

**Computer Science 411/611**  
**Virtual Reality Systems**  
**Fall 2005**  
**Homework 1 – Fun with Colors in X**

**Due: Thursday, 9/29/2005**

**Overview**

For this project, you will modify a small program in C to learn more about graphics using the X Windowing system.

**Description**

Given the zurburt program we discussed in class (and available on the class web page), modify the program so that each of the first four menu choices offers a different color name, and the selection of that menu option causes a solid fill of the display window with that color. Also, omit the text of the color name that appears in the drawing window. The fifth menu choice (labeled “zurburt”) should produce either:

- (computer science) a continuously updated display of randomly colored rectangles in random locations within the display window. The rectangles should also be randomly sized, but not larger than 100 pixels in either direction. The update should continue until another menu choice or ‘q’ is selected (see XEventsQueued), at which point the display should stop (but not exit).
- (DPA) an artistic design or pattern consisting of rectangles. You may use your own design, or that of another artist. Select colors carefully and be creative.

Pressing key ‘q’ while the cursor is in the menu window should always cause an exit. Multiple ‘q’s should not be necessary.

**Submission Requirements**

You should submit the following:

- a hardcopy of your program (with your name, date, and compile line in a comment section at the beginning of your code)
- a sheet describing any special features of your project
- an electronic copy of your program (preferably tar’ed and gzip’ed) sent to me at [tadavis@cs.clemson.edu](mailto:tadavis@cs.clemson.edu)