

Programming Assignment #3 - Fun with Images

due: Friday, February 14, by 4:00 p.m.

This programming assignment is an extension of Lab 3 - Say Cheese! You are to write two new ImageTransformers.

The first new ImageTransformer is ImageRotateCounterClockwise. This one works just like ImageRotateClockwise, but - as its name implies - rotates in the opposite direction. [Note: it is possible to accomplish this by performing a clockwise rotation three times; such an approach is explicitly forbidden. Your rotation must move directly to the specified state.]

The second new ImageTransformer is ImageDarkener2. Like its namesake, this one darkens the image, but it does so by subtracting 40 from each color value. [Note: some of you learned in lab, that the SImage class and the framework for display combine to treat color values outside the [0,255] range in a reasonable manner. Nonetheless, your ImageTransformer should **not** create any color values outside this range.]

Turn in:

- Listing of the source code of the two classes. These are to be stapled together along with a cover sheet and turned in to me.
- E-mail to me a copy of your source code files e-mail attachments.

The assignment is due at 4:00 p.m. on Friday, February 14.

This assignment is to be completed by each student individually. It is governed by the Help Policy described below.

Assignment Type: Individual

Help Policy In Effect for This Assignment: Individual Project Without Collaboration.

In particular, you may receive help from the following persons, in addition to an instructor in this course: NONE. You may use the following materials produced by other students: NONE.