Code Check List for Effective Personal Reviews and Formal Inspections
W.L.Honig
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A basic check list for code. Your team can extend if appropriate and necessary for your quality
plan goals. Keep your checklists under configuration control and be sure all use the "latest" one.

Style Guide Defects (Style Defects may be minor or major)
1. Check everything in the style guide!
(many of these not only improve readability but also find or lessen chance of bugs if used
properly!)
   - In this version of our final project, there are no style guide defects that I can see or point
     out.

Possible Defects
1. Are size and bounds checks carried out when and where necessary? (a good practice is to
   use inclusive lower limits and exclusive upper limits)
   - Yes, size and bounds checks are carried out when and where they are necessary
2. Is there ever any mismatch between the units of an expression and those of a variable? (feet
   to meters)
   - No, there are no mismatches between the units of an expression and those of a variable.
3. Are number variables appropriate maximum size? (int, double, etc.)
   Yes, the number variables for each data type is appropriate.
4. Are array, buffer, table (etc.) sizes appropriate? (Too little or too big, both bad)
   - Yes, array sizes are appropriate. None are too large or too small.
5. Are equality tests used on floating point numbers? (Always bad)
   - No there were never any equality tests done using floating point numbers.
6. When testing for errors, could the "error condition" actually be legitimate in some cases?
   - No test errors seen in this final cycle so no error condition
7. Are exceptions declared, thrown and handled correctly?
   - Yes all exceptions are declared, thrown, and handled correctly.
8. Is every function call the correct function? (Not a similarly named function)
   - Yes every function call that is in this final cycle is correct and functions as expected.
9. Are preconditions checked before a function call (if necessary)?
   - Yes, preconditions are checked before a function call when it is necessary.
10. Are postconditions ensured at the time of every possible function return point?
    - Yes, all postconditions are ensured and each function returns the expected type.
11. Are files and other resources closed in all possible exits?
    - Yes, all files and other resources are closed in all possible exits.

Note:
Studies have shown that the most acceptable forms of for loops (to avoid off-by-one errors) are
these:

```
for ( i = 0; i <= max_index; ++i )
for ( i = 0; i < sizeof(array); ++i )
for ( i = max_index; i >= 0; --i )
for ( i = max_index; i; --i )
```