

An offline Java API documentation.

Create a new IDE based on BlueJ with java code support, i.e. make it so blue-j can compile and run another code like: c++, c#, php, python, sql, html, ruby, GLSL, ext..

Refactor option i.e. notify options to let user know things are too complex(or large) like methods, classes, parameters in a method, variable names, ext...

Virtual display of what's going on under the hood when running a java program, to help new java programmers see more accurately what the computer sees when executing their code.

i.e.: display of the heap and the objects that are on it, the pointers to the heap objects, the stack and the current point of execution, the current variables and their values, what the garbage collector is doing, ext...

(My favorite just cause it sounds cool for new learners to see in action)

Updated UI, make it so the main screen in blue-j displays more information about the classes like variables within them and their interaction, maybe even a show the variables and inner methods as their own nodes in the class nodes.

Graphical programming extension(new idea, might be too complex), make the entire program representative via drag and drop graphics where in theory a whole program could be created via visual nodes without ever writing a piece of code.

J Unit starter, extension that analyses a piece of code and produces some basic stating j-unit test for it.

J Unit statistics, a UI that shows some percentages of success and fails, what data causes the fails, the segment of code the fail occurred ext.

JLWGL integration into blue-j

Blue J tutor, something that will iterate over some code and translate it to English for the user to better understand ie: at a for loop the tutor may say:

"the program is going to sum up a new variable i to 10 and each time it's going to print hello on the display." kind of like the paperclip in ms word.

Android Cell phone exporter, takes a segment of code and automatically wraps it with the necessary code to be used on a android phone.

svn/github support, have it so the extension can automatically commit/checkout some code directly from blue j.

Change logs, have the extension remember changes to the code and the time of change (regardless of blue j being closed in-between) kind of like a mini one person github/svn.

Method executor, extension that allows the user to just execute a highlighted method with its variables(parameters, global variables and object variables) specified by the user and allow them so see the local/object/global variable results and return values.

Big O analyzer(yes I said it), extension that will scan a segment of code with a defined calculation to test by, like a Boolean comparison for searching, and determine its Big O performance.

Multi Thread aid: extension that shows what threads have control of what object locks at what time during execution.