

A photograph of a control room. In the foreground, there is a wooden desk with a white chair. The desk has some papers on it. The background is a wall covered with various control panels, including dials, switches, and small monitors. The room appears to be from a past era, possibly a power plant or a factory.

Coding Fun: Only Exceptions for Control Flow

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Peter Kofler

- Ph.D. (Appl. Math.)
- Professional Software Developer (25 years)
- “fanatic about code quality” (20 years)
- Technical Agile Coach/Mentor (10 years)



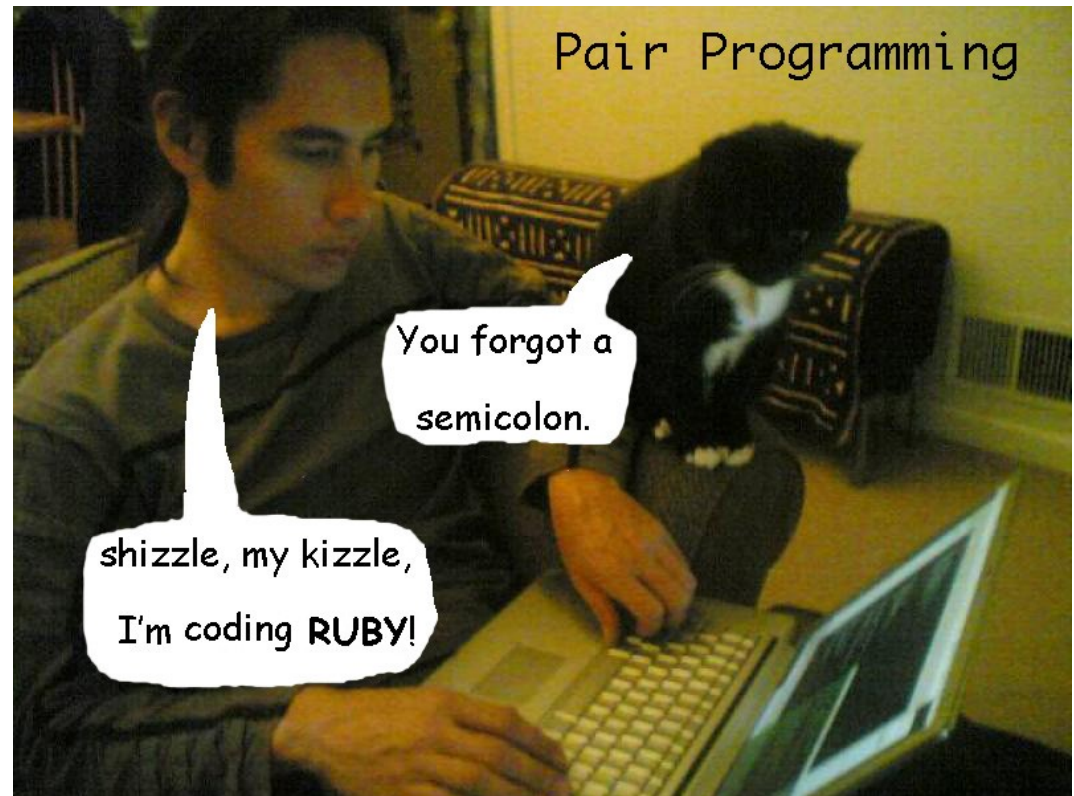
I help development teams with

- Professionalism
- Quality and Productivity
- Continuous Improvement



Mentoring

- Pair Programming
- Programming Workshops
- Deliberate Practice, e.g. Coding Dojos



Developing Quality Software Developers



Only Exceptions for Control Flow



Constraint: Only Exceptions ...

- To change the control flow use exceptions.
- No `if`, `while`, `for`, ternary operator.
- No `Stream`, `map`, `filter`.
- No function lookup or array of functions.
- (Easier) It is allowed to use a single `if` to raise an exception in a “library” function.
- (Bonus) Make the code readable.

Warning

- Anti Pattern!
- Basically a GOTO
- Makes code hard to understand.
- Performance is bad
- We are just playing...



Assignment



ROT-13 (“Encryption”)

Write a function that “encrypts” using ROT-13:

- Each letter is replaced with one 13 added in the alphabet.
- At the end of the alphabet, it continues at the beginning.
- Lowercase letters are first changed to uppercase letters.
- Characters that are not letters are not encrypted.
- Umlauts are letter combinations for encoding (Ä → AE ...)
- Example: Hello, World -> URYYB, JBEYQ (“e” gets “R” ...)
- Variation #1: Make the offset (here: 13) customizable.

Hands On!



→ Coding

Closing Circle

- How did it work out?
- How do you feel?
- What did you learn and want to share with the group?





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