# Bugs and annoyances

## **Editor**

* Lots of strange things go on with the tabs in the text window. Reload an algorithm and it appears on two tabs. A graph from a previous session is not reloaded, unlike an algorithm.
* Don’t appear to be able to select self-loops in the graph panel.
* Graphs are not saved unless the user’s focus is on the text window for the GraphML.

## Algorithm

* Comments that are not at the beginning might screw things up. This happened when I inserted a comment after the visit() function in dfs.alg
* It appears that imports for things such as Point are not automatically provided (because the developers did not anticipate positions being manipulated by an algorithm)

## Animation

* Should be a simple way to clean up pre-existing labels and weights or have the automatically cleaned up when the algorithm is done.
* I seem to have introduced a bug that keeps the user from moving a node while the algorithm is running. Oddly, you can move a vertex in the final state even if you have not exited from the animation.
* Sometimes, when nodes are moved (and the modification is not saved) between two executions of an algorithm, the second execution starts with a sequence of steps that replicate the movement. This is not a big deal since saving modifications appears to avoid this problem.

## Graph representation

* Node id’s are assigned by order of appearance rather than the id fields in the xml file. This makes for an inconsistency in the way edges are created. There are two ways to fix the problem:

1. don’t store id’s at all and just assign them when reading the graph
2. store id’s and use them consistently

The downside of (a) is that it’s hard to decipher the edges from looking at the file; the downside of (b) is that the reader has to do error checking on id’s and not allow them to change when editing from Galant. The current solution is really (a) with the added confusion of an id field that is ignored. The right, but nontrivial, way to do this is

* + read the id fields as given when reading opening a file that may or may not have been edited externally; do error checking
  + make the Galant graph editor smart in that it (i) keeps nodes sorted by id, and (ii) updates id’s for both nodes and edges if the user changes the order of the lines in the file; this approach also requires that id fields be read-only
* Default value for weight should be blank, not 0. Requires an extra check before doing a parseInt but well worth it.
* If weight is changed by direct typing instead of arrow keys, an unexpected exception occurs, but it’s possible to continue and type weights thereafter. This appears to be an intermittent problem.

## Input/output

* When the current state is exported to a file the export reflects the final state of the algorithm. Also the filename extension is gml.
* When you quit, there is no prompt to save anything (as opposed to when you close a tab).
* Graph is saved only if you’re in its text window.