Project 3: Drawing program

*CSCI 430*

*May 1, 2014*

Group Members: Anil Timilsina, Brandon Theisen, Cha Yang, Eric Dorphy

Changes by Anil Timilsina

Feature: User Friendly Selection

Classes Added: none

Classes Modified

1. **Item**

Added a Boolean flag to check if the Item is to be drawn for selection, in which case, rectangles would be drawn around the control points for user friendly selection. Also added a couple methods to set and get this Boolean flag.

1. **Polygon**

Updated the “includes” method to iterate through all the points in the stack (stack of control points of the polygon) to check if the point is up to 10 pixels away from the control point.

1. **SelectButton**

Added just two method calls to ‘SelectCommand’ to set the flag for whether select command is starting or ending.

1. **SelectCommand**

Added a flag that keeps track of whether select command has been ended. When this flag is false, rectangles will appear around the control points of each item, when it is false (when user clicks at some point in the window), all rectangles disappear.

Also updated the constructor to iterate through all of the ‘items’ and ‘selecteditems’ to create rectangles around the control points.

Updated ‘setPoint’ method to select the clicked item (or unselect if it was already selected), and remove the rectangles.

Updated ‘execute’ and ‘end’ methods for added functionality.

1. **UIContext**

Added an abstract method draw that takes in a point as a parameter.

1. **NewSwingUI**

Added implementation of the draw method with a point as a parameter. This method draws a 10x10 rectangle around the point that has been passed in.

Also for each draw method of different items (label, line, eclipse, polygon), added code to check if the item’s Boolean selection value is set (true), and if it is, then draws rectangle around each control point of that item by calling draw method on that point.

**How to use User Friendly Selection:**

1. Click on the select button.
2. For all items that are created, same rectangles will appear around the control points of the items. The rectangles will be blue in color if the item has not already been selected, and if it is already selected rectangles and the item will be red.
3. If you do not want to select any item, just click at any point in the window that is not inside one of those rectangles. All of the rectangles will disappear.
4. *To select an item* click on any of the rectangles around its control point.
5. *To unselect a selected item*, do steps 1,2 and then click on any of the rectangles around its control point.

Meeting log for Project 3.

One meeting only: April 13th 1pm – 3pm. Present all.

We only had one meeting for this project. In the meeting we divided the features among us and discussed on how we will implement the code. The features were divided as:

Eclipse: Brandon

Polygon: Cha

User Friendly Selection: Anil

Move: Eric

All members contributed equally to this project. But this project did not require great deal of cooperation between team members. Even though it was a group project, the tasks were independent and basically each member worked on their own.