

Exercise 2: Responsibilities (Assessed Group Work)

Group Number:	Group Member Name	Team Role
1.		
2.		
3.		
4.		
5.		
6.		
7.		

References

- [1] R. Wirfs-Brock and A. McKean. *Object Design: Roles, Responsibilities, and Collaborations*. Addison-Wesley, 2003.
- [2] R. Wirfs-Brock, B. Wilkerson, and L. Wiener. *Designing Object-Oriented Software*. Prentice-Hall, 1990.

1 Problem Statement

Given the partial specification below, identify a list of candidate objects and their responsibilities. Record them using a class-card style. Refer to the lecture on responsibilities for guidance. This exercise is to be done in groups. Specification adapted from Wirfs-Brock et al [1, 2].

2 Drawing Editor (Partial) Requirements Specification

The drawing editor is an interactive graphics editor. With it, users can create and edit drawings composed of lines, rectangles, ellipses, and text.

Tools control the mode of operation of the editor. Exactly one tool is active at any given time.

Two kinds of tools exist: the selection tool and creation tools. When the selection tool is active, existing drawing elements can be selected with the cursor. One or more drawing elements can be selected and manipulated. If several drawing elements are selected, they can be manipulated as if they were a single element. Elements that have been selected in this way are referred to as the current selection. The current selection is indicated visually by displaying the control points for the element. Clicking on and dragging a control point modifies the element with which the control point is associated.

When a creation tool is active, the current selection is empty. The cursor changes in different ways according to the specific creation tool, and the user can create an element of the selected kind. After the element is created, the selection tool is made active and the newly created element becomes the current selection.