



# Formation Day

**Daniel Tomko — Microsoft**

Your job as an engineer is to find solutions, not to know solutions.

## ENGINEERING METHOD

Checklist:

People generally made mistakes due to pressure. Do they have mechanisms that they can make sure to make forward progress when the pressure is on?

TWO MISTAKES:

- 1. Start writing code too soon.**

Divides engineering process into discrete phases. Sets up critical decision points for are you ready to move on.

By the time you're ready to code, you've already figured out the solution, so you can focus on the craft of writing code.

Watching a really *fluent* coder write an algorithm: sketches it out piece-meal and filling in the details like a painter.

### **STEP ONE.** Thoroughly understand the problem.

- Chance to ask questions to interviewer. Make sure you're not making any assumptions.
- Edge cases

How do you know when you've understood the problem enough? No ambiguity: edge cases, pitfalls, know the things that algorithm is going to have to account for.

Biggest problem here is that their idea for a possible solution looks a lot like good. Don't express those ideas in terms of pseudocode. Because if your idea looks too much like code, when you write the real code, you might miss things because they are so similar.