# REACTO

(Whiteboard) problem solving technique

#### LOGISTICS

#### (every morning 8:30-9:30am)

- Random weekly pairs of 'interviewer' and 'candidate'
- Interviewers study problem night before
- Fellow presents problem to interviewers
  15 min
- "Interview" time30 min
- Optional review

### WHITEBOARD

- Technical interviews often involve a whiteboard
- Why?



Identify the problem

- Identify the problem
- Brainstorm solutions

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- Implement one

- Identify the problem
- Brainstorm solutions
- Implement one
- Evaluate it

Repeat

Examples

Approach

Code

Test

Optimize

Repeat

Examples

Approach

Notice how far down this is

Code

Test

Optimize

#### REPEAT

- Restate in your own words (diagram if useful)
- Or ask questions
- Keep going until you understand the problem
- Leads very naturally into...

#### EXAMPLES

- Representative input and output
- Consider edge cases
- Consider errors
- Write them down

#### APPROACH

- Come up with at least one conceptual solution
  - identify pros and cons
  - make simple, broad optimization choices here
- Don't code!
- Show you can communicate
- Use this time to plan (crucial)

### CODE

- Start at top left
- Write small
- Minimal indenting
- Minimal line spacing
- Breadth first

# TEST

- Use Examples
- Be the machine
- Leads into...

#### OPTIMIZE

- How is it now?
- Count the steps (maybe during Tests)
- Count the "space"
- Convert to big O
- How could it be more optimal?

# FINAL THOUGHTS

- Think of the interviewer as a collaborator
- Enjoy it!