BECAUSE YOU CAN'T TEST EVERYTHING

COMMUNICATING RISK

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PRESENTED BY

JENNY BRAMBLE AND DANTE

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HI, I'M JENNY!

I'm currently a Software Test ~~Creature~~ Engineer!

▸ History:

  ▸ Support –> Devops –> Support again –> QA/ Support –> QA

▸ Willowtree Apps is home

▸ Enjoys cats, cupcakes, computers.

▸ jenny.bramble@gmail.com

▸ @jennydoesthings

▸ Pronouns: she/her

Enough about me. Let's talk about RISK.

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THIS IS DANTE.

HE TRAPPED HIMSELF IN THE BATHROOM FOR 12 HOURS ONCE.

AGENDA

▸ What is my job?

▸ Words are terrible!

▸ Defining risk

▸ Using that definition

▸ Risk matrix and examples

▸ Talking about risk

▸ Additional pictures of cats

I CAN'T TEST EVERYTHING

PLEASE DON'T ASK ME TO TEST EVERYTHING

DANTE THOUGHT THAT
WAS YOUR JOB

DANTE LIKES NICE
THINGS; DON'T
QUIT YOUR JOB

IF TESTING EVERYTHING ISN'T MY JOB

THEN WHAT IS?

WHAT IS MY JOB?

▸ Ask questions. Absorb answers. Translate them.

▸ Verify that systems under test preform in the ways that all the stakeholders expect, or help reset those expectations

▸ Educate other humans about 'testing'

▸ Advocate for practices, methodologies, and thought patterns that encourage quality in the code base and the organization

▸ Defuse bombs

▸ Evaluate and communicate risk

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DANTE THINKS YOUR
JOB ALSO ENTAILS

FEEDING DANTE

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MY JOB COMES DOWN TO ONE THING

COMMUNICATION

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ONE OF THE MAIN THINGS I
COMMUNICATE

RISK

EVERYONE KNOWS WHAT RISK IS

RIGHT?
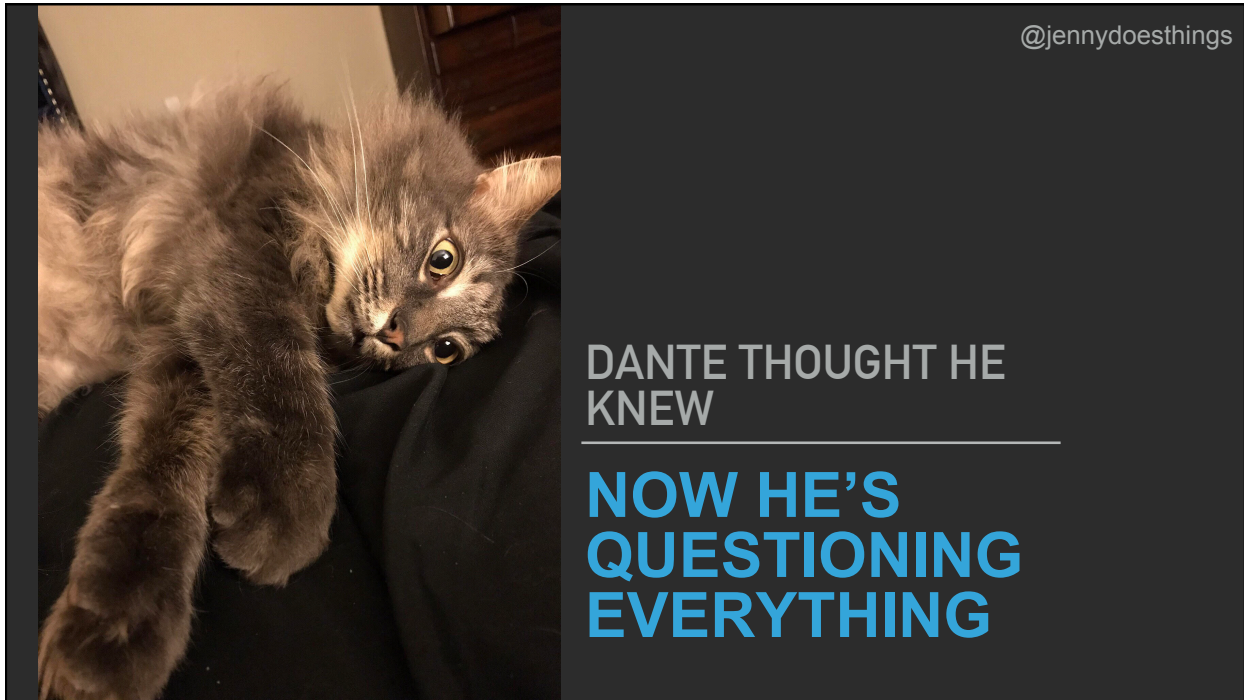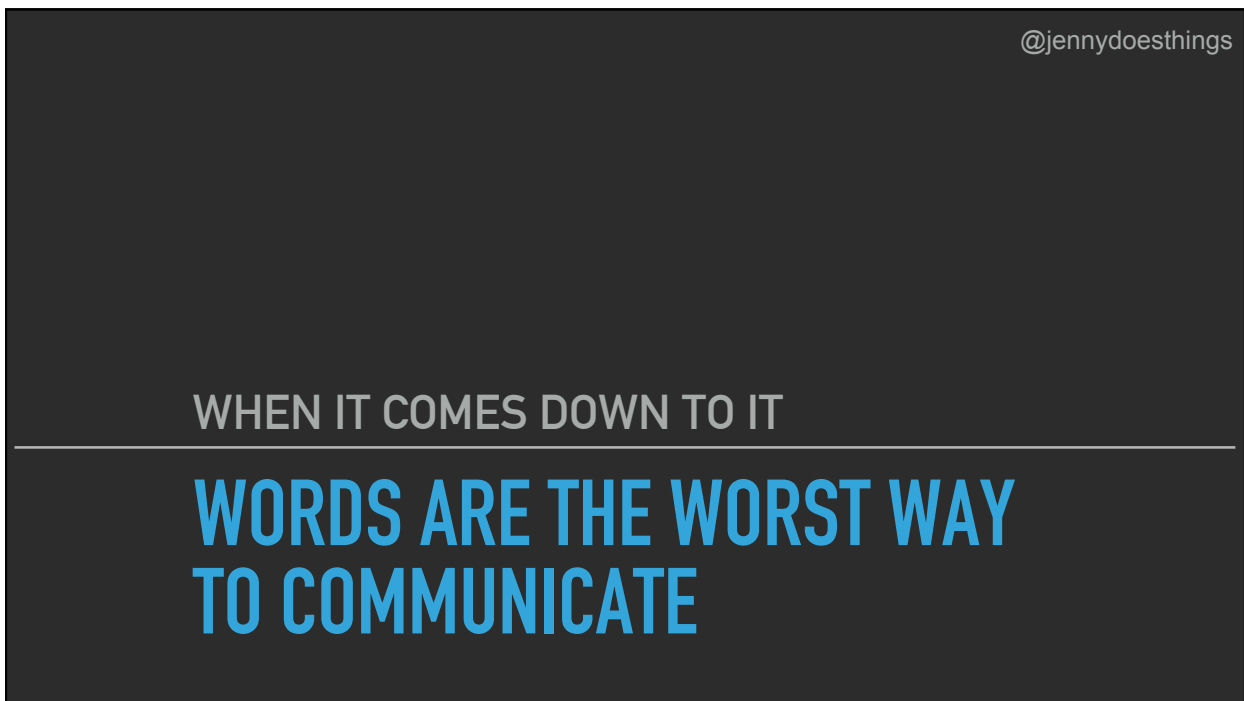
MY SISTER LIKES HER COFFEE SWEET

I LIKE MY COFFEE SWEET

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DANTE THOUGHT HE KNEW

NOW HE'S QUESTIONING EVERYTHING

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WHEN IT COMES DOWN TO IT

WORDS ARE THE WORST WAY TO COMMUNICATE

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BUT WE CAN MAKE THEM BETTER

AND MAKE THEM MEANINGFUL

WORDS ARE THE WORST WAY TO COMMUNICATE BUT…

▸ Defining terms lets us communicate across cross-functional teams

▸ Using the same words AND meanings

▸ It gives us an ability to justify our decisions to people outside our sphere

▸ Give updates that have depth

▸ Help determine what resources we need to apply to a project

WE CAN NOW COMMUNICATE MORE
CLEARLY AND PRECISELY

BECAUSE WE ALL KNOW WHAT WE'RE TALKING ABOUT

DANTE EXCLUSIVELY
COMMUNICATES

WITH BITING (AND SOME CRYING)

WHAT IS RISK?

‣ Anything that can go wrong

‣ Something awful

‣ A scary situation

‣ A headline bug

‣ Running out of cat food

‣ EVERYBODY PANIC

  ‣ PRODUCTION IS DOWN

  ‣ WE ARE ALL GOING TO GET FIRED

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THE IMPACT OF FAILURE
THE PROBABILITY THAT FAILURE WILL OCCUR

RISK

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THIS INTERESTS DANTE

AND HE WOULD LIKE TO KNOW MORE

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ANY POTENTIAL NEGATIVE IMPACT CONTRIBUTES TO THE RISK OF AN APPLICATION OR FEATURE

IMPACT OF FAILURE

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IMPACT OF FAILURE

▸ Technical
  ▸ Loss of data
  ▸ Introduction of security flaws
▸ Business
  ▸ Revenue cannot be collected
  ▸ Critical functions cannot be performed
▸ Morale
  ▸ Users have to utilize workarounds
  ▸ Slowed workflows
  ▸ Utilization of pitchforks and torches

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WHAT'S IMPACTFUL TO THE COMPANY?

IMPACT OF FAILURE

DANTE GETS IT

THE IMPACT OF LEAVING HIM FOR THE WEEKEND IS EVERYTHING "FALLS" OFF THE TABLE.

THE LIKELIHOOD THAT THE APPLICATION, FEATURE, OR USE CASE WILL FAIL

PROBABILITY OF FAILURE

PROBABILITY OF FAILURE

▸ Has this failed before?

▸ Has something similar failed before?

▸ Historical data tells you about past failure

  ▸ Defects

  ▸ Tribal knowledge

  ▸ QCA/RCA

  ▸ That person that's been here forever and knows everything

PROBABILITY OF FAILURE

▸ What features do users interact with the most?

▸ How do they interact with these features?

▸ What's inherently fragile about our code base?

▸ Are there external changes to consider?

▸ How do you feel about it?

▸ Are you proud of the feature?

THESE ARE VERY EDUCATED GUESSES ABOUT WHAT MIGHT FAIL

PROBABILITY OF FAILURE

DANTE IS PRETTY SURE

JUMPING OFF THE ROOF HAS A LOT OF RISK.

FACTORS OUTSIDE OF YOUR FEATURE, USE CASE, OR APPLICATION

OTHER TYPES OF RISK

OTHER TYPES OF RISKS

- ▸ Modified time table
- ▸ Environment issues
- ▸ New or inexperienced team members
- ▸ Natural disasters
- ▸ Sickness
- ▸ Outside pressure
- ▸ Industry-specific risks

DANTE FEELS THAT'S A LOT TO THINK ABOUT.

IS IT REALLY NECESSARY?

WE HAVE LIMITED TIME, BODIES, ATTENTION, MONEY, AND OTHER RESOURCES

WE CAN'T TEST EVERYTHING

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WHAT WE CAN DO IS

COMMUNICATE CLEARLY AND PRECISELY WHY WE TEST WHAT WE TEST

AND WHEN I SAY "TEST", I MEAN…

▸ Giving more attention to one item than another

▸ Raising concerns about a feature

▸ Discussing the need for more resources

▸ Choosing what stories to play

▸ Asking for more time on a project

▸ Manual and automated testing efforts

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DANTE THINKS WE
SHOULD HAVE

**A SERIOUS
DISCUSSION
ABOUT RISK**

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HAHA, NAAAAAH

**DANTE JUST WANTS TO TAKE
NAPS**

CAN WE MAKE THIS EASIER VISUALLY?

YES: RISK MATRIX

FIRST THINGS FIRST

DO MATH

DANTE THOUGHT

THERE WASN'T GOING TO BE MATH

DETERMINE A RATING SYSTEM

WHAT IT IS DOESN'T MATTER AS LONG AS IT MAKES SENSE

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NOW, DOCUMENT IT

MAKE A RISK MATRIX

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Item/Story/Use Case	Impact of Failure	Probability of Failure	Risk
Send user email confirming their recent purchase	7	3	21
Shopping cart redirect to PayPal	9	2	18
Adding a newly created item type to a shopping cart	9	6	54

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OTHER ELEMENTS OF A RISK MATRIX

▸ You can include a breakdown of the types of risk if it's hard to pull out one number

  ▸ Usage

  ▸ Fragility

  ▸ Merges

  ▸ Environmental issues

  ▸ User frustration

  ▸ User familiarity

▸ Risks may also vary depending on the phase of the project and environment

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COMPLEX OR SIMPLE, AS LONG AS IT CONVEYS THE CORRECT INFORMATION

RISK MATRIX

HOW DO WE TELL THE STORY OF A PROJECT ON THE RAILS?

REAL WORLD EXAMPLE

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REAL WORLD EXAMPLE

- We were able to describe the project in terms of risks and effects.

  - Risk to the user (of catastrophic failure)

  - Risk to engineering (of technical debt)

  - Risk to the team (of failing sprints)

  - When we could fix specific issues (before or after release to production)

  - I also argued for a 'pitchfork index.'

NO FRIENDS WERE HARMED IN THE MAKING OF THIS PRESENTATION
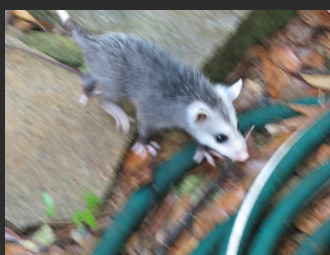
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THE MORE WE TALK ABOUT RISK

WE CAN BECOME A BETTER, MORE COHESIVE TEAM

WE CAN USE RISK FOR MORE THOUGHTFUL
TESTING AND CONVERSATIONS

HOW DOES THIS HELP US?

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WE CAN USE RISK FOR MORE THOUGHTFUL
TESTING AND CONVERSATIONS

HOW DOES THIS HELP US?

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DANTE SOMETIMES
GETS OVERWHELMED

**THINKING
ABOUT RISK**

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TO BE FAIR

**DANTE GETS
OVERWHELMED
A LOT**

AGENDA

- ▸ What is my job?
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CONVERSATION STARTERS

- ▸ How do you define risk?
- ▸ How do you tell the story of your application, feature, or use case?
- ▸ What's your job title? Your job?
- ▸ In retrospect, when should you have spoken up? What resources do you need to make that easier next time?
- ▸ What takes a lot of your time at work?
- ▸ Sometimes, it takes a lot of "spoons" to start these conversations. Be kind and soft, like Dante.

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