MapJVM process

User opens jar file and can choose either help or connect.

Help pops up a window and describes how to retrieve name of a running jdi.

Connecting to a jdi through a user prompt will start our process.

First, we need to loop through the variables received from the jdi and create this graph in a StringMap.

A StringMap is a tree of strings that also includes additional dependencies for relationships that make the tree hard to draw. For example in the tree

Main  
BST A BST B

Main connects to both BSTs but if B is a child of a, we also have to acknowledge that relationship in our output. The algorithm to use would be a depth first search creating a tree and once a node that was already added to the tree is encountered then that dependency will be added as an additional dependency in the StringMap. In the example above, main would have two children A and B and A would then have a child of B. Since we have already found B, the additional relationship A to B will be added. The purpose of this is to show all possible relationships, considering some might not be in graph form.

The String Map is converted into a mirror GraphicsMap which calculates its own coordinates and draws them to the canvas.