

CMPT 371 Material Inspection

Date: March 04, 2017, 1pm

Location: Thorvaldson S371

Material under Inspection: Display.cs and related game objects in the Unity project

Creators: Mackenzie, Nhi, Kevin, Kyle, Heramb;

Inspection Facilitator: Brianne

Notetakers: Janelle

Members Present: Nhi, Brianne, Kyle, Evan, Heramb, Ix, Mackenzie, Janelle, Brady

Comments

-Some merge issues with two demo scenes—will resolve later today

Line 15: What does this variable do? What does it represent?

The depth of display—how far is it from the user

Lines 17 and 18: could be redundant: do we need two linked lists? When will their contents be different?

Whole document: we need to update to new terminology

We shouldn't call prefabs "obj," it's confusing. Call them "prefab"

Evan: doesn't like Copies being associated with the Display class

-Display is disabled when minimized, could cause problems

-Semantically Copies should not be associated with the Display

-Put Copies in WorkspaceManager class?

Kyle agrees, put code in one spot

All class members should have comments, even if "obvious"

-If something changes, we can spot the change more easily

Line 32: What is displayImagePositions?

-Why is it length 1?

-Actual value is being set in the editor

-Which values is that true for? It's confusing

-What if something gets accidentally changed?

-Hard to document reasons for values

-We should create a spreadsheet to document this

Line 34: "button" not very descriptive

Lines 49+: is there a Javadoc-style way of commenting in C#/Unity/whatever? Visual Studio adds <summary> automatically, so is there a good way to encode it and export automatically? Investigate this

Line 60: Assert is correct logically, need to update terminology

displayScrollButtons() – “display” is such a loaded term already in this file
Function is creating the buttons, rename to create

Some people reading this code might not be familiar with Unity, so we should make the pre/post conditions more explicit: “creation of new Tray” is not descriptive for someone unfamiliar with Unity.

-createTray() is calling UpdateTray in all cases: why?

-Can we move it/change the logic?

-CreateTray() is called in addImage, so we should add an if/else for createtray/updatetray()
instead

All copies will be instantiated in the same spot. Should adjust this in a future ID

Lines 160 onwards: update all terminology

ScrollLeft() and ScrollRight() : these functions require a precondition that the number of images in the list is larger than the display’s array size

The rest of the project has lots of commented out onGUI() code. Is it OK to remove that?

-Yes.

Changes to Implement

Implement now:

-Update the terminology to be consistent with design doc

-Comment line 15: what units, what is it being used for?

-Comment line 18: what is the second LinkedList here being used for?

-Lines 22-24: renamed to “prefab” instead of obj

-Add comments to all class members explaining what they do

-Add comments to all fields whose true value is set in the editor, not in the script

-Create default parameters spreadsheet in Google Drive to document in-editor changed values

-Lines 34-38 Rename “button” to “buttonPrefab”, rename left and right to leftButton and rightButton

-Line 60: fix description in assert

-Lines 72-83: add a comment for the logic of this if/else block

-Line 96 etc. rename displayScrollButtons() to createScrollButtons()

-Line 122 “thumbnail images” -> “thumbnail

-Line 124, 146 etc.: be more specific about what “creation” means as a postcondition eg. GameObject has been instantiated and added to the hierarchy

-Lines 127- createTray() should not be called just to call update tray. Move the else-condition call to UpdateTray to line 85, add an if/else condition there

-Line 151 add comment to explain use of ScreenToWorldPoint, change spacing

-Line 15, 153 –displayDepth should be copyDepth

-Add preconditions to ScrollLeft() and ScrollRight()

-Add comment to explain code in Lines 230-235 in ScrollRight()

-Line 241: Add pre/post conditions to redrawDisplayImages()

-Add comment to explain code in redrawDisplayImages()

Implement later:

- Refactor to remove one of the lists on lines 17-18
- Move Copies list from Display to some other container to separate concerns
- Look into Javadoc-style context documentation
- Change position Copy is instantiated to so they don't spawn in the same positions

In Dashboard.cs

- Fix lines 134-35—why does this still work? Investigate this!
- Remove imageMan variable

In entire project:

Delete all commented out onGUI() code