

Code Review | Coursera

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Code Review

Another technique to increase your confidence in the correctness of your program is a *code review*. In a code review, another skilled programmer reviews the code you have written, looking for mistakes you might have made. Such a review is another way to address the “how to test for problems you did not think of” problem—the reviewer brings a fresh perspective to the code and may identify areas of concern you did not think about. Code reviews have one nice advantage over other forms of testing: often when your reviewer identifies a problem, she can propose steps towards fixing it.

One form of code review is a *code walk-through* in which the programmer explains the algorithm and code to the reviewer. Typically, the reviewer is familiar with the problem and algorithm required to solve it, so the walk-through focuses on the code itself. The programmer goes line-by-line through the code, explaining to the reviewer what each line does, and why it is there. If the reviewer is not familiar with the problem/algorithm, the walk-through process may start with the programmer walking the reviewer through earlier steps of the programming process—possibly even starting from Step 1: Work an instance of the problem yourself.