

### 1. Choose your global settings.

Graphs can be directed, undirected, weighed, unweighted make sure to choose your graph type by using the checkboxes on the footer. This can be changed whenever you want. You can also change the global design of nodes and edges, for example the default node is black and has a white label. So, lets see how this looks like and get started with:

### 2. graph creation

To create a graph either right click and insert a node or go to the insert tab and select node. Now click wherever you like to insert a new node. You can see the mode you are in from the footer as well as a node counter.

But we know graphs also have edges, to add edges there are also two similar way. Right click on the first node then click on the second node to complete the edge. Depending on your graph type a modal will pop up. You can also click in edge from the insert tab now clicking on any two nodes will add an edge between them. If you click on a node but change your mind you can choose the option to reset the first node.

If you have a large graph this could take a long time, and chances are you have a common graph within your large graph, to speed up creation choose one of the common graphs. Let's select a clique, fill in the parameters and voila you have yourself a full graph. You can use this in a larger graph if you like and edit the edges just as you would normally.

### 3. Graph editing

Nodes and edges you add can be by clicking on what you want to edit then navigate to the design tab. Make sure "Selected Node" is chosen to edit the selected node, if you selected an edge it would say "Selected Edge". You can select many nodes and edges by holding ctrl/cmd or by holding down the right click and creating a selection rectangle. Now you see both options to choose from. There are many different options to explore within the design tab. Another way to open the design tab is to right click and choose edit.

### 4. Graph deleting

If you ever make a mistake when creating your graph, you can always delete nodes, and edges. You can do this by selecting what you want to delete and pressing delete, backspace, or right click and delete. Or click the trash can in the design tab.

### 5. Graph searching

Have a large graph all over the place, you can zoom in and out using your mouse wheel, by right clicking or from the view tab. If your still lost, you can search for the node you need and constrict your search using the filter button.

### 6. Running Algorithm

You have your graph now you want to run an algorithm, go to the home tab and choose any algorithm available some algorithms will not be available depending on the graph type. Follow the instructions given to you and voila the algorithm is complete. In this state you cannot edit or delete you graph; this is just for you to visualize. To go back to editing either right click and choose to stop algorithm or click stop from the home tab. You will get the option to save your graph changes to your original graph if you like the way it looks now.

## 7. Graph saving/opening.

If you're finished with graphanatic for the day but would like to continue your work in the future, you can save your graph as .phanatic file, then open the file by clicking the open button. It will ask if you want to overwrite or open with the current graph. Choose your preference, note that if you choose to open together the graph options will not be changed. That means the global options will stay as they currently are.

You can also save your graph as an SVG to view as an image, save it as a full view of the graph or just screen view of your graph.

Start graphing now!