

CSC 204 Lab 10: Green Screen Intro

Goals

After doing this lab, you should be able to:

- Use Java to manipulate pixels between two pictures based upon the characteristics.
- Have a better understanding of 2-D storage (pixels of pictures, similar to 2-D arrays).
- Generate screenshots from Alice - the 3-D programming environment.
- Use Gimp, the open source, free, photo editing software, to perform simple alterations to pictures.

Lab Preparation

Read through this lab. Create an Eclipse project, named Lab10. From the Lab10 folder on Blackhawk, copy the Java files into the src folder, and the pictures into the project folder. Open up Alice2 and Gimp.

Play with Greenscreen software

Run the Java files copied over into your workspace. Pick CherryLandscape for the background, and dragon for the foreground. See what happens. Understand the code. Play around with other combinations.

Create an Alice Picture

- Open Alice2.
- Create a new world from the grass template.
- Delete the ground.
- Edit the World's property: atmosphereColor = green.
- Add Objects
 - Browse around,
 - Find cool things,
 - Place them in your world.
- "Play" your world and "Take Picture"

You should now have a greenscreen picture to play around with the Java code. Test it out. You might want to find another background image to use, too.

Gimp your Images

- Gimp is a powerful photo editing software package.
- We will look at a few features that might help you perfect your blending of pictures.
 - Resize images
 - Erase errors

Deliverables

You should find a great background picture, create a great foreground picture, use the software to put your foreground onto your background, and then save the three pictures into a Lab10 folder on our shared drive.