Graphics Editor

Problem Statement

The graphics editor provides an Application Programmer's Interface that enables a programmer to develop their own graphical ~~method~~ model editor for a specific type of model. This API in turn, relies on extending the Eclipse Graphical Editing framework to provide an environment in which the editor functions, and the programmer can create a graphical editor and palette of shapes in order to modify an underlying model. The graphical editor provides an interface with which the programmer implements said editor for a given underlying model. Such instance of the graphical editor allows a user to drag objects from a specified model into a working graphical diagram.

Software Requirement Specification

- The graphical editor consists of a graphical document editor which can be used to create new document, delete document, update or view the document

- The graphical document editor consists of many documents, where each document can be saved, opened, printed or create a new one.

- A document is made up of many sheets which can have graphics included in them.

- Sheets have multiple number of drawing objects, which can be created, grouped or formatted

- The programmer must provide implementations of functions that draw objects and their connections, as well as functions that add and remove connections. The latter function will be handled by a specific event listener. Any changes made in real-time to the underlying model will also be updated in the diagram through a seperate event listener.
- The user can also add and remove connection between these objects as needed using the palatte supplied, thus modifying the underlying model.
- Each sheet contains drawing objects, including tent, geometrical objects and groups. A group is simply a set of drawing objects.
- OA geometrical object includes circle, ellipse, rectangles, lines and squares, trapeziums which are identified by their respective constraints.