

Programming Midterm Grading Test Cases  
CSCI 201L Fall 2016  
10% of course grade

## Part 1 – 4% Total

**Important Note: Test Part 1 using the new factory.txt provided in the Programming Midterm resources, it has 3 new lines: a comment, factory author's name and a file path to the author's image. If any errors arise, try again after removing the last 3 lines of factory.txt. Full credit for Part 1 should be awarded if the tests pass with either factory.txt format.**

### Test A - 0.25% - New Factory Hierarchy Menu Item Added

- -.25% –New Factory menu item called “Factory Hierarchy” should be added to top JMenuBar of the FactoryClientGUI – does not have to be functional. (Test P1.A.1)

### Test B - 0.25% - Clicking Factory Hierarchy Menu Item Opens JFrame

- -.25% – Clicking Factory Hierarchy Menu Item opens any new JFrame (Test P1.B.1)

### Test C - 0.50% - Typing R when Factory Hierarchy Dialog is Open Refreshes JTree Data

- -.50% – Open Factory Hierarchy JFrame used in previous test. If you press R, the JTrees should populate with data. (Test P1.C.1)

### Test D - 0.50% - Background is orange

- -.50% – Open Factory Hierarchy JFrame used in previous test. Background should be orange. (Test P1.D.1)

### Test E - 0.50% - Code Check: Data is not Hard-Coded

- -.50% – Search in the code for “Factory Hierarchy” to find where the Factory Hierarchy menu item code is located. Verify that the JTrees’ data *aside from the root* was not hard coded, they use some factory data structure to extract information. (Test P1.E.1)

Code like this (FactoryHierarchy.java:63) is okay:

```
private void refresh () {
    resourceTree.removeAllChildren();
    resourceTree.setUserObject("Resources");
    for (Resource resource : mFactoryManager.getFactoryResources()) {
        resourceTree.add(new DefaultMutableTreeNode (resource.getName()));
    }
    productTree.removeAllChildren();
    productTree.setUserObject("Products");
    for (Product product : mFactoryManager.getFactoryProducts()) {
        productTree.add(new DefaultMutableTreeNode (product.getName()));
    }
    revalidate();
    repaint();
}
```

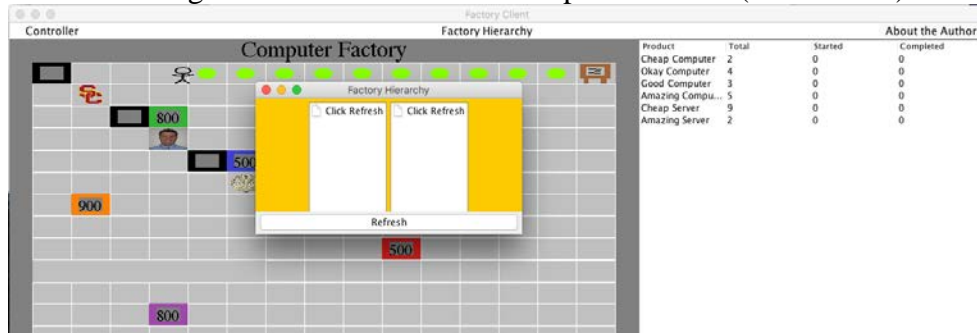
### Test F - 1.00% - Clicking Refresh populates Factory Hierarchy Window with New Data

- -1.00% – Clicking refresh populates JTrees with data. It is okay if you need to click on the root of each JTree (ex. Products or Resources) to expand its subnodes (ex. Good Processor, Motherboard, etc.). (Test P1.F.1)

### Tests G - 1.00% - GUI is similar to pictured photo: relative size, locations, etc.

- -.10% – Frame does not have title “Factory Hierarchy” at top of JFrame. (Test P1.F.1)

- -.15% – Frame is not close to the approximate size pictured below. (Test P1.F.2)
- -.15% – Frame’s location is not close to the location used below. (Test P1.F.3)
- -.20% - Frame’s refresh button does not match photo in size or location. (Test P1.F.4)
- -.10% - Frame’s button does not have label “Refresh”. (Test P1.F.5)
- -.10% – JTrees’ roots do not read “Click Refresh” before hitting refresh button. (Test P1.F.6)
- -.20% – Frame’s general look is not similar to photo below. (Test P1.F.7)



## Part 2 – 6% Total

Your factory.txt should now have the following 3 lines as its last 3 lines:

```
-- this is the name of the factory's author
    Author Name|Pusheen
    Author Photo|pusheen.png
```

You should also have the PNGs named **pusheen.png** and **pusheenInBurrito.png** located directly under the project folder (ex. myProgrammingMidterm/pusheen.png). These resources are available on the 201 website.

### Test A - 0.50% - New About the Author Menu Item Added

- -.50% –New Factory menu item called “About the Author” should be added to top JMenuBar of the FactoryClientGUI – does not have to be functional. (Test P2.A.1)

### Tests B – 0.50% - New View Author, Set Author Name, and Set Author Photos Menu Items Added

- -.16% –New Factory menu item called “View Author” should be added – does not have to be functional. (Test P2.B.1)
- -.16% –New Factory menu item called “Set Author Name” should be added – does not have to be functional. (Test P2.B.2)
- -.16% –New Factory menu item called “Set Author Photo” should be added – does not have to be functional. (Test P2.B.3)

### Tests C - 1.00% - Default View Author JFrame is similar to pictured photo: relative size, locations, etc

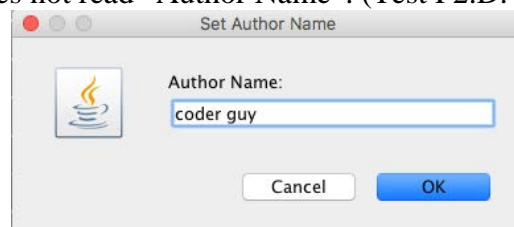
- Click View Author menu item *before* ever clicking Set Author Name or Set Author Photo.
- -.10% – Frame has title “View Author” at top of JFrame. (Test P2.C.1)
- -.15% – Frame is not close to the approximate size pictured below. (Test P2.C.2)
- -.25% – Frame’s relative location is not close to the location used below. (Test P2.C.3)

- -.20% – Frame’s has JLabel that says “Author of this Factory: Pusheen” centered at the top of the JFrame. (Test P2.C.4)
- -.30% – Frame’s has the following photo of pusheen.png that is centered at the top of the JFrame. (Test P2.C.5)



#### Tests D - 0.50% - Clicking “Set Author Name” opens JFrame that looks like pictured photo

- Click Set Author Name under the About the Author JMenuItem. This should open a JOptionPane or JFrame that looks like the following.
- -.10% – Frame does not have the title “Set Author Name” at the top of the GUI. (Test P2.D.1)
- -.20% – Frame does not have default Java image at left. (Test P2.D.2)
- -.10% – Frame does not the options “Cancel” and “OK”. (Test P2.D.3)
- -.10% – Frame label does not read “Author Name”. (Test P2.D.4)



#### Test E - 0.25% - Cancelling “Set Author Name” does not change subsequent View Author Dialogs

- Click Set Author Name under the About the Author JMenuItem. Enter any text into the JTextField. Press “Cancel”. Now open View Author JFrame under the About the Author JMenuItem.
- -.25% – JLabel on View Author JFrame should still say “About the Author: Pusheen” (Test P2.E.1)
- Close View Author JFrame.

#### Test F - 0.50% - Updating Author Name then clicking View Author changes the View Author Dialog

- Click Set Author Name under the About the Author JMenuItem. Enter “coder guy” into the JTextField. Press “OK”. Now open View Author JFrame under the About the Author JMenuItem.
- -.50% – JLabel on View Author JFrame should now say “About the Author: coder guy” (Test P2.F.1)

#### Test G - 0.50% - Clicking “Set Author Photo” opens JFileChooser

- Click Set Author Photo under the About the Author JMenuItem.
- -.50% – This should open a JFileChooser. (JFileChooser can allow any file types to get full credit here.) (Test P2.G.1)

#### Test H - 0.50% - "Set Author Photo" only allows JPG & PNG files

- Use the Set Author Photo JFileChooser from the previous test.
- -.50% – JFileChooser should only allow PNG & JPG files. (Test P2.H.1)

#### Test I - 0.25% - Cancelling "Set Author Photo" does not change subsequent View Author dialogs

- Click Set Author Photo under the About the Author JMenuItem. Navigate to any JPG or PNG file *except* pusheen.png. Choose "Cancel". Now open View Author Dialog.
- -.50% – The View Author JFrame should still have the old pusheen.png photo, not the one you just selected in the JFileChooser. (Test P2.I.1)
- Close View Author dialog.

#### Test J - 0.50% - Updating Author Photo then clicking View Author changes the View Author Dialog

- Click Set Author Photo under the About the Author JMenuItem. Navigate to the coder.png file wherever you have it stored. (Coder.png is available on the Resources.zip file online.) Choose "Open". Now open View Author Dialog.
- -.50% – The author photo should have changed from pusheen.png to coder.png. (Note: it is ok if the JFrame's formatting changed, see picture below.) (Test P2.J.1)



#### Test K - 1.00% - Code Check – Changing factory.txt author name and photo changes default View Author window

- Close program. Change the last 3 lines of factory.txt to the following:
  - -- this is the name of the factory's author
    - Author Name|cat
  - Author Photo|pusheenInBurrito.png
- Begin program. Open View Author JFrame.
- -1.00% – View Author should now include the exact same author name and author photo as the picture below. (Test P2.K.1)

