What does the Java assert keyword do, and when should it be used?

<https://stackoverflow.com/questions/2758224/what-does-the-java-assert-keyword-do-and-when-should-it-be-used>

Assertions (by way of the assert keyword) were added in Java 1.4. They are used to verify the correctness of an invariant in the code. They should never be triggered in production code, and are indicative of a bug or misuse of a code path. They can be activated at run-time by way of the -ea or -enableassertions option on the java command, but are not turned on by default.

Assertions are a development-phase tool to catch bugs in your code. They're designed to be easily removed, so they won't exist in production code. So assertions are not part of the "solution" that you deliver to the customer. They're internal checks to make sure that the assumptions you're making are correct.

public static boolean compare(final Object thisValue, final Object otherValue) {

boolean result;

if (thisValue == null) {

result = otherValue == null;

assert otherValue == null || otherValue.equals(null) == false;

} else {

result = otherValue != null && thisValue.equals(otherValue);

assert thisValue.equals(null) == false;

}

return result;

}