery Translate \_show\_he\_she\_builder\_in\_gallery= show he/she builder in gallery to Spanish



Title: Model - Camera bug

**Report No:** 2.4 - 15 **Status:** Resolved

Resolved Date: Nov 5, 2013

## **Related Report:**

None.

## **Description:**

When performing a "Camera get a good look at this", Camera's pointOfView is not a number. Currently only Saturn and Uranus.



## **Comments:**

First of all make sure we set a default value (0,0,0) if value is NAN.
edu.cmu.cs.stage3.alice.core.Transformable.java line 410
if( center == null || Double.isNaN(center.x) || Double.isNaN(center.y) || Double.isNaN(center.z))

A call to public void union( Sphere s ) is causing the m\_center and m\_radius to be incorrect, so a check to make sure the values are not NaN is needed.

```
edu.cmu.cs.stage3.math.Sphere.java line 107

javax.vecmath.Vector3d temp = MathUtilities.divide( MathUtilities.add( points[maxDistanceI], points[maxDistanceI] ), 2 );

if (!Double.isNaN(temp.x) && !Double.isNaN(temp.y) && !Double.isNaN(temp.z) ){

m_center = temp;

m_radius = Math.sqrt( maxDistanceSquared )/2.0;
}
```

Title: New Name, Splashscreen, aboutAlice image, and Alice license

Report No: 2.4 - 16 Status: Resolved

Resolved Date: Nov 10, 2013

**Related Report:** Report No. ????

## **Description:**

Paws Inc. partnered with Carnegie Mellon Alice developers and added the Garfield characters to Alice.



#### **Comments:**

Program name, splash screen and about Alice windows not changed. Changed license.txt in edu.cmu.cs.stage3.alice.authoringtool.dialog Added Alice2.4\_LICENSE.pdf in Alice 2.4 Required folder.

Title: Save As Web Page feature

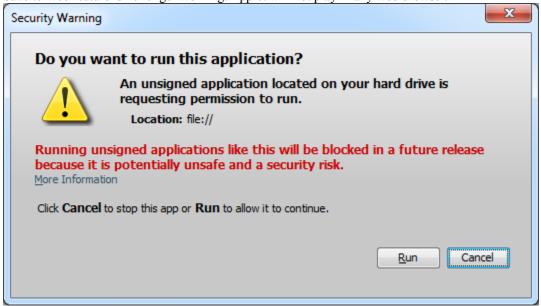
Report No: 2.4 - 17 Status: On Hold Resolved Date:

## **Related Report:**

Report No. 2 Report 2.3.5 - 1

## **Description:**

Save to Web feature is no longer working. Applet will not play in any web browser.



#### **Comments:**

Disable the Save to Web feature. Found out that Java changed their security so unsign or self sign Applet will not be able to run in any browser. Even after changing the security settings on the browser, applet still cannot load external file.

Commented out edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 663 //saveForWebContentPane = new edu.cmu.cs.stage3.alice.authoringtool.dialog.SaveForWebContentPane(this);

http://http://www.java3d.org/howto.html
Download Java 3D from http://java3d.java.net/binary-builds.html

Created an executable jar so users can run their world with the jar instead of opening Alice. Modified edu.cmu.cs.stage3.alice.player.DefaultPlayer.java to allow user to open an Alice world with this executable jar. Title: New Feature - Added Symbol keys to "when <key> is typed, do <method>" event

**Report No:** 2.4 - 18 **Status:** Resolved

Resolved Date: Dec 5, 2013

## **Related Report:**

(Sept 19, 2012) Requested by Wanda – Summer workshop.

## **Description:**

User requested for more keys. This update will include almost all keys on a standard US keyboard.



## **Comments:**

edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 1428 Added 10 .gif images AuthoringToolResources.java line 2419

## Added/redo 30 images.

Removed items at edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 1428. Added code at edu.cmu.cs.stage3.alice.authoringtool.AuthoringToolResources.java line 814 Modified ...\Alice 2.3\Required\resources\common\StandardResources.py

["edu.cmu.cs.stage3.alice.core.behavior.KeyClickBehavior",

["keyCode",...

["edu.cmu.cs.stage3.alice.core.behavior.KeyIsPressedBehavior",

["keyCode",...

#### **Alice 2.4.1**

Title: StackOverflowError in recursion

**Report No:** 2.4.1 - 1 **Status:** Resolved

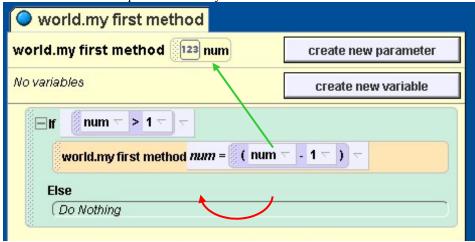
Resolved Date: Dec 5, 2013

**Related Report:** 

None.

## **Description:**

This is a variable lookup error where if you have



Copying the "world.my first method (num=num-1)" will cause the num in num-1 to be referenced to num (shown with red arrow). The correct reference should be to the num in the parameter (as shown with green arrow). If referenced wrongly, then the statement will become num = (num-1) - 1 and every num in this statement will be (num-1) recursively.

If a recursion statement is copied, the variable is not evaluated correctly, until it is rebuild manually.

Alice 2.0 does not allow copying of method with parameters.

#### **Comments:**

In the variable lookup, we need to make sure that the variable "a" and "b" should be a==b rather than just comparing the names "num"== "num". Changed edu.cmu.cs.stage3.alice.core.CopyFactory.java line 65 to return a==b rather than a.equalsIgnoreCase (b).

#### **Alice 2.4.2**

Title: While <Condition> is true not working

**Report No:** 2.4.2 - 1

Status: Fixed but require further testing

Resolved Date: Dec 13, 2013

# **Related Report:** Report No. 2.4 – 4

#### **Description:**

The "While <Condition> is true" is not works because of a change to a related bug. The related bug fix check if a key is pressed before running the code, but a "While <true>" event should run without a key press if the condition is "true".

While	<	None> 🔽	is true
Beg	in:	Nothing ¬	-
Durir	ng:	Nothing ¬	-
g Er	nd:	Nothing ¬	-

#### **Comments:**

edu.cmu.cs.stage 3. alice.core.behavior.Abstract Conditional Behavior.java

Created public boolean listeningToKeypress = false; in line 47

Added if ((listeningToKeypress && AuthoringTool.temp == 0) ||!listeningToKeypress) in line 83 and 102 to check if this method should take into account key press (ie. If this method is called by the KeyIsPressedBehavior.java method or the ConditionalBehavior.java)

edu.cmu.cs.stage3.alice.core.behavior.KeyIsPressedBehavior.java

Added code listening To Keypress at line 94 and 104 to indicate if Abstract Conditional Behavior method should listen to key press.

Title: Adding additional language file

Report No: 2.4.2 - 2 Status: Resolved Resolved Date:

#### **Related Report:**

None.

## **Description:**

We need to translate these files:

edu.cmu.cs.stage3.alice.authoringtool.images AboutAlice\_English.png AliceSplash\_English.png

edu.cmu.cs.stage3.lang english.properties

Alice 2.4\Required\etc\default English.a2w

Alice 2.4\Required\resources\English\ Alice Style.py Java Style.py Java Text Style.py

#### **Comments:**

Merge string.properties from edu.cmu.cs.stage3.alice.authoringtool into English.properties so all the localization file is in one file.

Adding a language to this list automatically cause Alice to try to load the language resource file and translate all the texts in Alice accordingly.

Added edu.cmu.cs.stage3.alice.authoringtool.AikMin.java

public static String[] listOfLanguages = {"English","Portuguese","Spanish"};

edu.cmu.cs.stage3.alice.authoringtool.dialog.PreferencesContentPane.java line 1551 populate Language drop down box from Languages in listOfLanguages.

#### Old code:

edu.cmu.cs.stage3.alice.authoringtool.util.Configuration authoringToolConfig = edu.cmu.cs.stage3.alice.authoringtool.util.Configuration.getLocalConfiguration( edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool. class.getPackage() ); authoringtoolConfig.getValue( "language" )

#### New Code:

edu.cmu.cs.stage3.alice.authoringtool.util.Configuration
private Package authoringToolPackage = Package.getPackage( "edu.cmu.cs.stage3.alice.authoringtool" );
Configuration.getValue( authoringToolPackage, "language" )

Changed edu.cmu.cs.stage3.lang.Messages.java line 12 to checks if language is set, set to English as default or load language from preferences.

Title: Auto Update to better distribute update to users

Report No: 2.4.2 - 3 Status: Resolved

Resolved Date: March 5, 2014

## **Related Report:**

None.

#### **Description:**

Previously we were only able to update alice.jar, and when there is more files changed in the Alice 2 directory, we required users to redownload the whole alice.zip or alice.dmg file again. The download are large and very time consuming to download, therefore it is a great idea if we can just distribute all the changes in a single zip file using the Alice Update. Alice should then unzip all the required items into the appropriate location and restart Alice.

#### **Comments:**

The edu.cmu.cs.stage3.alice.authoringTool.java line 1466 public int quit(boolean condition) method should update the current alice.jar with the new alice.jar and restart the program.

Remove edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 5664 private boolean checkForUpdate() until we have a way to compare the dates of the new and old files.

edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 5683 public void updateAlice()

Update file:

File name: AliceUpdate.zip

Server path: http://www.alice.org/downloads/2.4 (This info is saved in Required/resources/common/StandardResources.py)

Contains:

```
etc/default_English.a2w
etc/default_Portuguese.a2w
etc/default_Spanish.a2w
externalLib/(all .jar)
lib/(win or osx)
```

lib/aliceupdate.jar (this must be named aliceupdate.jar so the updater can unzip this file to the lib directory in the user's Alice folder. Alice cannot overwrite alice.jar while the program is running)

```
resources/English/(all .py)
resources/Portuguese/(all .py)
resources/Spanish/(all .py)
```

Alice should delete/recreate .Alice2 folder on each new full update. This is to make sure any settings from previous Alice version does not interfere with the new updated settings.

Modify edu.cmu.cs.stage3.alice.authoringtool.JAlice line 595

```
if (file != null) {
          java.io.File firstRun = new java.io.File( getAliceHomeDirectory(), "etc/firstRun.txt" ).getAbsoluteFile();
          if (firstRun.exists()) {
                firstRun.delete();
                if (file.exists())
                     new java.io.File( file, "AlicePreferences.xml" ).getAbsoluteFile().delete();
          }
          if ( file.exists() ) {
                aliceUserDirectory = file;
          } else if( file.mkdirs() ) {
                      aliceUserDirectory = file;
          }
}
```

Title: MAC file association bug

Report No: 2.4.2 - 4 Status: Resolved Resolved Date:

## **Related Report:**

2.4 - 12 and 2.4 - 13

## **Description:**



Dmg image not loading correctly. (Fixed by adding the image into the dmg and making sure the dmg recognize and load the image) File not opening correctly, and new file will not open if Alice already started.

#### **Comments:**

Added edu.cmu.cs.stage3.alice.authoringtool.JAlice.java line 125 to create a new Alice window if another a2w file is double clicked when one Alice window is already present.

```
if ((System.getProperty("os.name") != null) && (System.getProperty("os.name").toLowerCase().startsWith("mac"))) {
        com.apple.eawt.Application app = com.apple.eawt.Application.getApplication();
        app.setOpenFileHandler( new OpenFilesHandler() {
        public void openFiles(OpenFilesEvent event) {
                 List<String> filenames = new ArrayList<String>();
                 for(File f : event.getFiles()) {
                          filenames.add(f.getAbsolutePath());
                 if (!listenerRegistered){
                          worldToLoad = new java.io.File( filenames.toArray(new String[filenames.size()])[0]).getAbsoluteFile();
                          listenerRegistered = true;
                 } else {
                          //authoringTool = new AuthoringTool( defaultWorld, worldToLoad, stdOutToConsole, stdErrToConsole);
                 try {
                          String decodedPath =
URLDecoder.decode(JAlice.class.getProtectionDomain().getCodeSource().getLocation().getPath(), "UTF-8");
                          decodedPath = decodedPath.substring(0, decodedPath.lastIndexOf(".app") + 4);
                          String[] params = { "open", "-n", decodedPath, filenames.toArray(new String[filenames.size()])[0] };
                          Runtime.getRuntime().exec(params);
                 catch (Exception e) {
                          e.printStackTrace();
        });
```

Title: Importing and exporting model (a2c) files with extended characters in folder

**Report No:** 2.4.2 - 5 **Status:** Resolved

Resolved Date: March 4, 2014

## **Related Report:**

None

## **Description:**

Models saved from the previous version of Alice encode the extended characters possibly in ASCII, and Alice does not recognize those characters when loading the model.

#### **Comments:**

Modify to make Alice encode all the files and folders in UTF-8.

When loading world and model file:

ZipFileTreeLoader line 116

When saving file Alice uses: edu.cmu.cs.stage3.io.ZipTreeStorer for saving a2c files and edu.cmu.cs.stage3.io.ZipFileTreeStorer for saving a2w files

edu.cmu.cs.stage3.alice.core.Element line 1736 calls methods from these classes to create the folder/files for the zip file. Added

```
if (storer instanceof edu.cmu.cs.stage3.io.ZipFileTreeStorer) {
    name = new String(name.getBytes("UTF-8"));
}
```

Because the filename for models are not encoded properly. Do not need to do this for Alice worlds because those are already encoded correctly.

Title: Unable to drag a function to the condition of an If statement

**Report No:** 2.4.2 - 6 **Status:** Resolved

Resolved Date: May 21, 2014

## **Related Report:**

None

## **Description:**

## Robert Durtschi robert.durtschi@gcsu.edu

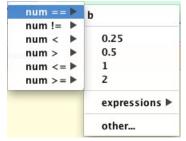
the "Distance to" integer function will now drag to "if true", but it generates the code line:

if penguin distanceTo flagpole

and does not give the user a choice of logic comparisons that dragging an integer variable would. The desired line should read:

if penguin distanceTo flagpole < 1

User defined function of type Integer cannot be drag and drop into an "if" statement or a "while" statement. Regular variable will cause Alice to prompt a drop down box to create the Boolean expression for the "if" statement or "while" statement



#### **Comments:**

edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 1930 makeComparatorStructure(...

edu.cmu.cs.stage 3. a lice. authoring tool. view controller. Property View Controller and the controller a

When moving variables, line 595

Variables are edu.cmu.cs.stage3.alice.authoringtool.datatransfer.ElementReferenceTransferable.variableReferenceFlavor

When moving methods, line 693

Methods are edu.cmu.cs.stage3.alice.authoringtool.datatransfer.ElementReferenceTransferable.elementReferenceFlavor

When moving properties, line 729

 $Properties\ are\ edu.cmu.cs.stage 3. a lice. authoring tool. data transfer. Property Reference Transferable. property Reference Flavor and the resulting the resulting transfer and trans$ 

When moving functions, line 739

Functions are edu.cmu.cs.stage3.alice.authoringtool.datatransfer.ElementPrototypeReferenceTransferable

```
When moving function from details panel to editor, line 1327 Added
```

dtde.dropComplete( true );

```
    booleanlogic

    not a
    both a and b
    either a or b, or both
math
    a == b
    a != b
                       class java.lang.Boolean
    a > b
    a >= b
    a < b
    a <= b
random
    choose true probabilityOfTrue of the time
                       class java.lang.Number
    random number
string
    a joined with b
                       class java.lang.String
    what as a string
askuser
    ask user for a number class java.lang.Number
    ask user for yes or no class java.lang.Boolean
                       class java.lang.String
    ask user for a string
mouse
    mouse distance from left edge
    mouse distance from top edge
time
                       class java.lang.Number
    time elapsed
    year
    month of year
    day of year
                       class java.lang.Integer
    day of month
    day of week
    day of week in month
    is AM
                      class java.lang.Boolean
    is PM
    hour of AM or PM
    hour of day
                      class java.lang.Integer
    minute of hour
    second of minute
  advancedmath
    minimum of a and b
    maximum of a and b
    absolute value of a
                      class java.lang.Number
    square root of a
    floor a
```

```
ceiling a
 sin a
 cos a
              class java.lang.Number
 tan a
 arccos a
 arcsin a
 arctan a
 arctan2 a b
 a raised to the b power
 natural log of a
 e raised to the a power
 IEEERemainder of a / b
 int a
 round a
 a converted from radians to degrees
 a converted from degrees to radians
 the b th root of a
other
 right , up , forward
```

class edu.cmu.cs.stage3.math.Vector3

```
proximity
    ground is within threshold of object
    ground is at least threshold away from object
    ground distance to
    ground distance to the left of
    ground distance to the right of
    ground distance above
    ground distance below
    ground distance in front of
    ground distance behind
size
    ground 's width
    ground 's height
    ground 's depth
    ground is smaller than
    ground is larger than
    ground is narrower than
    ground is wider than
    ground is shorter than
    ground is taller than
    ground is to the right of
    ground is above
    ground is below
    ground is in front of
    ground is behind
point of view
    ground 's point of view
    ground 's position
    ground 's quaternion
other
    ground 's current pose
    ground 's part named key
```

Title: JOGL model shading

**Report No:** 2.4.2 - 7 **Status: Resolved** 

Resolved Date: April 3, 2014

# **Related Report:**

Report 2.4 - 5

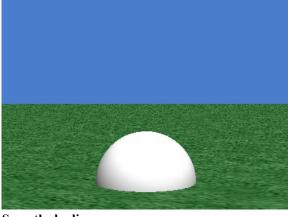
# **Description:**

Currently, the JOGL code is not implemented for these shading styles. Lighting bug still appear when playing world, especially when a say or think bubble is present.

#### **Comments:**

# **Implementing Flat and Smooth Shading**





Flat shading

Smooth shading

edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.appearanceProxy.java line 98 and 102. Set m\_isShaded = false; Added edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.appearanceProxy.java line 50.

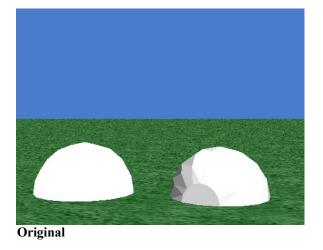
if (style == 0)

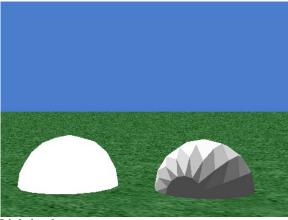
context.gl.glShadeModel(GL.GL FLAT);

else

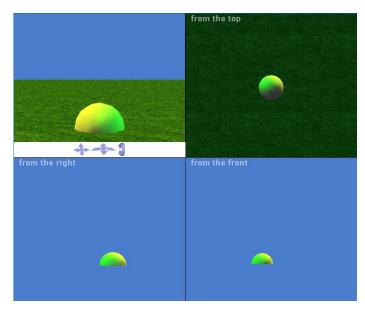
context.gl.glShadeModel(GL.GL\_SMOOTH);

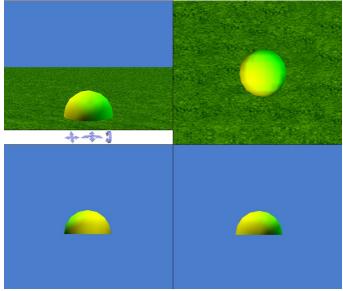
#### Lighting Bug with Say and Think





Lighting bug





Top, right and front view is incorrect. Yellow light is on the left or the bump, and green light is on the right side of the bump. The top view is also darker.

This bug was caused by the Graphi.java class. Rremoving the text in the render fixed the problem.

edu.cmu.cs.stage3.alice.authoringtool.editor.sceneeditor.CameraViewPanel.java line 1416 calls getOffscreenGraphics() from edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.RenderTarget.java line 207.

```
RenderContext m_renderContextForGetOffscreenGraphics; return new Graphics( m_renderContextForGetOffscreenGraphics );
```

**Note:** Need to fix the Graphic class so it can display text (i.e. in say and think bubble) without causing the light bug. Light bug also exists when the world plays (if the render window is not updated) and at the end.

The Graphics class at line 59 is resetting the model matrix and doing the following to display some graphics.

```
m_renderContext.gl.glMatrixMode( GL.GL_MODELVIEW );
m_renderContext.gl.glPushMatrix();
m_renderContext.gl.glLoadIdentity();

m_renderContext.gl.glDisable( GL.GL_DEPTH_TEST );
m_renderContext.gl.glDisable( GL.GL_LIGHTING );
m_renderContext.gl.glDisable( GL.GL_CULL FACE );
```

Created set() and reset() to push the matrix before displaying the say or think bubble and pop the matrix after. The pop matrix is only in the drawString section. Not sure how it will affect other methods.

## When pressing Play

edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 5519 added renderPanel, renderPanel added renderTarget.getAWTComponent().

Fixed all the lighting bugs. Modified edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.CameraProxy.java line 89 moved sceneProxy.setup() to after all the Matrix computation.

## Some related classes worth noting.

*AppearanceProxy* 

setPipelineState - set the shading and material for models

BackgroundProxy - change atmosphere color

CameraProxy – draw opaque and transparent objects

ExponentialFogProxy – For changing fog density ExponentialSquaredFogProxy FogProxy – For changing fog color (atmosphereColor) LinearFogProxy – For changing fog distance

**Graphics** 

IndexedTriangleArrayProxy

LightProxy – Setup light color and brightness, but range not doing anything now.

Line ArrayProxy

OnscreenRenderTarget
getAWTComponenet - create glCaps

**PickInfo** 

RenderContext

RenderTarget init – JOGL start up code, initialize light.

 ${\it Visual Proxy}$ 

Title: Tutorial Bug Report No: 2.4.2 - 8 Status: Resolved

Resolved Date: March 15, 2014

#### **Related Report:**

None.

#### **Description:**

On tutorial 4, Alice requires user to drag and drop a model from the Local Gallery to the render window. Upon completing the step, Alice displays this error:

The Alice tutorial thinks maybe you didn't follow the instructions carefully.

Please back up to your mistake or restart.

This is because Alice is trying to match the text Local Gallery with the new Alice 2.4 structure LocalGallery (English).

## **Comments:**

Tutorial is all done in english, so any text comparison in the Spanish and Portuguese version will fail.

Tutorial 1, 2 and 3 is not affected by this change.

Tutorial 4 (Tutorial4.stl)

<![CDATA[sceneEditor<large>:singleView:galleryViewer<Home\Local Gallery\Beach>:button<Local Gallery (English)>]]>

The :button tag will match the text in the tutorial with the text in Alice. In this case, the text (for English version) is Local Gallery (English)

Insert code to allow Alice to check against the set locale for available gallery. edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java

line 4282 getBoxForID(...)

c = AuthoringToolResources.findButton(jAliceFrame.sceneEditor.getGalleryViewer(), spec+" (Core)");

line 4573 isIDVisible (...)

java.awt.Component c = AuthoringToolResources.findButton(jAliceFrame.sceneEditor.getGalleryViewer(), spec+" (Core)");

Title: Skin Texture bug Report No: 2.4.2 - 9

Status: Not resolved in code. Need to re-save affected models from Alice.

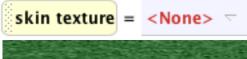
Resolved Date: March 20, 2014

## **Related Report:**

None.

## **Description:**

Models are loading with texture, but the details panel is showing none.





Model with skin texture and without.

#### **Comments:**

#### Correct:

property

criterion Class = "edu.cmu.cs.stage 3.alice.core.criterion. Internal Reference Keyed Criterion" name = "diffuse Color Map" > garfield

#### Incorrect:

property name="diffuseColorMap"/>

Loading model's details (Creating the skin texture tile) edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.PropertyGUI line 42
This is where Alice creates the skin texture tile in the detail's panel property = edu.cmu.cs.stage3.alice.core.property.TextureMapProperty <name = diffuseColorMap> propertyDnDPanel = edu.cmu.cs.stage3.alice.authoringtool.util.GUIFactory.getPropertyDnDPanel propertyViewController = edu.cmu.cs.stage3.alice.authoringtool.util.GUIFactory.getPropertyViewController

Listener - edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.PropertyViewController Value - edu.cmu.cs.stage3.alice.core.TextureMap[world.ground.GrassTexture]

edu.cmu.cs.stage3.alice.core.Element line 1920 - This is where Alice loads the name of the texture

Title: Transparency Bug Report No: 2.4.2 - 10 Status: Resolved

Resolved Date: April 7, 2014

## **Related Report:**

2.3.2-14

#### **Description:**

Transparent object display fine at editor screen but not when playing world or saving image using the Take Picture button or crating thumbnail when saving the world.





Correct display

Incorrect displaying

#### **Comments:**

Added code in edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.RenderTarget.java line 45 to render transparency.

context.gl.glBlendFunc(GL.GL SRC ALPHA, GL.GL ONE MINUS SRC ALPHA);

context.gl.glEnable(GL.GL BLEND);

context.gl.glEnable(GL.GL\_ALPHA\_TEST);

context.gl.glAlphaFunc(GL.GL GREATER, 0);

Also required in edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.CameraProxy.java line 95 to render opacity.

This code make sure opacity and transparency works through out Alice.

Title: Tutorial Maker Report No: 2.4.2 - 11

Status: Should not be added to final release. Currently accessed by Update menu.

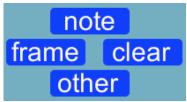
Resolved Date: April 20, 2014

#### **Related Report:**

None.

#### **Description:**

Tutorial builder in Alice requires the user to edit the tutorial file (.stl) to change the access="read" to access="write" before the option to edit the tutorial can be access in Alice.





**Note:** Double click on an item to make a Hole.

Problems with this builder:

Cannot create a new tutorial despite having the new option. Cannot undo changes. Clear option clear the whole screen.

Cannot jump to a page without having to traverse each page and performing the tutorial.

#### **Comments:**

Take the tutorial maker from MEME and make it work with Alice 2.4. Added classes:

edu.cmu.cs.stage3.caitlin.stencilhelp.client.TutorialEditor.java edu.cmu.cs.stage3.caitlin.stencilhelp.client.TutorialEditorMenus.java edu.cmu.cs.stage3.caitlin.stencilhelp.client.NewNoteDialog.java

## Changed classes:

edu.cmu.cs.stage3.caitlin.stencilhelp.client.StencilManager.java multiple location edu.cmu.cs.stage3.caitlin.stencilhelp.client.Note.java line 206-250 edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 5659

**Note:** Some changes were made to the tutorial maker to make it work better. Alice will resize the window so all tutorial made here will be the on the screen size and the notes will be placed correctly. The Pages pane is enlarge to fit the scroll bar without it covering up half of the page buttons. Fix code to prevent an error by the program trying to remove a page when there is already no pages left.

Added menu code for tutorial editor in edu.cmu.cs.stage3.alice.authoringtool.Actions line 57, 238, and 529 launchTutorialAction

edu.cmu.cs.stage3.alice.authoringtool.JAliceFrame line 731 adds the tutorial editor menu to the Help menu.

Title: List bug Report No: 2.4.2 - 12 Status: Resolved

Resolved Date: May, 2014

## **Related Report:**

None.

## **Description:**

VarNumList = 0, 1, 4

Print VarNumList list output world.my first method.VarNumList.\_\_Unnamed0\_\_ Print last item from VarNumList output None

## **Comments:**

Print **VarNumList** list output **world.my first method.VarNumList.\_\_Unnamed0\_\_** edu.cmu.cs.stage3.alice.core.response.Print.java line 124 – If printing List, remove everything after the \_\_\_.

## Print last item from VarNumList output None

edu.cmu.cs.stage3.alice.core.property.ObjectArrayProperty.java line 363 returned index is not correct. Changed to index-1.

**Title: Color bug Report No:** 2.4.2 - 13 Status: Resolved

Resolved Date: April 23, 2014

# **Related Report:**

None.

**Description:** Alice Style shows white as no color.

## **Comments:**

Modify Alice/Required/resources/English/Alice Style.py edu.cmu.cs.stage3.alice.scenegraph.Color.WHITE: "white",

Title: Set pose bug Report No: 2.4.2 - 14 Status: Resolved

Resolved Date: April 28, 2014

## **Related Report:**

None.

## **Description:**



(Obj)List = Garfiled, Garfiled2, Garfield3



Set pose caused all 3 garfield to perform the same action.

## **Comments:**

The set pose function creates a series of steps to move the model back to the required pose. Unfortunately the Vector that holds these steps is not cleared between the models. New steps is added to this Vector, and at every index of the loop, all the steps are performed again. On index=0, only Garfield will perform set pose. On index=1, Garfield will perform set pose followed by Garfield2 performing the set pose. On index=2, all 3 Garfield will perform the set pose.

Added code in edu.cmu.cs.stage3.alice.core.response.PoseAnimation line 65 to reset the Vector.

Title: Array length in loop condition

**Report No:** 2.4.2 - 15 **Status:** Resolved

Resolved Date: May 21, 2014

## **Related Report:**

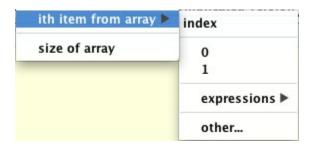
None.

## **Description:**

## Romero, Chris" < Chris-Romero@Redwoods.edu

Alice 2.4.1 does not allow you to drag a non-numeric array on top of the Loop's Boolean condition. You must create a numeric array first. Then drag it over the "times" condition to get the "size of array" menu option (length function). Then drag the non-numeric array tile over the numeric array placeholder in the Loop's Boolean condition.

Cannot drop non Number array to loop condition. Number array dropped in loop condition will provide a drop down menu.



#### **Comments:**

If non number array is dropped to the loop condition, Alice should provide the size of array option.

Added code in edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.PropertyViewController.java line 1000 if (desiredValueClass.isAssignableFrom( java.lang.Number.class )) { ... }

Title: Update issue with the type of variable

**Report No:** 2.4.2 - 16 **Status:** Resolved

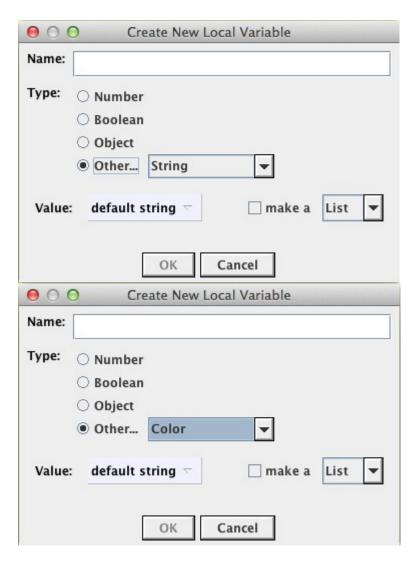
Resolved Date: May 14, 2014

## **Related Report:**

None.

## **Description:**

When creating a variable of type Other, changing the type (i.e. from String to Color) does not refresh the value.



#### **Comments:**

This will refresh the display when the drop down box changes.

Title: Scripting
Report No: 2.4.2 - 17
Status: Resolved

Resolved Date: June 11, 2014

## **Related Report:**

None.

#### **Description:**

Michael L Owen < owenml@hotmail.com

Scripting: Prior to version 2.3.5 scripting was available by editing the User's AlicePreferences file. This allowed things like file saving for things like games, and was useful for explaining how a World could be made to remember things between executions. As far as I can tell, newer versions crash if the scripting variable is set to true, and may even change it back to false while doing so. I've included a copy of the filewriter program, and the dump for 2.4.2. for review. (Note: You may have to modify the path in the "world.scoreFileName" variable to point to a valid location.)

#### **Comments:**

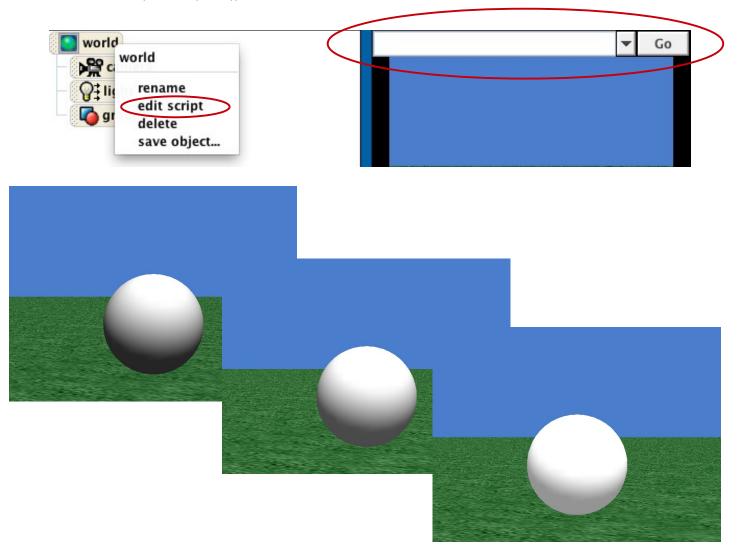
Created an enable scripting checkbox in Edit – Preferences menu, Seldom Used tab. edu.cmu.cs.stage3.alice.authoringtool.dialog.PreferencesContentPane.java line 2063

 $seldom Used Panel. add (enable Scripting Check Box, \\ \textbf{new}$ 

GridBagConstraints(0, 10, 1, 1, 0.0, 0.0,

GridBagConstraints. WEST, GridBagConstraints. HORIZONTAL, new

Insets(0, 0, 0, 0), (0, 0);



Title: AmbientLightBrightness not working in JOGL

**Report No:** 2.4.2 - 18 **Status:** Resolved

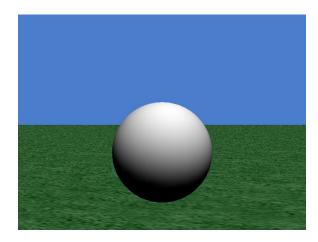
Resolved Date: May 26, 2014

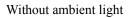
## **Related Report:**

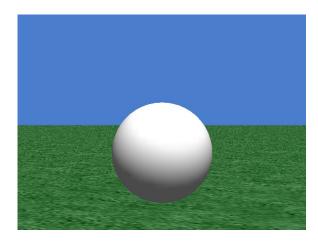
None.

## **Description:**

No implementation for AmbientLightBrightness in JOGL.







With ambient light

## **Comments:**

edu.cmu.cs.stage3.alice.scenegraph.renderer.joglrenderer.LightProxy.java line 97 context.addAmbient( m\_colorTimesBrightness );

ambientLightBrightness = 1 ¬

Changing light brightness from 0.5, 1, 2

Title: Extended character showing up different on MAC

**Report No:** 2.4.2 - 19 **Status:** Resolved

Resolved Date: June 5, 2014

## **Related Report:**

None.

## **Description:**

The extended characters in the resources py files are different on MAC from Windows.

#### **Comments:**

Need to check for the OS and determine what file to load. Added edu.cmu.cs.stage3.alice.authoringtool.AuthoringToolResources.java line 105

Undone these changes. Found another way to fix the problem. edu.cmu.cs.stage3.alice.authoringtool.AuthoringToolResources.java line 541

Convert the text from Mac encoding to Windows encoding so the extended characters in the python files will be displayed as it should.

Char	Dec	Hex	Keystro	kes	Char	Dec	Hex	Keystrokes	Char	Dec	Hex	Keystrokes
			-									
Ä	128	80	<op>u</op>	Α	1	171	AB	<op><sh>e</sh></op>	÷	214	D6	<op>/</op>
Å	129	81	<op><s< td=""><td>h&gt;a</td><td> </td><td>172</td><td>AC</td><td><op><sh>u</sh></op></td><td><b> </b></td><td>215</td><td>D7</td><td><op><sh>v</sh></op></td></s<></op>	h>a		172	AC	<op><sh>u</sh></op>	<b> </b>	215	D7	<op><sh>v</sh></op>
Ç	130	82	<op><sh>c</sh></op>		≠	173	AD	<op>=</op>	ÿ	216	D8	<op>u y</op>
É	131	83	<op>e</op>	$\mathbf{E}$	Æ	174	ΑE	<op><sh>'</sh></op>	Ÿ	217	D9	<op>u Y</op>
Ñ	132	84	<op>n</op>	N	ø	175	AF	<op><sh>o</sh></op>	/	218	DA	<op><sh>1</sh></op>
Ö	133	85	<op>u</op>	0	∞	176	B0	<op>5</op>	¤	219	DB	<op><sh>2</sh></op>
Ü	134	86	<op>u</op>	U	±	177	B1	<op><sh>=</sh></op>	<	220	DC	<op><sh>3</sh></op>
á	135	87	<op>e</op>	а	≤	178	B2	<op>,</op>	>	221	DE	<op><sh>4</sh></op>
à	136	88	<qo>`</qo>	а	≥	179	B3	<qo>.</qo>	fi	222	DD	<op><sh>5</sh></op>
â	137	89	<op>i</op>	а	¥	180	B4	<ор>у	fl	223	DF	<op><sh>6</sh></op>
ä	138	8A	<op>u</op>	а	μ	181	B5	<op>m</op>	‡	224	E0	<op><sh>7</sh></op>
ă	139	8B	<op>n</op>	a	9	182	B6	<op>d</op>		225	E1	<op><sh>9</sh></op>
å	140	8C	<op>a</op>		Σ	183	B7	w <qo></qo>	,	226	E2	<op><sh>0</sh></op>
ç	141	8D	<op>c</op>		П	184	B8	<op><sh>p</sh></op>	,,	227	E3	<op><sh>w</sh></op>
É	142	8E	<op>e</op>	е	π	185	В9	<op>p</op>	%0	228	E4	<op><sh>r</sh></op>
è	143	8F	<qo>`</qo>	е	ſ	186	BA	d <qo></qo>	Â	229	E5	<op><sh>m</sh></op>
3	144	90	<op>i</op>	е	a	187	BB	<op>9</op>	Ê	230	E6	<op>i E</op>
;	145	91	<op>u</op>	е	0	188	BC	<op>0</op>	Á	231	E7	<op>y</op>
	146	92	<op>e</op>	i	Ω	189	BD	<op>z</op>	Ë	232	E8	<op>u E</op>
	147	93	<qo>`</qo>	i	æ	190	BE	<op>'</op>	È	233	E9	<op>` E</op>
	148	94	<op>i</op>	i	ø	191	BF	<qo></qo>	Í	234	EA	<op><sh>s</sh></op>
	149	95	<op>u</op>	i	i	192	C0	<op><sh>/</sh></op>	Î	235	EB	<op><sh>d</sh></op>
ĭ	150	96	<op>n</op>	n	i	193	C1	<op>1</op>	Ϊ	236	EC	<op><sh>f</sh></op>
5	151	97	<op>e</op>	0	_	194	C2	<op>1</op>	Ì	237	ED	<qo>` I</qo>
)	152	98	<qo>`</qo>	0	√	195	C3	<op>v</op>	Ó	238	EE	<op><sh>h</sh></op>
)	153	99	<op>i</op>	0	f	196	C4	<op>f</op>	ô	239	EF	<op><sh>j</sh></op>
j	154	9A	<op>u</op>	0	≈	197	C5	<op>x</op>	<b>É</b>	240	F0	<op><sh>k</sh></op>
ŏ	155	9B	<op>n</op>	0	Δ	198	C6	<op>j</op>	Ò	241	F1	<op><sh>1</sh></op>
í	156	9C	<op>e</op>	u	«	199	C7	<op>\</op>	Ú	242	F2	<op><sh>;</sh></op>
ì	157	9D	<qo>`</qo>	u	»	200	C8	<op><sh>\</sh></op>	Û	243	F3	<op>i U</op>
û	158	9E	<op>i</op>	u		201	C9	<op>;</op>	Ù	244	F4	<qo>&gt;` U</qo>
ü	159	9F	<op>u</op>	u		202	CA	<op><sp></sp></op>	1	245	F5	<op><sh>b</sh></op>
†	160	A0	<op>t</op>		À	203	CB	<op>` A</op>	^	246	F6	<op><sh>i</sh></op>

**Title: Export Code For Printing bug** 

Report No: 2.4.2 - 20 Status: Resolved

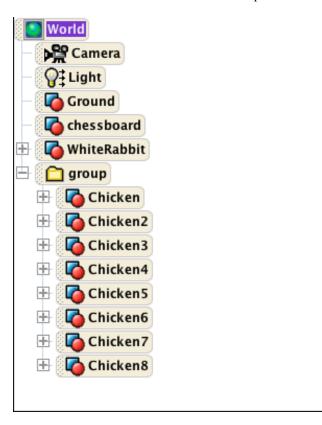
Resolved Date: June 10, 2014

## **Related Report:**

None.

#### **Description:**

Items in a folder are not evaluated, so none of the methods or functions will show up in the html for printing.



## **Comments:**

Added edu.cmu.cs.stage3.alice.authoringtiil.dialog.ExportCodeForPrintingContentPane.java line 404 to include any models in a folder (if present).

#### **Alice 2.4.3**

Title: Set Dummy at Camera bug

Report No: 2.4.3 - 1 Status: Resolved

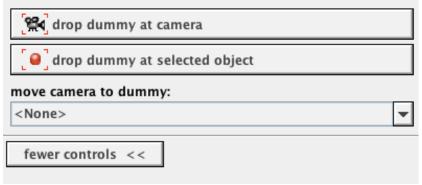
Resolved Date: Jun 16, 2014

## **Related Report:**

None.

## **Description:**

Dummy object added to the world don't get deleted from the "move camera to dummy" drop down box when a new world is created.



#### **Comments:**

Added edu.cmu.cs.stage3.alice.authoringtool.editors.sceneeditor.CameraViewPanel.java line 1144 moveCameraCombo.removeAllItems();

moveCameraCombo.addItem( NONE DUMMY );

to clear the combobox and reset the item back to <None>.

Title: Multiple Linux bug Report No: 2.4.3 - 2 Status: Resolved

Resolved Date: July 31, 2014

#### **Related Report:**

None.

#### **Description:**

- Sound is not playing in Linux, getting null pointer exception on sound object. Other users also getting other sound related bugs, suspect its due to wrong version of jar, jmf, or sound libraries.
- 2. Extended characters not displaying correctly. (Report No. 2.4.2 19)
- 3. Restart feature not working. (Report No. 2.4 2)
- 4. Window not resizing when in tutorial.

#### **Comments:**

1.

Probably due to missing jmf.properties and soundbank.gm file in Required/externalLib folder.

2.

edu.cmu.cs.stage3.io.ZipFileTreeLoader.java

line 56 open(...) - zipEntry.getName() is not returning the full path. This is because the path is incorrect due to the addition of those extended characters. With each extended character in the filename, the path to the file will be truncated 1 character. Instead of filename.xml, the file path is now saved as filename.xm.

line 118 readFile(...) - zipEntry is null because it fails to find the path of the search item.

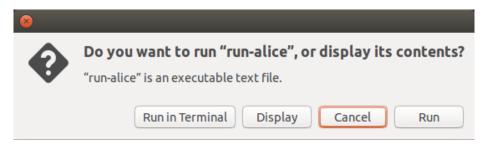
Added the following to the executing file to fix the file encoding problem:

-Dfile.encoding=ISO-8859-1

3.

edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 1530

This will only work if user run run-alice instead of running it in terminal.



4.

In Linux, Alice cannot resize the window when it is maximized. To fix the resizing problem, Alice must first set the window back to NORMAL before resizing the window.

edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 3692 jAliceFrame.setExtendedState(java.awt.Frame.NORMAL);

Removed edu.cmu.cs.stage3.alice.authoringtool.JAliceFrame.java line 217 **setExtendedState(MAXIMIZED\_BOTH)**; so Alice will restore the previous window size at start up rather than maximizing the window every time at startup.

Title: NullPointerException when dragging models from tree (MAC)

**Report No:** 2.4.3 - 3 **Status:** Resolved

Resolved Date: July 21, 2014

## **Related Report:**

None.

#### **Description:**

Alice will throw a NullPointerException when dragging a model from the tree, without first selecting the model.



Exception in thread "AWT-EventQueue-0" java.lang.NullPointerException

at apple.awt.CDragSourceContextPeer.setDefaultDragImage(CDragSourceContextPeer.java:276) at apple.awt.CDragSourceContextPeer.setDefaultDragImage(CDragSourceContextPeer.java:205) at apple.awt.CDragSourceContextPeer.startDrag(CDragSourceContextPeer.java:107) at sun.awt.dnd.SunDragSourceContextPeer.startDrag(SunDragSourceContextPeer.java:111) at apple.awt.CDragSourceContextPeer.startDrag(CDragSourceContextPeer.java:60)

#### **Comments:**

Select the item that is being drag before calling startDrag(...). edu.cmu.cs.stage3.alice.authoringtool.WorldTreeComponent.java line 214 worldTree.setSelectionPath( path );

Title: Multiple sound bug Report No: 2.4.3 - 4 Status: Resolved

Resolved Date: Aug 4, 2014

#### **Related Report:**

None.

#### **Description:**

1. When dragging an object from the tree or the details methods panel to the editor and setting the model to play an Alice sound, the sound duration is displayed as (?:??).



2. Sounds are not cleared from the list even after starting a new world. (Actually, this affects all used values. Non of the values are cleared between the worlds)

#### **Comments:**

1.

## Draging object to editor to make sound tile

edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 1122 – Search Alice sound directory and create a runnable to load selected sounds.

## When selecting the sound at the popup menu.

edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 1144 – Load the sound file. Sound does not have duration data

#### Calls this method to print the duration of the sound. If duration is NaN, then it prints (?:??).

edu.cmu.cs.stage3.alice.authoringtool.AuthoringToolResources.java line 1222

edu.cmu.cs.stage3.alice.core.property.DataSourceProperty.java getDataSourceValue();

edu.cmu.cs.stage3.media.AbstractDataSource

getDuration(...);

fireDurationUpdatedIfNecessary(...); - This is where the sound gets the duration data.

Calls by m jmfPlayer.addControllerListener from edu.cmu.cs.stage3.media.jmfmedia.Player.java

#### Viewing or updating the details panel calls this to update the sound text.

edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.SoundsPanel.java line 84 setSounds(...) - Sound does not have duration data. edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.SoundViewController.java line 81 setSounds(...) - m soundDurationLabel.updateComponent();

## When importing sound to the details panel

edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.SoundsPanel.java

line 131 SoundsPanel.this.refreshGUI():

line 108 gui = edu.cmu.cs.stage3.alice.authoringtool.util.GUIFactory.getGUI( sound );

edu.cmu.cs.stage3.alice.authoringtool.util.GUIFactory.java

line 146 ((edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.SoundViewController)viewController)

.setSound( (edu.cmu.cs.stage3.alice.core.Sound)o );

edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.SoundViewController.java

line 78 waitForRealizedPlayerCount

Create new player

Only when selecting world's detail panel

Fixed the problem by adding code in edu.cmu.cs.stage3.alice.authoringtool.util.GUIFactory.java line 400 Create a viewController and do setSound so Alice goes through the same process as if it was importing sound.

2. edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 128 clearRecentlyUsedValues() not called anywhere. Added clearRecentlyUsedValues() in edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 1680 in the leaveWorld(...) method.

Title: Multiple Movie Maker bug

Report No: 2.4.3 - 5 Status: Resolved Resolved Date:

## **Related Report:**

None.

## **Description:**

- 1. Movie Maker not working on OSX. Thread not running for writing frames.
- 2. Alice cannot export movie when sound is in event.
- 3. Remove frames folder.

#### **Comments:**

1. It looks like the while loop is running to many times in the Thread and is causing some problems. Inserting

solved the problem. We do not need to worry since this will still allow for at most 1000 frames per second.

2. Alice movie maker does not check events for sound. Added code in edu.cmu.cs.stage3.alice.authoringtool.dialog.CaptureContentPane.jave line 883 findSoundsfromBehavior(...)



3. Alice fails to remove the frames folder because sound file is still in used. Seems to be working now.

Title: Weird ClassCastException (Swing-related)

**Report No: 2.4.3 - 6 Status: Resolved** 

Resolved Date: Sept 15, 2014

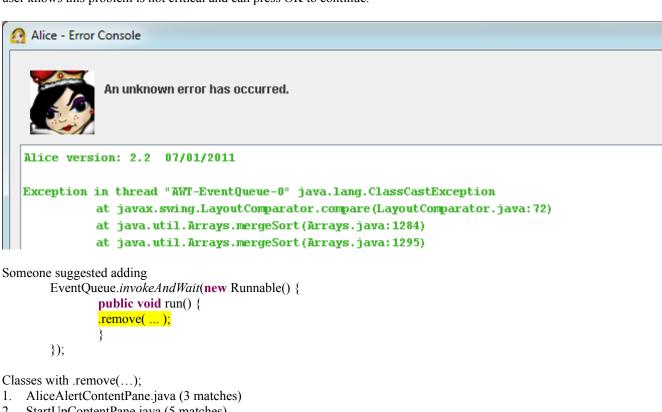
#### **Related Report:**

None.

#### **Description:**

Error due to .remove() throughout Alice source code. Do not always occur. Bug not fixed, because not reproducible and target is unknown.

Modified edu.cmu.cs.stage3.alice.authoringtool.dialog.StdErrOutContentPane.java line 72 to include additional info on this error so user knows this problem is not critical and can press OK to continue.



- StartUpContentPane.java (5 matches)
- 3. BehaviorGroupEditor.java (3 matches)
- 4. BehaviorGroupsEditor.java (2 matches)
- ConditionalBehaviorPanel.java 5.
- InternalResponseBehaviorPanel.java 6.
- 7. TriggerBehaviorPanel.java (2 matches)
- 8. ComponentElementPanel.java
- CompositeElementPanel.java (3 matches)
- 10. ForEachElementPanel.java (2 matches)
- 11. IfElseElementPanel.java (3 matches)
- 12. LoopNElementPanel.java (2 matches)
- 13. WhileElementPanel.java
- 14. ComponentQuestionPanel.java
- 15. ComponentResponsePanel.java
- 16. CameraViewPanel.java (5 matches)
- 17. SceneEditor.java (2 matches)
- 18. Gallery Viewer. java (4 matches)
- 19. LocalGalleryDirectory.java
- 20. WebGalleryDirectory.java
- 21. AliceMenu.java (4 matches)
- 22. ElementTreeCellEditor.java (2 matches)
- 23. ScriptScratchPad.java

- 24. PropertyGUI.java
- 25. PropertyViewController.java (7 matches)
- 26. TextFieldEditablePropertyViewController.java (2 matches)
- 27. VariableDnDPanel.java
- 28. VariableGUI.java
- 29. AuthoringTool.java (3rd match)
- 30. JAliceFrame.java (9 matches)
- 31. Spline.java
- 32. NumPad.java

Only 9 .remove(...) calls were made when Alice start up, and error happens only at startup. Nothing works!!! Problem still there???

#### **Comments:**

Rearrange the .add calls in edu.cmu.cs.stage3.alice.authoringtool.JAliceFrame.java line 752+. Moving some of the .add calls to line 92 where they are executed later seems to solve the problem. This may allow other items within the panel to be created before they are all added into the main window.

## Problem persists,

moved edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 667 stdErrOutContentPane = new edu.cmu.cs.stage3.alice.authoringtool.dialog.StdErrOutContentPane(this); Title: Tool tip and popup menu bug on MAC

Report No: 2.4.3 - 7 Status: Resolved

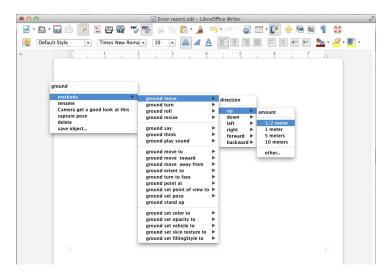
Resolved Date: Sept 16, 2014

#### **Related Report:**

None.

#### **Description:**

Tool tip and popup menu does not hide when Alice is not in focus (only on MAC). When Command+Tab to another application, Alice menu still appears on top of the other application.



#### **Comments:**

Tooltip can be made to hide if the following is not set. edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 884 javax.swing.ToolTipManager.sharedInstance().setDismissDelay(Integer.MAX\_VALUE);

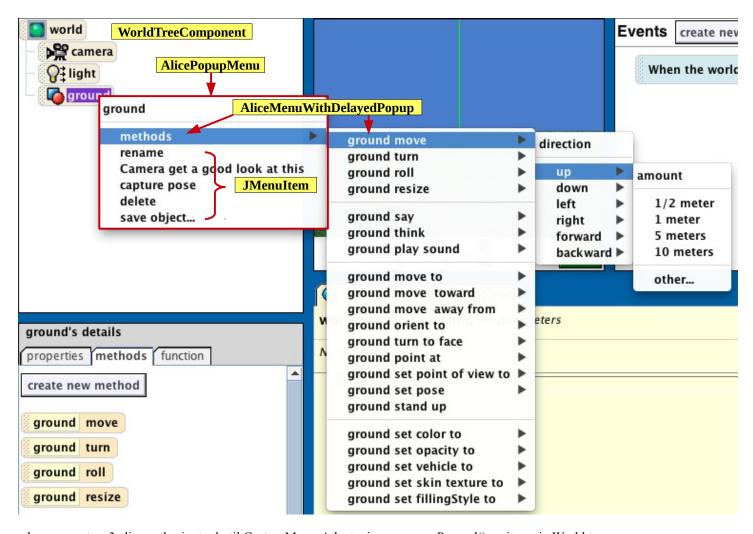
edu.cmu.cs.stage3.alice.authoringtool.JAliceFrame.java line 298

Add window focus listener to disable tooltip when Alice lost focus, so the tool tip will not appear above other application when user cmd+tab away from Alice. Additional flag is set to check if tooltip is enabled before making changes.

edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 346

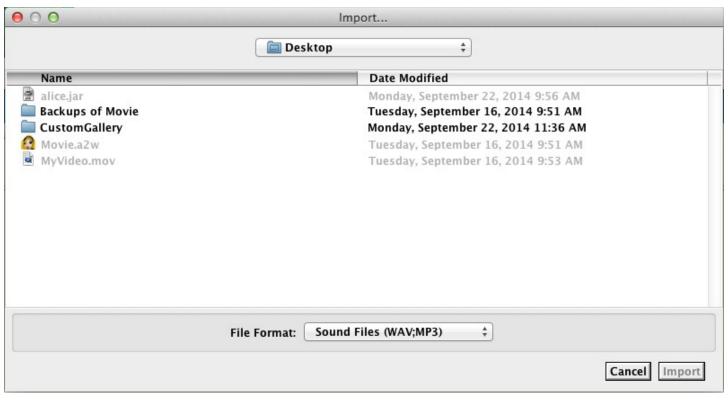
Current Look and Feel is set to javax.swing.plaf.metal.MetalLookAndFeel, and this is causing all the popup to appear above the other application when user cmd+tab away from Alice.

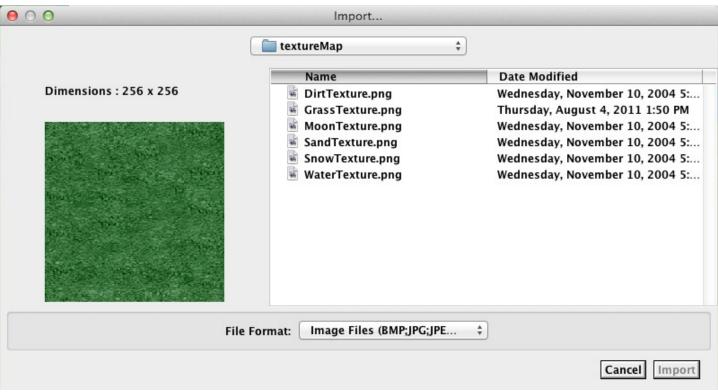
When changed to the default MAC Look and Feel, the popup works as expected. The only exception is the Alice menu.

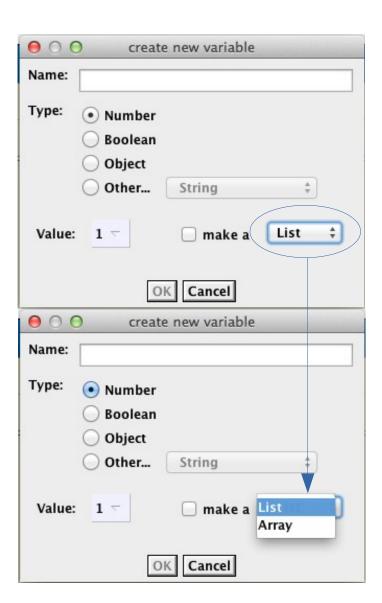


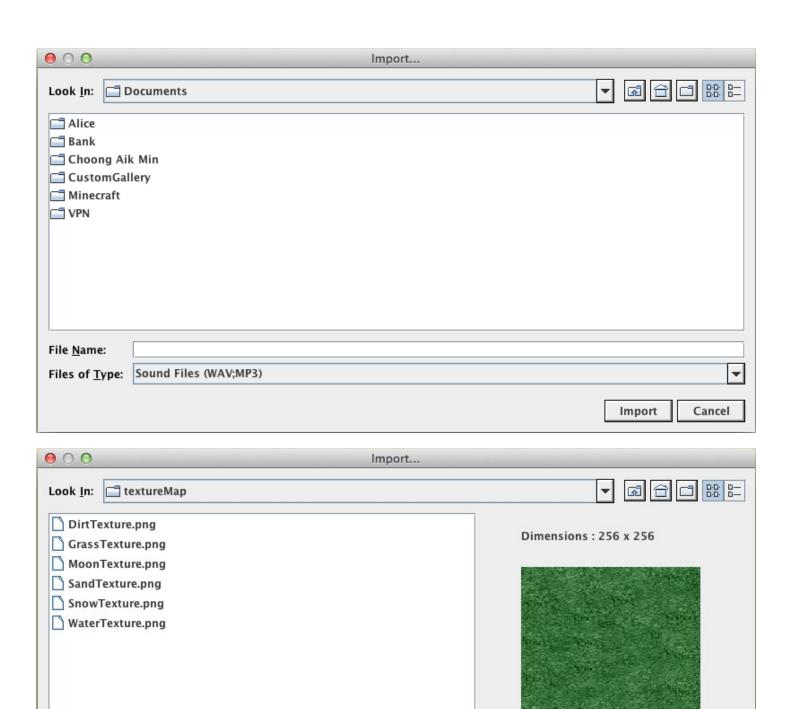
 $edu.cmu.cs.stage 3. a lice. authoring tool.util. Custom Mouse Adapter. java-mouse Pressed ()\ on\ items\ in\ World\ tree.$ 

Solved the problem by adding a property listener in edu.cmu.cs.stage3.alice.authoringtool.util.AlicePopupMenu.java line 134 to remove menu when window is out of focus.









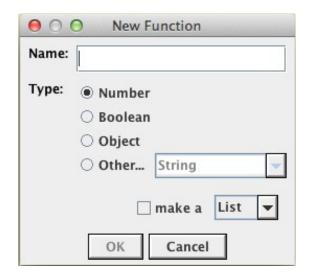
Import

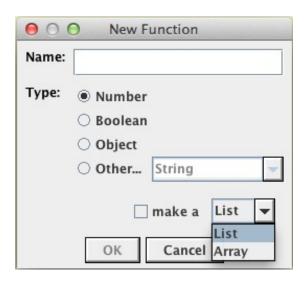
Cancel

File Name:

GrassTexture.png

Files of Type: Image Files (BMP;JPG;JPEG;PNG;GIF;TIF;TIFF)







Title: Serious memory leak Report No: 2.4.3 - 8

**Status:** 

**Resolved Date:** 

## **Related Report:**

None.

## **Description:**

Alice is not clearing memory from previous loaded file. If continuously using Alice to load large files, Java will eventually run out of heap space and Alice will not be able to load anymore files.

## **Comments:**

Need to free memory from the previous World. This is done when the next World is loaded. edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 2076 loadWorld (...)

Title: Text Output and Error Console bug

**Report No:** 2.4.3 - 9 **Status:** Resolved

Resolved Date: Apr 17, 2015

### **Related Report:**

None.

#### **Description:**

- 1. Alice is outputting all error and printed text to both the Text Output and Error Console.
- 2. Alice is not clearing the Text Output even when the checkbox in preferences menu is checked.
- 3. Alice is not clearing output when loading new world.

**Note**: Errors should be outputted to the Error Console while all printed text should appear when Playing world and outputted to the Text Output. "Running World" and "Stopping World" will only be printed in Text Output.

## **Comments:**

edu.cmu.cs.stage3.alice.authoringtool.dialog.StdErrOutContentPane.java line 148

Redo this class to separate the Error Console from Text Output so all print statements prints to Text Output instead of outputting as errors.



Title: Drag and Drop (MAC) bug

**Report No: 2.4.3 - 10** 

**Status:** 

**Resolved Date:** 

## **Related Report:**

None.

#### **Description:**

Import a sound into Alice, then drag the sound to the editor. Remove the sound and Alice will prompt you to remove all references of the sound from your code. You will not be able to drag and drop anything after that.

#### **Comments:**

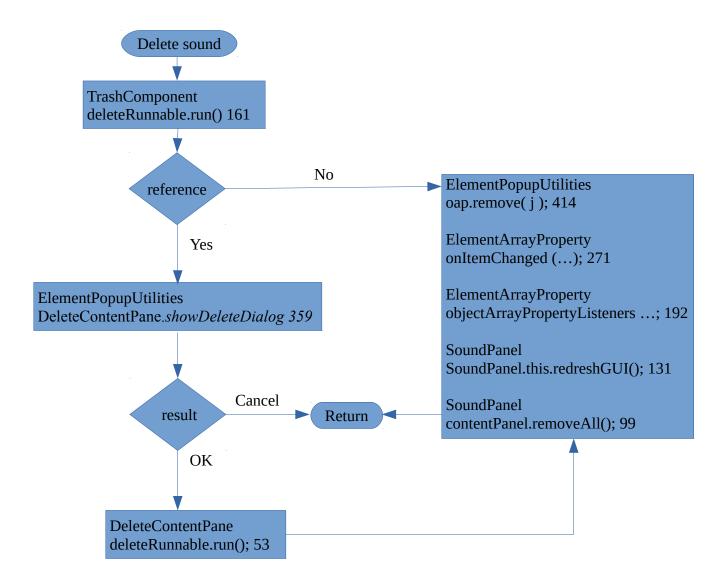
Dragging sound to editor

edu.cmu.cs.stage3.alice.authoringtool.editors.responseeditor.CompositeComponentResponsePanel.java line 439

**Note:** If you clear all references to the sound file, then press Cancel, you will be able to delete the sound file later without any problem. If you press OK after removing the references, then you will not be able to drag and drop after that.

Problem is when Alice clear the sound panel edu.cmu.cs.stage3.alice.authoringtool.viewcontroller.SoundPanel.java line 99

**Note:** This bug is cause by Alice not receiving the dragDropEnd notification. This happens when another window popups in Alice. MAC don't have a global mouse listener unlike Windows (awt dll).



Title: Cannot create input stream from filename with extended character

**Report No:** 2.4.3 - 11 **Status:** Resolved

Resolved Date: Nov 30, 2014

## **Related Report:**

None.

## **Description:**

Alice cannot create input stream from a file if the filename contains extended character. edu.cmu.cs.stage3.alice.core.property.DataSourceProperty.java line 54 java.io.InputStream is = loader.readFile(filename); returning null.

## **Comments:**

Sound filename are not stored with the correct utf-8 encoding, causing Alice to fail to load the file. Change edu.cmu.cs.stage3.alice.core.Element.java line 1743 name = new String(name.getBytes("utf-8"), "utf-8");

Title: Print tile does not print unicode characters

**Report No:** 2.4.3 - 12 **Status:** Resolved

Resolved Date: Feb 25, 2015

## **Related Report:**

None.

## **Description:**

1. Alice cannot print unicode characters.



2. Print statements in script also does not print unicode characters but writes to file correctly. def tryIt():

```
jaString = u"\u65e5\u672c\u8a9e\u6587\u5b57\u5217"
print jaString
myFile = PrintWriter(File(saveFileName), "utf-8") # This utf-8 reference works
myFile.print(jaString)
myFile.flush()
myFile.close
```

#### **Comments:**

1. Added VMParam -Dfile.encoding=ISO-8859-1

Detect the encoding of the text in the Print tile.

Added a new jar juniversalchardet-1.0.3.jar.
edu.cmu.cs.stage3.alice.authoringtool.util.StyleStream.java line 59
public static String detectEncoding(byte[] bytes)

2. Modify script to encode string.

```
jaString = u"\u65e5\u672c\u8a9e\u6587\u5b57\u5217" \\ text = jaString.encode("utf-8") \\ print text
```

Title: Problems in language file

**Report No:** 2.4.3 - 13 **Status:** Resolved

Resolved Date: Apr 17, 2015

## **Related Report:**

None.

## **Description:**

- 1. Some string spans multiple lines thus having multiple entries in the language file and requiring multiple calls to this file. These string should be merge.
- 2. Some strings begins with a space and the output does not have spaces in them, causing some text to merge together.
- 3. Need to make sure all key in all the language files are the same, and sorted.

4.

## **Comments:**

Sorted the language files.

Removed all the underscore at the start of the line with those, and fix the calls.

Added German to the list of languages.

Title: Dummy object bug Report No: 2.4.3 - 14 Status: Resolved

Resolved Date: Apr 17, 2015

## **Related Report:**

None.

## **Description:**

Dummy object in a file does not appear in the move camera to dummy drop down box. Work around: adding a new dummy will refresh the drop down.



## **Comments:**

Update the move camera to dummy dropbox when user clicks the "add object" button to open the gallery.. edu.cmu.cs.stage3.alice.authoringtool.editors.sceneeditor.SceneEditor.java line 142 edu.cmu.cs.stage3.alice.authoringtool.editors.sceneeditor.CameraViewPanel.java line 1261 updateMoveCameraCombo()

Title: Print Function bug Report No: 2.4.3 - 15 Status: Resolved

Resolved Date: Apr 20, 2015

#### **Related Report:**

None.

#### **Description:**

Printing a Function will cause the function to be deleted.

Create a Function (eg. my first function), Drag a Print tile to the editor and select object > world.my first function Function gets deleted and the tile becomes:



#### **Comments:**

edu.cmu.cs.stage3.alice.core.response.Print.java edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 2032

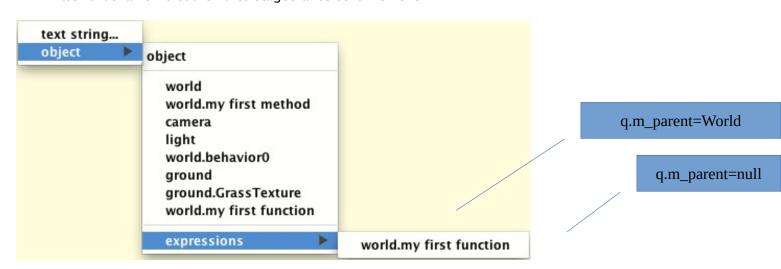
Functions in expression can be dragged without any problems, but otherwise will be deleted from the menu and Functions tab. java.lang.RuntimeException: ExternalReferenceException:

PropertyReference[property=edu.cmu.cs.stage3.alice.core.property.UserDefinedQuestionProperty[name=userDefinedQuestion,owner=edu.cmu.cs.stage3.alice.core.question.userdefined.CallToUserDefinedQuestion[world.my first method. Unnamed0 . Unnamed0 ]],criterion=null]

edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 2718

edu.cmu.cs.stage3.alice.authoringtool.editors.responseeditor.CompositeComponentResponsePanel.java line 266

- world propertyValue is edu.cmu.cs.stage3.alice.core.Element
- world.my first method is also edu.cmu.cs.stage3.alice.core.Element
- world.my first function is edu.cmu.cs.stage3.alice.core.Question and edu.cmu.cs.stage3.alice.core.Element
- text string is none
- world.behavior is edu.cmu.cs.stage3.alice.core.Element



```
Maybe don't list functions in the main object area, just list it in expressions.
Make elements
edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 1038
edu.cmu.cs.stage3.util.Criterion criterion = new
edu.cmu.cs.stage3.util.criterion.MatchesAllCriterion( new
edu.cmu.cs.stage3.util.Criterion[] { instanceOf, elementIsNamed,
inAppropriateOAPCriterion } );
edu.cmu.cs.stage3.alice.core.Element[] elements = context.getRoot().search( criterion );
elements=
World
UserDefinedResponse
SymmetricPerspectiveCamera
DirectionalLight
WorldStartBehavior
Model
TextureMap
UserDefinedQuestion
makeFlatElementStructure
line 467 exclude making menu for UserDefinedQuestion
Make expressions
```

edu.cmu.cs.stage3.alice.authoringtool.util.PopupMenuUtilities.java line 1180

recursiveFactory, context, NO\_CURRENT\_VALUE );

line 410 exclude making menu for UserDefinedQuestion

makeElementStructure

java.util.Vector expressionStructure = makeFlatExpressionStructure( valueClass,

Title: Redo AWTUtilities to provide support for MAC and Linux

**Report No: 2.4.3 - 16** 

**Status:** 

**Resolved Date:** 

## **Related Report:**

2.4.3 - 10,

### **Description:**

AWTUtilities provide global mouse and key listener for Alice, but the dll files only work on Windows machine.

#### Comments:

edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 851 create a global mouse listener edu.cmu.cs.stage3.awt.AWTUtilities.java

System.loadLibrary( "jni\_awtutilities" );

## isGetCursorLocationSupported

isSetCursorLocationSupported

isIsKeyPressedSupported

isGetModifiersSupported
isPumpMessageQueueSupported

pumpMessageQueue

getCursorLocation

setCursorLocation

isCursorShowing

setIsCursorShowing

isIsCursorShowingSupported

isSetIsCursorShowingSupported

isKeyPressed

getModifiers

mouseListenersAreSupported mouseMotionListenersAreSupported

addMouseListener
removeMouseListener
addMouseMotionListener
removeMouseMotionListener
isButton1Pressed
isButton2Pressed
isButton3Pressed

fireMouseAndMouseMotionListenersIfNecessary

## Note:

Added jNativeHook.jar to provide the global key listener. edu.cmu.cs.stage3.alice.authoringtool.AuthoringTool.java line 870

Added code in edu.cmu.cs.stage3.awt.AWTUtilities.java line 93 getCursorLocation() and setCursorLocation().

```
Toolkit.getDefaultToolkit().getSystemEventQueue().push(this);
@Override
protected void dispatchEvent(AWTEvent event)
{
    try
    {
        super.dispatchEvent(event);
        if (peekEvent() != null && userEventDispatched)
             raiseIdleEvent();
             userEventDispatched = false;
        }
        else
             int eventId = event.getID();
if (eventId == KeyEvent.KEY_TYPED || eventId == MouseEvent.MOUSE_CLICKED)
             {
                 userEventDispatched = true;
             }
        }
    catch (Throwable ex)
    {
        onError(ex);
    }
}
```

Title: Option+Click Report No: 2.4.3 - 17 Status: Resolved

**Resolved Date:** May 2015

## **Related Report:**

Redo AWTUtilities to provide support for MAC and Linux

#### **Description:**

Change all the control+click in Alice to Option+click for the MAC version.

Many schools are still dealing with older equipment, and even if they have two button mice, the Mac interface guidelines still specify control-click, so I think we need to stay with that. The Macs have an option key, which is the equivalent of the PC ALT key... In Alice 3, the Mac version uses option-click and the PC versions will use CTRL click... Is it possible to implement something like that in Alice 2?

Thanks,

Don Slater

#### **Comments:**