Errata

Hey, nobody's perfect. Here are the errors that I and others have found so far. If you have mistakes, questions, or comments about the book, please feel free to write me at wolf@princeton.edu.

Chapter 1

p. 25: "pixel pixelval(pixel " -> "pixeltype pixel("pixeltype". "void set_pixel(pixel " -> "void set_pixel(pixeltype".

p. 25: C++ reference should be to Stroustrup's book, not Kernighan.

p. 26: "pixel 1_pixels" -> "pixeltype d1_pixels".

Figure 1-9 (p. 29): contains relationship should have a ball on the message end.

Figure 1-13 (p. 32): "m: Menu" -> "u: Menu"; "which_menu(x,y,i)" should be "which_menu(i).

Figure 1-14 (p. 33): The message is shown with the first bit on the right-hand end of the message, not on the left-hand end.

p. 37: "The Transmitter class contains analog electronics" -> "The Transmitter class interfaces to analog electronics".

Figure 1-19 (p. 40): Behavior in Detector* class should be "<integer>read-bit()".

Figure 1-26 (p. 44): First action after start should be "panel*:read-knob()".

Q1-9 (p. 55): "receive-message" -> "receive-command"; receive-command() is shown in Figure 1-28.

p. 66 (Example 2-1): NZCV should be 1001.

Chapter 2

p. 71: "LDR r2,x ; get value of c" -> "LDR r2,[r4]; get value of c".

p. 74: "if (a > b) {" -> "if (a < b) {

p. 75: "ADD r0,r0,r1 ; compute a + b" -> "ADD r0,r0,r1 ; compute c + d".
"SUB r0,r0,r1 ; compute a - b" -> "SUB r0,r0,r1 ; compute c - d".

p. 76: "ADDLT r0,r0,r1 ; compute a + b" -> "ADDLT r0,r0,r1 ; compute c + d".
"SUBGE r0,r0,r1 ; compute a - b" -> "SUBGE r0,r0,r1 ; compute c - d",
p. 82: ARM code should be

```
ldr r0,[r13]
str r14,[r13]!
str r0,[r13]!
bl f2
sub r13,#4
```

```
p. 84: "ASTAT1" -> "ASTAT"
```

```
p. 92: "SUB R3 = R3 - R2" -> "R3 = R3 - R2;".
```

**Chapter 3**

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p. 109: All assembly statements should end in a semicolon. "R1 = DM(i0" -> "R1 = DM(I0".
```

```
p. 116: nchar() should be

```
if (buf_tail >= buf_head) return buf_tail-buf_head;
else return BUF_SIZE + buf_tail - buf_head;
```

```
Figure 3-6 (p. 124): The activities on :CPU and :Device show when, for example, an interrupt request is received. The CPU does not send an interrupt request.
```

```
p. 133: hit rate formula should be

```
h = h1 * tL1 + (h2-h1)tL2 + (1-h2)tMain
```

```
p. 147: "DM(i8" -> "DM(I8"
```

```
p. 161: "The class's buffer and current-bit attributes" -> "The class's buffer and current-bit behaviors"
```

```
p. 169: "data_buffer& fullbuf" -> "data_buffer *fullbuf"
```

**Chapter 4**

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p. 229: "testing software in Section" -> "testing software in Section 5.9"
```

**Chapter 5**

```
Figure 5-5 (p. 254): Add an arrow from x1 to d.
```
p. 303: "replaces a[0]" -> "replaces a[0][0]". "repeats itself at a[0][4]" -> "repeats itself at a[1][0]".

Figure 5-32 (p. 321): should be no def-use pair to the left-hand side of a = a->next.

p. 329: Header should be "5.10 Design Example: Software Modem"

Chapter 6

Figure 6-2 (p. 347): Coroutine 1 should use "ADR r14" everywhere, not "ADR r13".

Questions Q6-17, Q6-18, Q6-19, Q6-20, Q6-21, Q6-22, Q6-23, Q6-25, Q6-26: in all these problems, processes are periodic with periods equal to their deadlines.

Chapter 7

p. 439: "search[i-ox+XCENTER][i-oy..." -> "search[i-ox+XCENTER][j-oy...".

Chapter 8

EQ 8-2 (p. 476): Should be "ty = td + tm".

Figure 8-30 (p. 490): Link between Floor and Controller should have quantity 1 on Controller end.

Figure 8-31 (p. 490): "elevator-positions[H][F]" -> "elevator-positions[1..H][1..F]".

Figure 8-32 (p. 491): "request-lights[F]" -> "request-lights[1..F]".

Figure 8-33 (p. 491): "car-floor[H]" -> "car-floor[1..H]". "emergency-stop[H]" -> "emergency-stop[1..H]".

Chapter 9

Figure 9-8 (p. 511): Traditional state transition diagram should have edges from s1-4 and s2-3 to s5, activated by r.

p. 523: "low probabilities were to certain errors" -> "low probabilities were ASSIGNED to certain errors".