

CS 235 - Week 10 Lab Exercise - 2021-10-28

Deadline

Due by the end of lab on 2021-10-28.

How to submit

Submit your `.java` file and at least two suitable `.png` or `.jpg` or `.gif` files usable with your resulting Java application for this lab on <https://canvas.humboldt.edu>

Purpose

To practice a bit with painting/Graphics and Java threads.

Important notes

- IF you are attending the lab via Zoom, you are expected to pair program in a breakout room (possibly trio-program if necessary based on class members' Internet and the number of class members attending via Zoom).
 - In this case, **be sure to TYPE BOTH (all) OF YOUR NAMES** in the beginning comment of EACH of your `.java` files

But, because of the delta variant surge, if you are attending lab in person in BSS 317, you will each work on a separate computer, although discussion amongst those attending will be encouraged!

Your Task

Start from the posted Week 10 Lecture example `ThreadImage1.java`; rename this to be `ThreadImage2.java` (and change all the names within correspondingly).

- Add another `@author` line to its opening Javadoc comment, indicating that you have adapted this
- Change the `@version` line to the date that you last modified this
- It should now expect **two** command line arguments, and complain and exit if not given two, and they are expected to be the names of image files (assumed to be reachable from the current working directory).
- BOTH of the given images should be painted onto a sub-panel (you get to decide where they are initially painted).
- Add a SECOND set of Begin and End buttons to the southern sub-panel.
- The previously-existing Begin and End buttons still start and end a thread that repaints the first image repeatedly so it appears to "move" across the screen.
- The new/second Begin and End buttons should start and end a different, additional thread, that repaints the SECOND image repeatedly so it appears to move in a way at least SOMEWHAT differently than the first image --
 - this might mean it just "moves" across noticeably-more quickly or noticeably-more slowly

- this might mean it moves right-to-left instead of left-to-right
 - this might mean it moves up, or down, or diagonally, or etc.!
 - this might mean there is a random component to its movement
 - ...you get to choose!
- TRY OUT your resulting `ThreadImage2.java` on at least two suitable `.png` or `.jpg` or `.gif` files of your choice, and ALSO submit copies of these with your `ThreadImage2.java` file.
- When you are done, or before you leave lab, use Gmail to
 - MAIL a copy of your `.java` file and at least two `.png` or `.jpg` or `.gif` files of your choice to BOTH/ALL of you, and
 - EACH of you should SUBMIT the required files on Canvas