## CS 116 - Lab Guidelines

You're coding and you have a weird error message or your program is producing strange results. What should you do???

Take a deep breath. Mistakes are all part of the process and are actually a great way to learn. Here are some guidelines which will help you to do just that.

1. Don't try to write your entire assignment code to completion before testing it.

Write a chunk of code and try it out. If it does what you expect then great! If not, then get it working before moving on. Then when you have an error later on, you can most likely rule out this chunk as the culprit.

2. Don't copy code from the textbook or an online source.

I see it all the time – students trying to cobble together a solution from bits and pieces they find elsewhere. Most of the time the result is some Frankenstein's monster and is almost impossible to get it working because you don't really know how all the pieces work. It is fine to look at examples in the text for inspiration but close that book when you code.

3. Use the online documentation.

There is no reason to memorize all the details. I will show you in class how to read and use the online Java documentation and you will be able to use this source for all your quizzes and tests too!

4. Read the error messages.

They may look cryptic at first but they really are giving you a clue as to what you did wrong. They will tell you the line where the error occurred but your error might actually be sneaking around in a line **before** that point. Once you figure out the error, remember that error message because you will probably see it again and now you know what it means!

5. Don't make changes to your code blindly in order to fix an error.

You might actually be changing code that works instead of fixing the error! You need to be a bit of a sleuth to find the error. It is fine to change a little bit of code as a test, but if this doesn't work then be sure to change it back. I often use "comments" where you can remove code from the program but leave it in the file so that you can easily change it back if you have to do so.

## 6. Talk to other people.

We all make tons of errors when we code because those computers are so darn picky about the instructions we have to give them. There is a reason I pair you up for the labs, because two heads are better than one. Share your knowledge of past mistakes with your fellow students. May be someone else has seen this error message. Don't forget that I am a resource and I have made and seen tons of errors so I can point the way.