(St)art of Engineering

Conclusion

- Socratic
- Listen then communicate
- Keep Learning

Disclaimer

- Software Developer
- Not familiar with other engineering disciplines

Socratic Method

- Questions for clarification
- Questions that challenge assumptions
- Questions that challenge evidence
- Questions about perspectives
- Questions that challenge consequences or benefits
- Questions about the question

6 Hats

- Blue – top level view, consensus on the main question(s)
- Red – emotions, feelings, biases all shared <u>without</u> judgment
- White – facts
- Green – solutions
  - Yellow – good about each solution
  - Black – bad about each solution

What is the big deal?

- "Art is kinda boring and has nothing to do with code"
- Architect story
- Technical skills don't get jobs, technical skills get interviews
- Technical skills don't get promotions, technical skills get consideration
- Career paths:
  - Head Engineer – need "soft skills"
  - Management – need "soft skills"

All careers have a creative component

"Software is the only art form not limited by the laws of physics."
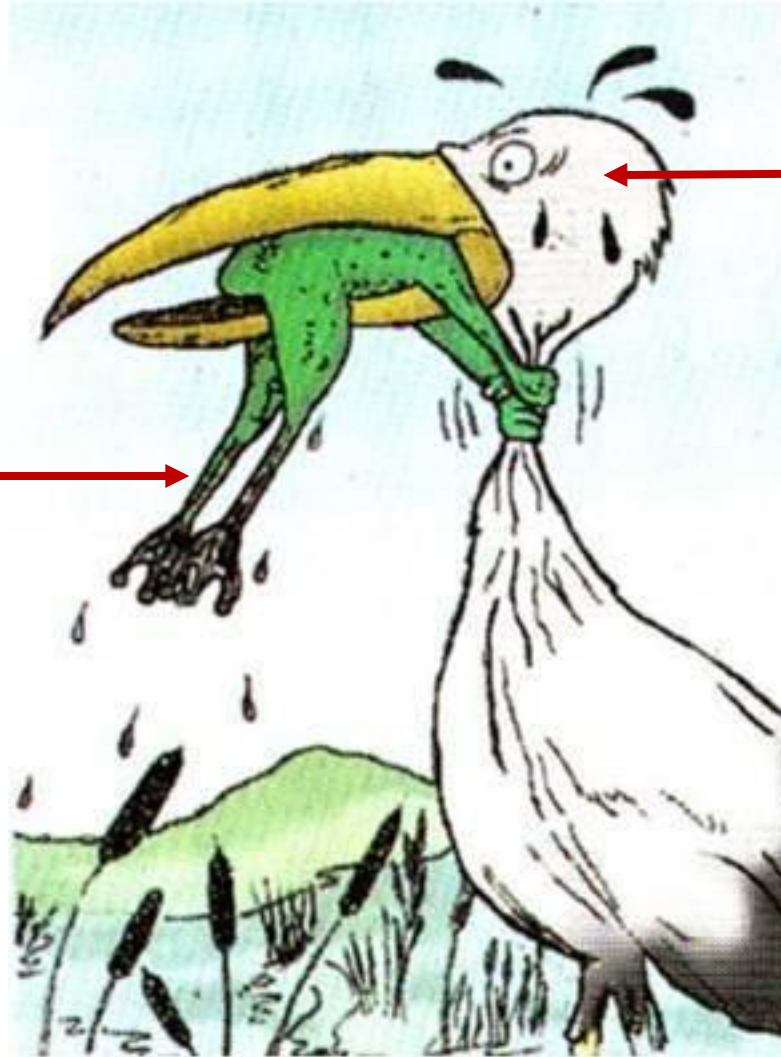-Anonymous (maybe Aaron)-

Play-Doh by Jeff Koons

When does a couch become a piece of art?

Engineering is a craft

- Technical skills are the hammer and chisel
- "This code is ugly"
- Need to sell product
- Communication is key

Marketing

Engineering

NEW YORK POST

Volkswagen exec blames rogue engineers for emissions scandal

By Associated Press   October 8, 2015 | 5:15pm

Volkswagen CEO testifies before the House Committee on Energy and Commerce Subcommittee on Oversight and Investigations on the Volkswagen emissions cheating scandal on Oct. 8.

Photo: Getty Images

"To my understanding this was not a corporate decision, this was something individuals did," Horn said, adding that he felt personally deceived.

"A clever person solves a problem.
A wise person avoids it."
                    -Albert Einstein-

"The most important skill in acting is listening."

-Al Pacino-

Lessons in Listening

- Listen to customers

- Understand scope

- Get to heart of issue

- Adjust to what is important

- Listen to managers, testers, other teams, etc.

Truth

- Investigative journalist
- Discover truth, don't try to create it
- If you don't know your customers → no one wants what you built
- Emotions become tightly coupled with the truth

"The person who knows HOW will always have a job. The person who knows WHY will always be his boss."
-Diane Ravitch-

Job Candidates

- No technical skill, no job

- Two sliders

- Non-technical skills
  - Effective communication
  - Proactive, ask tough questions
  - Transparency
  - Coachable
  - Team mindset
  - No ego

"If you can't explain it simply, you don't understand it well enough."
-Albert Einstein-

"Everyone lives by selling something."
-Robert Louis Stevenson-

Keep Learning

- Every 3 years, completely different

- Stay sharp – career insurance

- In an interview "I don't know ~~but I can search for that~~."

- Not a 40-hour week job

Balance

- Don't burn out
- Have outlets (family, friends, hobbies, side projects, etc.)
- Marathon
- Have fun!!!

Network

Requirements:

- Meet at least two new people

- Sell yourself (major, goals, etc.)

- Exchange contact information (email, LinkedIn, etc.)

Conclusion

- Socratic
- Communicate
- Keep Learning

Q & A