

How To Talk Technical

Without Talking Technical

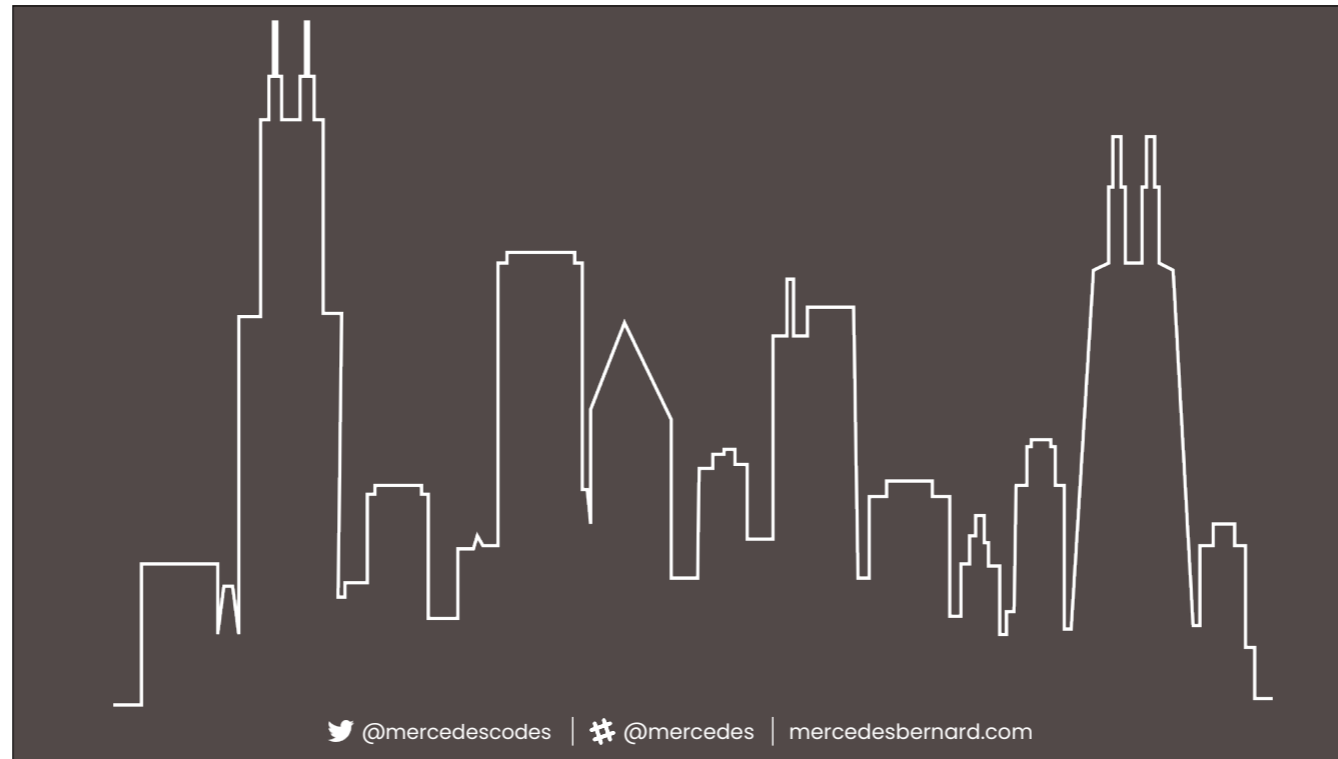
 @mercedescodes |  @mercedes | mercedesbernard.com

We've all been there.

We need to persuade our manager to give us time to build a proof of concept for why we should migrate our front end from Angular to React.

Or we need to explain to our client why we want to break apart their monolithic application and use microservices for their real-time notifications.

Or we just graduated from school and were never taught how to explain these concepts and someone just asked us what an API is.



My name is Mercedes Bernard and I've been a consultant for 7-ish years. I enjoy variety and working with clients to help them understand and get excited about what we're building.

Goals

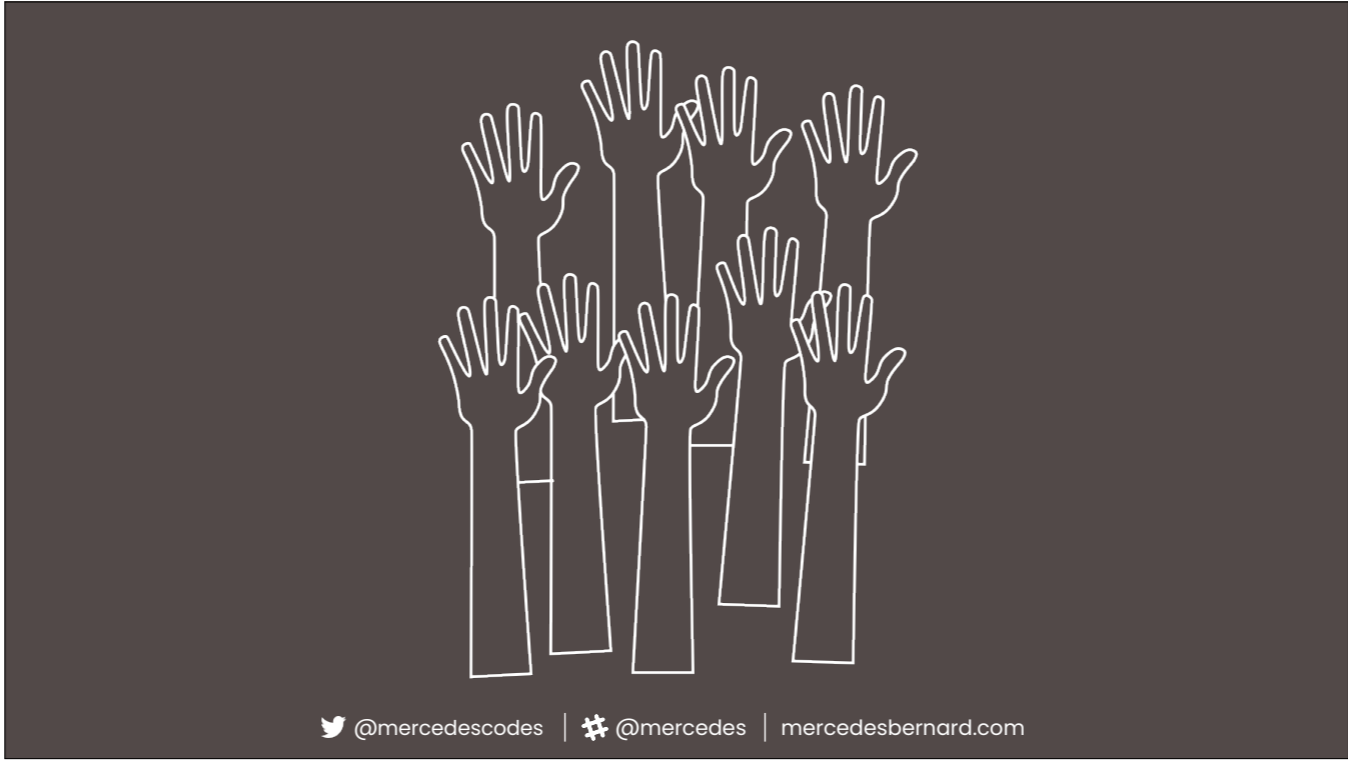
- Provide techniques for conveying complex technical concepts to non-technical audiences **in a way they understand**

Goals

- Practice these techniques

Goals

- Increase confidence in technical communication



Consultant? Product or internal development?
Individual contributor? Manager?



 @mercedescodes |  @mercedes | mercedesbernard.com

1 min

Write down an idea you recently
advocated for

 @mercedescodes |  @mercedes | mercedesbernard.com

1 min

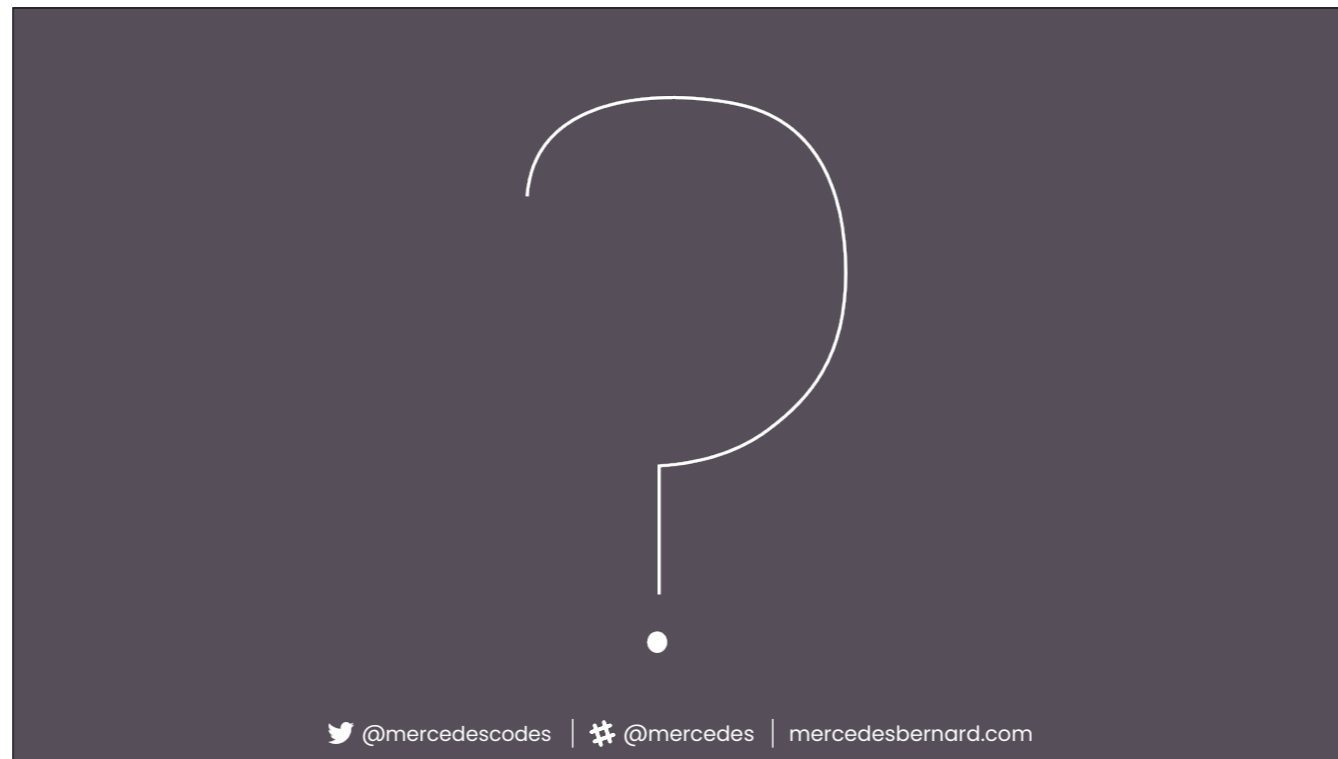
Write down something technical that
you recently learned

 @mercedescodes |  @mercedes | mercedesbernard.com

1 min

Write down the most complex technical
solution that you recently worked on

 @mercedescodes |  @mercedes | mercedesbernard.com

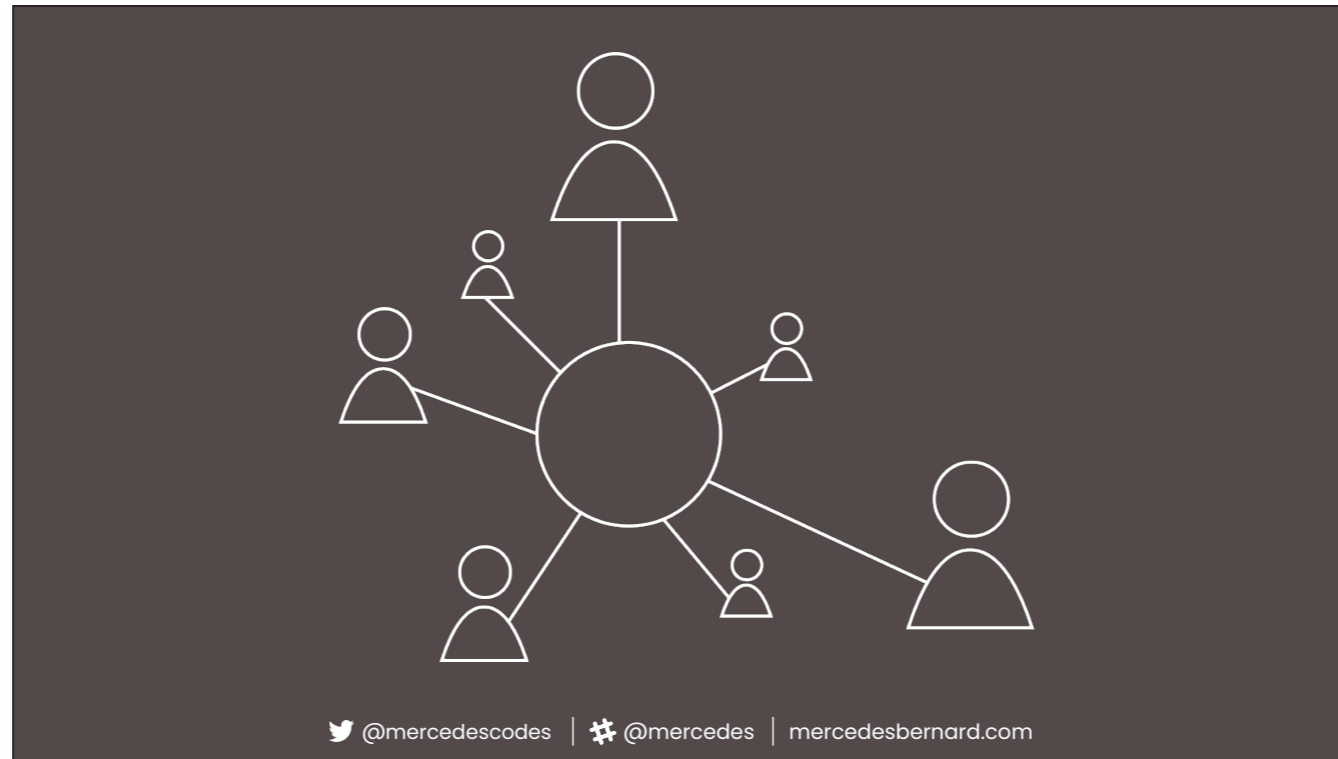


Why is the skill to translate technical concepts into understandable language so important?

If you do it well you can build credibility with your audience and create a shared understanding. Then your audience will be more likely to accept your ideas, invest in your ideas, and ultimately adopt your ideas.

Know Your Audience

 @mercedescodes |  @mercedes | mercedesbernard.com



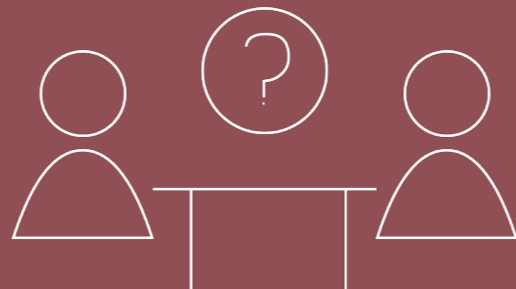
I'm using non-technical audience like a catch-all but there are many different types of audiences.

C-level executives vs middle management vs entry level folks

Marketing, finance, legal, HR

Clients across variety of different domains

Ask Questions



 @mercedescodes |  @mercedes | mercedesbernard.com

Don't make assumptions about your audience, need to start by asking questions.

Who will be in the audience?

How long have you been with [company]?

What is your background with [tech]?

What departments will be represented?

How long have you been working with [tech]?

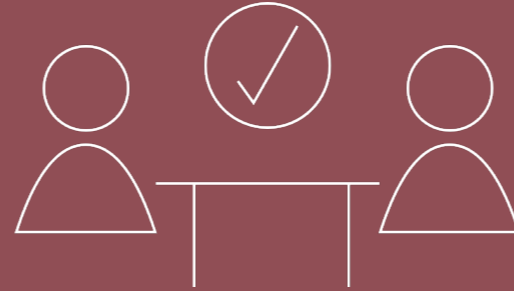
Listen with generosity

 @mercedescodes |  @mercedes | mercedesbernard.com

Take active listening a step further. Assume the best of all the answers you receive and be open to the information you receive. Use it to inform how you communicate later.

When someone says they don't know something, it's not because they're dumb. It's because it's never been explained before.

Understand Their Concerns



 @mercedescodes |  @mercedes | mercedesbernard.com

As developers, we get excited about tech. But our stakeholders usually have different concerns. We need to take the time to understand what they are actually concerned about.

Common concerns

- Understanding
- Budget
- Changing business process
- Added value

Address the actual concerns

 @mercedescodes |  @mercedes | mercedesbernard.com

It seems obvious, but when we're talking with them make sure to address their concerns instead of why the tech is so great.

Common concerns

- Understanding → Teach the concept
- Budget → Address cost and potential savings
- Changing business process → Show time savings, increased transparency or other process improvements
- Added value →

5 min

Using the 1st item you wrote down at the start of this talk, turn to someone near you and discuss the stakeholder's underlying concern and what you did to address it. If you didn't, how could you have?

 @mercedescodes |  @mercedes | mercedesbernard.com

So how do I actually
explain the thing?

 @mercedescodes |  @mercedes | mercedesbernard.com



Common Tips & Tricks

 @mercedescodes |  #mercedes | mercedesbernard.com

No jargon

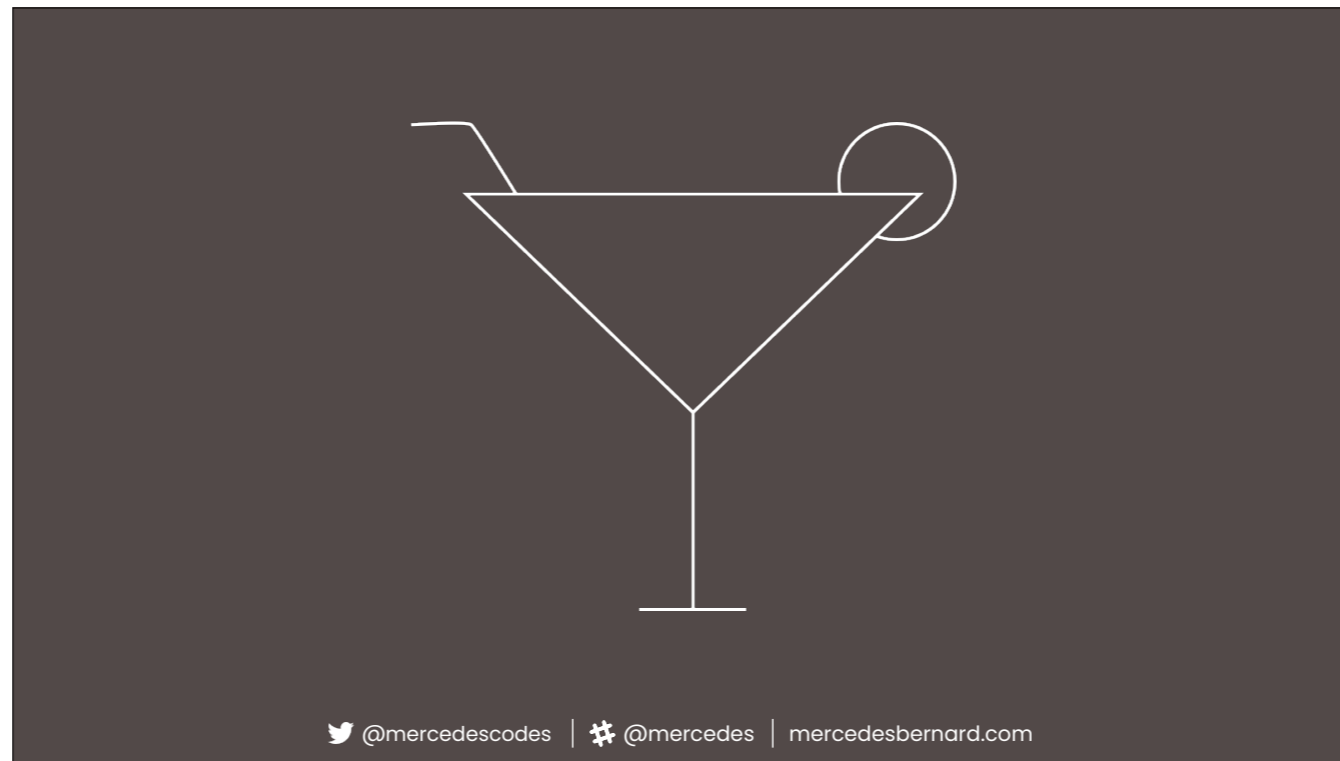
- Avoid acronyms and other technical language except where necessary
- Always define technical language prior to using it
- Saying what the acronym stands for does not count as defining it

Metaphors

- Make them accessible
- Every day situations: mailing a letter, starting your car, ordering a drink

 @mercedescodes |  @mercedes | mercedesbernard.com

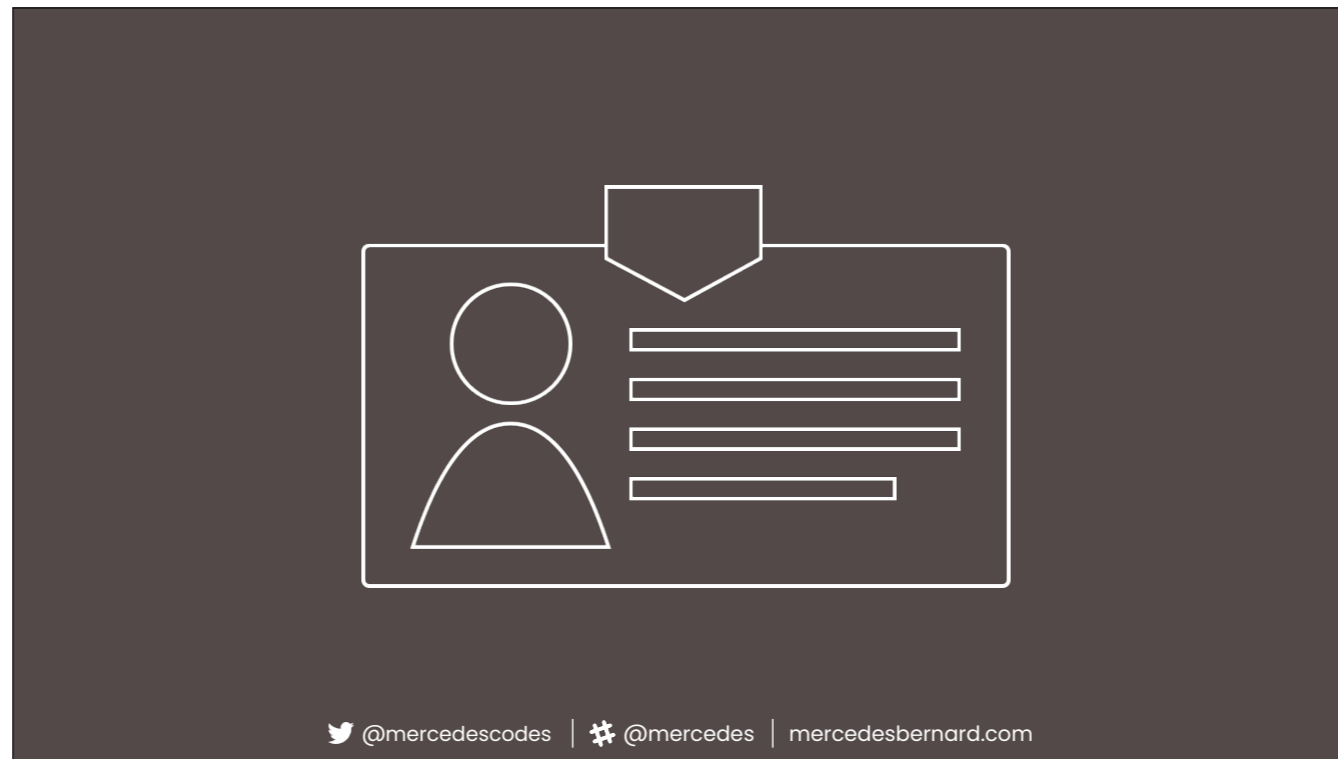
Regardless of someone's background, experience, culture, where they grew up, or what domain they work in, they should be familiar with what you're using as your metaphor.



A metaphor example comparing MVC to ordering a drink at the bar.

Metaphors

- Use analogies to your audience's domain



A metaphor example comparing mandatory access control & government security clearances

Metaphors

- Stay away from sports

 @mercedescodes |  @mercedes | mercedesbernard.com

Not all people know enough about sports to really understand these metaphors.

Sports language tends to be competitive and individualistic which are not the values you want to highlight when collaborating with your client and teaching them something new.

Don't be afraid to
draw

 @mercedescodes |  @mercedes | mercedesbernard.com

Visual language leaves less open to interpretation.

My favorite trick is to hand my audience the marker when they have questions so they can show me what they're confused about. This helps because often they don't have the vocabulary to explain their confusion.

10 min

Using the 2nd item you wrote down at the start of this talk, turn to someone near you (different person) and use a metaphor to describe the concept you learned so they will understand it

 @mercedescodes |  @mercedes | mercedesbernard.com

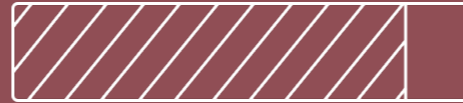
Tips & tricks are great
and all...

 @mercedescodes |  @mercedes | mercedesbernard.com

But what about the
meat and potatoes?

 @mercedescodes |  @mercedes | mercedesbernard.com

Explain Just Enough



 @mercedescodes |  @mercedes | mercedesbernard.com

Don't go too deep



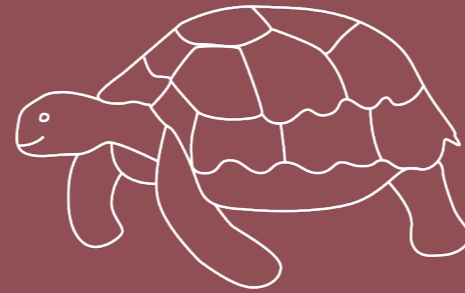
- More often than not, you need to explain the 'why,' not the 'how'



 @mercedescodes |  @mercedes | mercedesbernard.com

Example: Don't get tripped up explaining messaging protocols and architectural styles, when your audience just needs to understand that SOAP more secure but a higher level of effort like reading a letter in an envelope and REST is lightweight and flexible like reading text on a postcard.

Slow Down



 @mercedescodes |  @mercedes | mercedesbernard.com

Take your time

- Take more time than you think you need
- Use the time wisely

Mix It Up

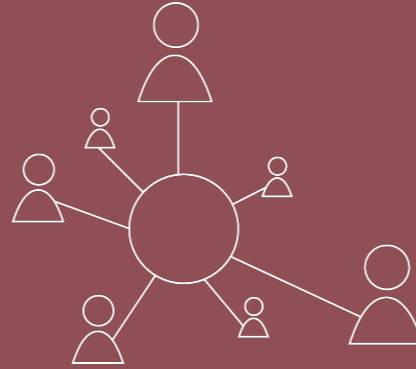


 @mercedescodes |  @mercedes | mercedesbernard.com

2 or more descriptions

- Try to come up with 2 different ways to explain your concept
- A verbal description and a visual description are good go-tos

Remember Your Audience



 @mercedescodes |  @mercedes | mercedesbernard.com

Use your audience's POV

- Think about how the person you are talking to will interact with this tech/solution every day
- Explain what happens from their point of view

Pay Attention to Body Language



 @mercedescodes |  @mercedes | mercedesbernard.com

Let's Tie It All Together

 @mercedescodes |  @mercedes | mercedesbernard.com

10 min

Using the 3rd item you wrote down at the start of this talk, turn to someone near you who you don't work with and using the techniques discussed, explain your solution

 @mercedescodes |  @mercedes | mercedesbernard.com

10 min

- Know your audience
- No jargon
- Metaphors
- Explain “just enough”
- Slow down
- 2 different ways of explaining

Questions

 @mercedescodes |  @mercedes | mercedesbernard.com

 @mercedescodes |  @mercedes | mercedesbernard.com