Week 5 Research

Kevin Mcaleer

In Java, there are causes and needs to break up the work you've performed. The idea is that if a problem will occur, it is better to insert an exception instead of letting the program run unchecked, or crash. "An exception is an event". This is any manner of error that stops the proper execution of the code. The call stack is the runtime system's default way of dealing with the problem. This is a hierarchy of code that will be searched for the proper response to manage the exception.

There are two primary responses to dealing with these exceptions. The checked exception occurs at compilation, the unchecked exception occurs further down the line at execution. The checked exception is one of two types called fully or partially checked. A fully checked exception is fully checked, but a partially checked exception leaves child classes without being fully checked. An unchecked exception occurs during runtime and covers everything the covered exception does not. The simplest way to understand an unchecked exception in java is a mathematical error.

Unit testing is the baseline of testing. This is testing to ensure there are no errors in the program, which involves executing segments of the code to make sure they all run properly. This is the simplest and earliest form of testing, and allows the author a better understanding of what exactly is occurring, allowing for a better implementation of said code. Fixing small details, and ensuring all the little parts run helps write descriptive comments, or adapt what's being utilized elsewhere in addition. Using a magnifying glass on each piece of data can be tedious but the thoroughness prevents simple or stupid errors, while developing a mastery and better understanding over each individual subject.

Sources

1. https://docs.oracle.com/javase/tutorial/essential/exceptions/definition.html#:~:text=Definition%3A%20An%20exception%20is%20an,off%20to%20the%20runtime%20system.
2. https://www.geeksforgeeks.org/checked-vs-unchecked-exceptions-in-java/
3. https://www.javatpoint.com/unit-testing