The Graphical User Interface (GUI) window allows for the creation and manipulation of UML graphical notation objects. The interface window is implemented within the “View.java” file. The “menu bar” and “left panel” attributes of the interface contain elements (buttons) that represent a desired action from the user. In addition, action events are generated when the user selects a previously created UML object in the “right panel” attribute. The interface detects action events and directs them into the controller for completion.

The controller is implemented in the “Controller.java” file. As events are passed in from the user interface, they are directed to their appropriate handler. If “Class” or “Comment” events are detected, they are directed to their own relevant subclasses to be created. If an event is detected to edit the text of a UML object in the right panel (currently only class boxes), the controller updates the lower section of the left panel to gather user input and then populates the object with new text. If the controller detects relationship events from the interface, they are passed to the “Relationship” subclass for creation.

All relationship actions are passed from the controller into the “Relationship.java” file. The appropriate relationship object is created between two-desired classes (currently only “Association” and “Generalization” relationships). However, if an action signal is received for a “Generalization” relationship, it is passed to its own subclass for creation. The controller will then update the right panel of the interface with the desired relationship between the selected class boxes.

All objects in the user interface window are accessible by mouse interaction. Mouse actions are passed from the interface window to the mouse listener, which is contained in the “MouseListener.java” file. This feature allows the user to relocate the UML objects to multiple positions in the right panel. The mouse listener updates the right panel accordingly as the user moves the desired object their mouse. Furthermore, the user is able to select UML objects in the right panel for editing and deletion purposes (currently only class and comment boxes).