Assignment 7: Copy & Paste

In this assignment we extend our graphics editor with *Cut, Copy* and *Paste* functionality. *Cut* and *Copy* shall be applicable on the selection. For both the *Copy* and *Paste* functionality each figure in the selection has to be copied. For this *cloning* shall be used. Note that the clone method must be overwritten in order to create a deep copy. We recommend implementing parts of the clone functionality in an abstract figure base class.

The JDraw framework is already prepared for this assignment as the interface Figure already contains a public clone method indicating that all figures can be cloned. In addition, the Figure interface extends the marker interface Cloneable which indicates, that Java-cloning must be implemented.

The following methods provide access to the selection of a DrawView instance:

getSelection	returns a list of the selected figures. The order of the figures in the list is the one in which the user has selected them.
addToSelection	extends the selection
removeFromSelection	deselects a figure
clearSelection	clears the selection and removes all selection markers

The clipboard may be implemented with a (global) field. As a variant, the system clipboard could be used (java.awt.datatransfer.Clipboard). This would allow transferring figures from one JDraw application to another JDraw application. In order to transfer figures to other editors, the appropriate formats would have to be implemented.

Deadline: November 06, 2018