CSCI 325 Programming II – HW04

DUE: Sunday, April 13 – 11:59pm

This assignment will evaluate your understanding of GUI programming with the Raylib graphics framework in C++. You will create a simple application that allows for the creation and deletion of rectangles on a screen. You will first be walked through the installation process for Raylib before you begin developing your application.

1) First, go to www.raylib.com and scroll down to the "raylib supported platforms" section. From there, select the platform that you are currently using (either Linux or Windows). You will be redirected to a tutorial helping you install raylib on your machine. Follow the steps found to install raylib on your system. It is recommended that you do not follow the raylib quickstart. Rather, follow the manual setup with W64Devkit for Windows.
2) Test your raylib install with a file titled "raylibHello.c". Include the example code found in the first example on raylib's website, "basic window". You should be able to compile and run this file like any other previous project in this class. If you see a blank window with a message in the middle, then your raylib installation is working.
3) Create a new file based on raylibHello.c titled HW4.cpp. This will be your main file for this homework project. First, create the functionality to detect the current location of the cursor within the window. Then, extend that ability so it can draw rectangles to the screen using two points that the cursor clicks as the corners. Make each rectangle that is drawn a different color, cycling through a list of five colors, blue, green, yellow, red, and brown.
4) Now, we need the ability to delete rectangles from the screen. Detect when the cursor overlaps one or more of the rectangles. Remove the rectangles when the delete key is pressed while the cursor is overlapping. Once all of this is included in your code, test it to make sure it works. Then, commit your code to a new repository titled HW04. Be sure to take a screenshot of your working project as well as your github commit, then submit your screenshots to Brightspace.