

# EC447 Course Web Site

## Lab Assignment 2

### Due Due Wednesday June 28, (by midnight)

Write an application that is similar to the example discussed in class that draws small circles for each left mouse click. Reduce the size of the circles to 10 x 10 pixels. The color is black. Place two check boxes in the upper left hand corner of the client area side by side. Label them "Connect" and "Connect All." The following actions take place each time a point is added:

- No checks - displays points only.
- Only Connect checked - connect all points with a line in the order drawn and a final closing line back to the first point.
- Only Connect All checked - every point is connected to every other point by a single line.
- Both checked - displays error message using MessageBox and unchecks both check boxes.

A right mouse click should delete all points and repaint.

- The program should not crash if there are zero or one points displayed and a connect or connect all operation is specified.
- You should be able to add points and an added point is immediately included in the current display mode.
- ChanChanges in the state of the check boxes should cause an immediate update to the client area's display. In other words repaint. The check changed event on the check boxes is the key.
- **No duplicate lines are allowed. Only one line between points.** I will go over suitable algorithms in class.
- Use the override of OnPaint an **not** a paint event handler. This was discussed in class and in the slides.

This assignment is quite a bit more challenging than the last and you should get an early start. Read and re-read the requirements to make sure you have not ignored something.

**This assignment is to be submitted online by midnight on the date due. If the date stamp on the zip file is dated the next day your assignment will be counted as late.**