Learning Effectively:

The Bigger Picture



- · Your goal is to architect and build systems
- · Think about the data flow through your entire system
- · Nothing exists in isolation
 - · Services interconnect
 - · Your system interacts with other systems
- · Change over time is a key dimension in all tradeoff decisions
 - A "perfect" system that cannot be changed is fundamentally broken, because the context around that system *will* eventually change
 - · Technical debt

Asking Questions Techniques



- · Elaborative Interrogation
- Uses questions like "Why?" and "How?" to understand the meaning of the information to be learned.
- · Socratic Method
 - Based on asking and answering questions to stimulate critical thinking and to draw out ideas and underlying presumptions.
- · Five Whys
 - Used to learn the root cause of a defect or problem by repeating the question "Why?" Each answer forms the basis of the next question.

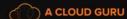
More Techniques Mnemonics



A CLOUD GURU

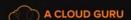
- · Really only good for memorization, naturally
- $\boldsymbol{\cdot}\,$ But a few things do need to be memorized
 - · DIRT MCG (or the new DR MC GIFT PX)

Overview



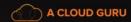
- · Often used for personal goals, but can be used for learning
- · Uses your brain's visuospatial thinking ability (which everyone has)
- · Leverages human tendency to remember our experiences

What is PDCA?



- · Plan
- · Plan what you're going to do to learn some material
- · Do
 - · Do what you planned; set about actually learning it
- Check
- · Check how well that plan worked-both how easy and how effective it was
- · Adjust (or Act)
 - $\boldsymbol{\cdot}$ Adjust your plan for future learning, emphasizing techniques that worked well

Triage



- · Time is your most constrained resource
- · Remember to consider ROI of your time
 - · So focus on what matters most
- · But remember to build a strong mental model
 - · So generalize
- \cdot Given the contention, err on the side of learning too much than not enough
- · And keep checking whether that was valuable