

How to use the Rubber Duck Method

What it is

Explain your problem out loud or in writing, step by step, to an imaginary listener, and the fix often shows up before you finish.

Programmers keep a rubber duck on the desk and explain their code to it line by line. Forced to explain clearly, the bug usually becomes obvious.

When to use it

When you're stuck on a problem and can't tell what's actually wrong.

Steps

1. **State the problem simply.** Explain it as if the listener knows nothing about it.
2. **Walk through it step by step.** Write out what each part is supposed to do, in order.
3. **Notice where you hesitate.** Wherever you pause or skip a step is usually where the real problem is.

Common mistake

Explaining it in your head instead of out loud or on paper. Forming full sentences is what surfaces the gap.

Pairs with

First Principles Thinking and the 5 Whys.

Example: a budget spreadsheet that's off by \$200 Page 2 of 3 Thu, Feb 8

The problem, in plain words

My monthly budget spreadsheet total is off by 200 dollars

Walk through it, step by step

- 1 *Add up every expense row in column B*
 - 2 *That total should match cell B20*
 - 3 *Row 14 is rent, paid from a different account*
 - 4 *Row 14 might be getting counted twice*
 - 5 *Check the formula's cell range in B20*
 - 6 *The range starts at row 1, not row 2*
 - 7 *Row 1 is the header labeled Amount, not a number*
 - 8 *Found it, right there*
 - 9
 - 10
 - 11
 - 12
-

Where I hesitated or skipped something

I paused right at step 6 when I looked at the range

What I realized: *The SUM formula's range included the header row by mistake*

Rubber Duck Written Walkthrough

Date: _____

The problem, in plain words

Walk through it, step by step

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____
- 11 _____
- 12 _____

Where I hesitated or skipped something

What I realized: _____