

| Chapter/Page/Line | Original Text | Change To |
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| Ch 3, p 43, line 16-17 | The period of a pendulum's swing depends on the weight of the pendulum and its length | The period of a pendulum's swing depends on its length |
| Ch 4, p 73, line 2 | The controlled statement on line 5 ... | The controlled statement <u>result = result + s[i];</u> on <u>the fifth line</u> ... |
| Ch 4, p 73, line 22 | <u>...compiler to call result's move constructor instead of its copy constructor.</u> | <u>...compiler to call result's move assignment operator.</u> |
| Ch 4, p 85, line 16 | ...(iterators, indexing, C-string access, simplicity)... | ...(iterators, indexing, C-string access, <u>value semantics</u> , simplicity)... |
| Ch 6, p 123, line 22: | cyclenode fourth = { "4", &first }; | cyclenode fourth = { "4", &first }; <i>Right parenthesis should be right curly brace.</i> |
| Ch 6, p 125, line 13 | ...that knows <u>which of the two ways the shared pointer was constructed.</u> | ...that knows <u>whether the sharred object and reference count were allocated as one object or two.</u> |
| Ch 7, p 152, line 6-7 | char* s = "sample data with spaces"; ... | Remove lines |
| Ch 7, p 152, line 13-14 | char* s = "sample data with spaces"; ... | Remove lines |
| Ch 7, p 152, line 23-29 | char* s = "sample data with spaces"; size_t i; ... for (i = 0; i < strlen(s); ++i) if (s[i] == ' ') strcpy(&s[i], &s[i+1]); // remove space s[i] = '\0'; | for (size_t i = 0; i <= strlen(s); ++i) if (s[i] == ' ') strcpy(&s[i], &s[i+1]); // copy string tail over space |
| Ch 7, p 152, line 33-35 | (The repeated call to strlen() is not the only thing less than optimal about this function. Other optimizations are left as an exercise.) | (The repeated call to strlen() is not the only thing <u>wrong with</u> this function. Other <u>improvements</u> are left as an exercise.) |
| Ch 7, p 153, line 2 | In <u>Example 7-8</u> , the function strlen() is a pure function. | In <u>Examples 7-7 and 7-8</u> , the function strlen() is a pure function. |
| Ch 7, p 153, lines 2-3 | In <u>the first loop</u> , its argument | In <u>Example 7-7</u> , its argument s |

| Chapter/Page/Line | Original Text | Change To |
|-------------------------|---|--|
| | s is never modified by the loop, so the call to strlen() is loop-invariant. In <u>the second loop</u> , the call to strcpy() modifies s, so the call strlen(s) is not loop-invariant. | is never modified by the loop, so the call to strlen() is loop-invariant, <u>and can be pulled out of the loop</u> . In <u>Example 7-8</u> , the call to strcpy() modifies s, so the call strlen(s) is not loop-invariant. |
| Ch 7, p 166, line 33 | To implement polymorphic behavior,... | To implement polymorphic behavior <u>in a C++ program</u> , a base class defines... |
| Ch 7, p 166, line 34-36 | A base class <i>defines</i> the interface by declaring a set of pure virtual functions (functions with declarations, but no function body). Because pure virtual functions have no body , C++ prevents the interface base class from being instantiated. Derived classes <i>implement</i> the interface by providing overrides (definitions)... | A base class <i>defines</i> the interface by declaring a set of pure virtual functions. C++ prevents the interface base class from being instantiated. Derived classes <i>implement</i> the interface by providing overrides (declarations and definitions)... |
| Ch 7, p 177, line 13 | ...the integer expression $x*4$ can be recoded more efficiently as $x<<2$. | ...the integer expression <u>$x*8$</u> can be recoded more efficiently as <u>$x<<3$</u> , because <u>8 is 2^3</u> , and because <u>shifting left k bits is equivalent to multiplying by 2^k</u> . |
| Ch 7, p 177, line 17-20 | <u>If one argument or the other can be modified to provide the exponent rather than the power of two value, the developer can...</u> | <u>If the developer can modify the program to provide the exponent k rather than 2^k, he can...</u> |
| Ch 9, p 217, line 12 | that matched <u>key</u> . “key” is in typewriter font | that matched <u>value</u> . “value” is in typewriter font |
| Ch 9, p 222, line 14-15 | Of course, with operator size_t() hijacked for this use, it isn't available to return the size of a charbuf. The expression sizeof(charbuf) will return very misleading data. | |
| Ch 9, p 225, line 11-13 | if (key[0] < 'a' key[0] > 'z') — return 0; return (key[0] - 'a'); | <u>return key[0] % 26;</u> |
| Ch 9, p 225, line 21-22 | This is defensive programming to prevent accessing undefined storage in case the key was something like “@#%”. | |
| Ch 10, p 252, line 9 | The storage allocated for each <u>list item</u> is... | The storage allocated for each <u>item in the map</u> is... |
| Ch 10, p 254, line 16 | // key not found path | // key <u>inserted</u> path |

| Chapter/Page/Line | Original Text | Change To |
|--------------------------|--|--|
| Ch 10, p 254, line 24 | ... found and false if it was inserted . | ... <u>inserted</u> and false if it was <u>found</u> . |
| Ch 10, p 254, line 35 | ... lower_bound() for a C++98-style hint, or upper_bound() ... | ... <u>upper_bound()</u> for a C++98-style hint, or <u>lower_bound()</u> ... |
| Ch 10, p 254, line 36 | ...whose key is <u>less</u> ... | ...whose key is <u>not less</u> ... |
| Ch 10, p 256, line 8-9 | ...the items returned by lookup are const. | ...the items returned by lookup are const <u>in an std::set</u> . |
| Ch 11, p 271, line 18 | Example 11-7 is a version of <u>stream_read_string()</u> ... | Example 11-7 is a version of <u>stream_read_string_reserve()</u> ... |
| Ch 12, p 300, line 15 | std::cout << "total items consumed " << counter << std::endl; | std::cout << "total items produced " << counter << std::endl; |
| Ch 12, p 318, line 1 | The disk drive can only be... | The disk drive's <u>read head</u> can only be... |
| Ch 13, p 338, line 37-38 | block_arena is a fixed pool of memory that can be allocated by block_manager. | <u>fixed_arena_controller provides a single static block of memory from which fixed-size nodes can be allocated.</u> |
| Ch 13, p 346, line 36-37 | The default constructor is typically empty in stateless constructors ... | The default constructor is typically empty in stateless <u>allocators</u> ... |