

Designing for AI

Setting User Expectations & Creating Minimum Viable Intelligence

Emily Sappington

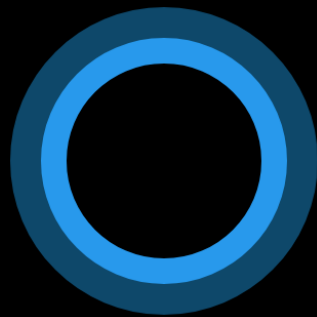
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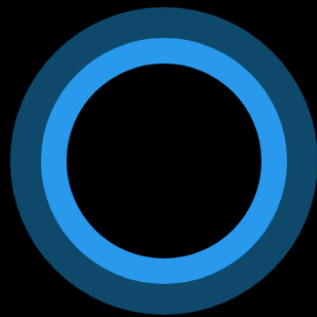
In 10
minutes!

Cortana



Multi-Modal
Voice Assistant

Cortana



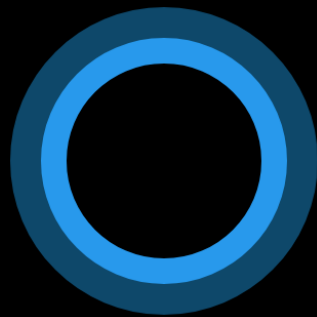
Multi-Modal
Voice Assistant

Context Scout



Research aid
in the Browser

Cortana



Multi-Modal
Voice Assistant

Context Scout



Research aid
in the Browser

Babylon Health



Healthcare
Assistant

Let's face it, AI is a buzzword.

“How can we do AI?”

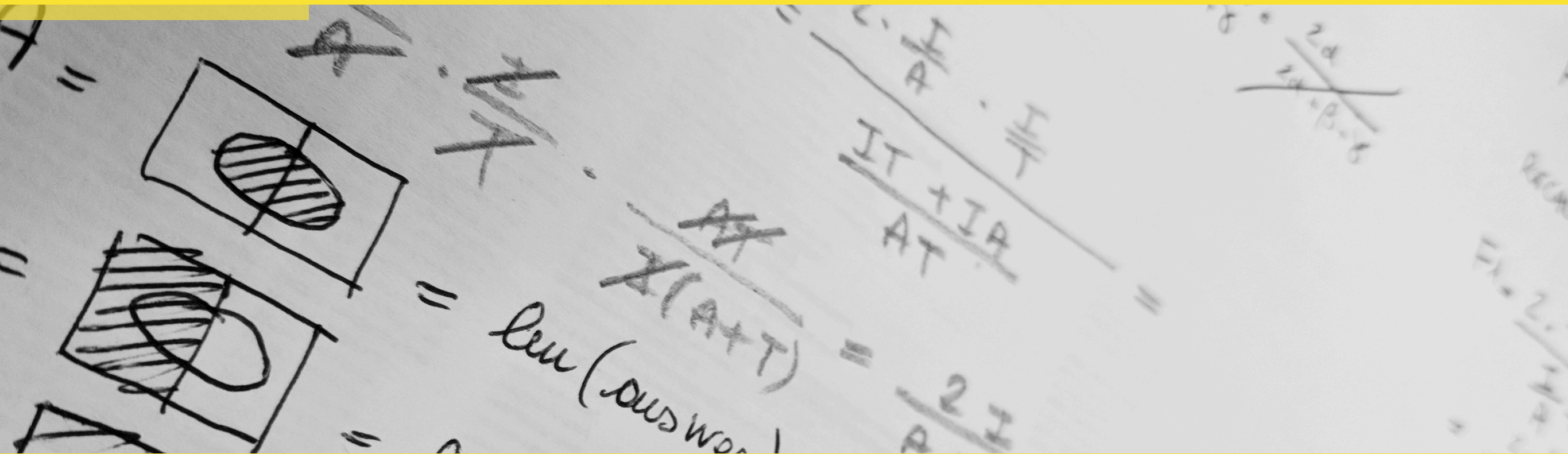


–Johnny Founder

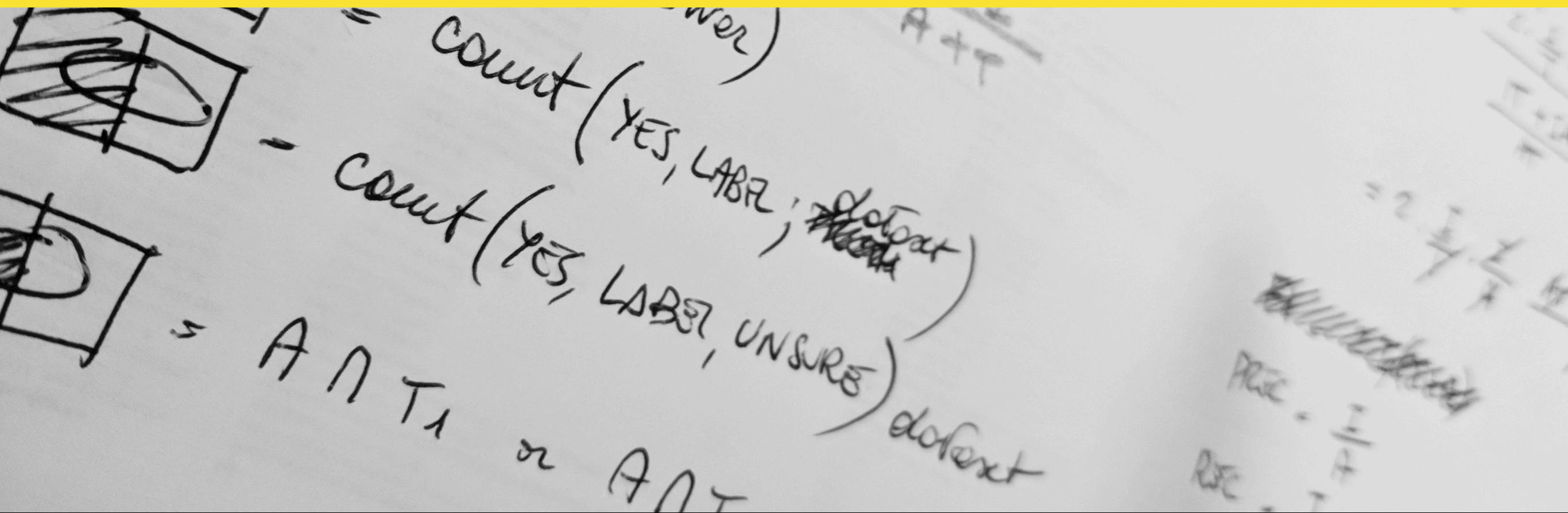
“Our company needs to start doing AI”



–Jennifer Founder



They're thinking of this.



“Artificial Intelligence is the broader
concept of machines being able to carry out
tasks
in a way we would consider ‘smart’.”

- Bernard Marr

“Artificial Intelligence is the broader
concept of machines being able to carry out
tasks
in a way we would consider ‘smart’.”

- Bernard Marr

Inspired by human intelligence

What makes someone or something smart?

Human

Tech

Human

Are they alive / awake?

Are they competent?
Can I trust them?

Can they do something better than me?

Do they impress me?

Tech

Does it respond to my input?

Can users achieve basic tasks with it?

Does it wow users?

- Appearing human
- Saving time
- Doing a human task in a fraction of the time

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Does it respond
to me?

First, people need to establish
responsiveness as a result of
their contact or
communication.



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Evaluating Competence

Human Example:

Students estimate the grades of their peers

Those who look more confident, maintaining eye-contact, were assumed to have higher grades



Higher GPA Student



Lower GPA Student



Higher GPA Student

Evaluating Competence

Human Example:

Students estimate the grades of their peers

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Tech Example:

Before achieving intelligence, deliver on the most simple promises of an MVP

Discovered a **10-to-win** rule for users engaging with Context Scout

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This is when users are testing your product

Users Testing Competence

- This stage of evaluation has the potential to **engage** users
- It can also be when they **lose faith** in your higher aims
- **Voice Assistant Example:** A user who can't set a reminder with their voice, will not be likely to trust the same voice assistant to take down credit card information and order pizza.



Setting expectations is key.





Crawl



Walk



Run



Crawl



Walk



Run

Set expectations all, along, the way.



Crawl

No you can't



Walk

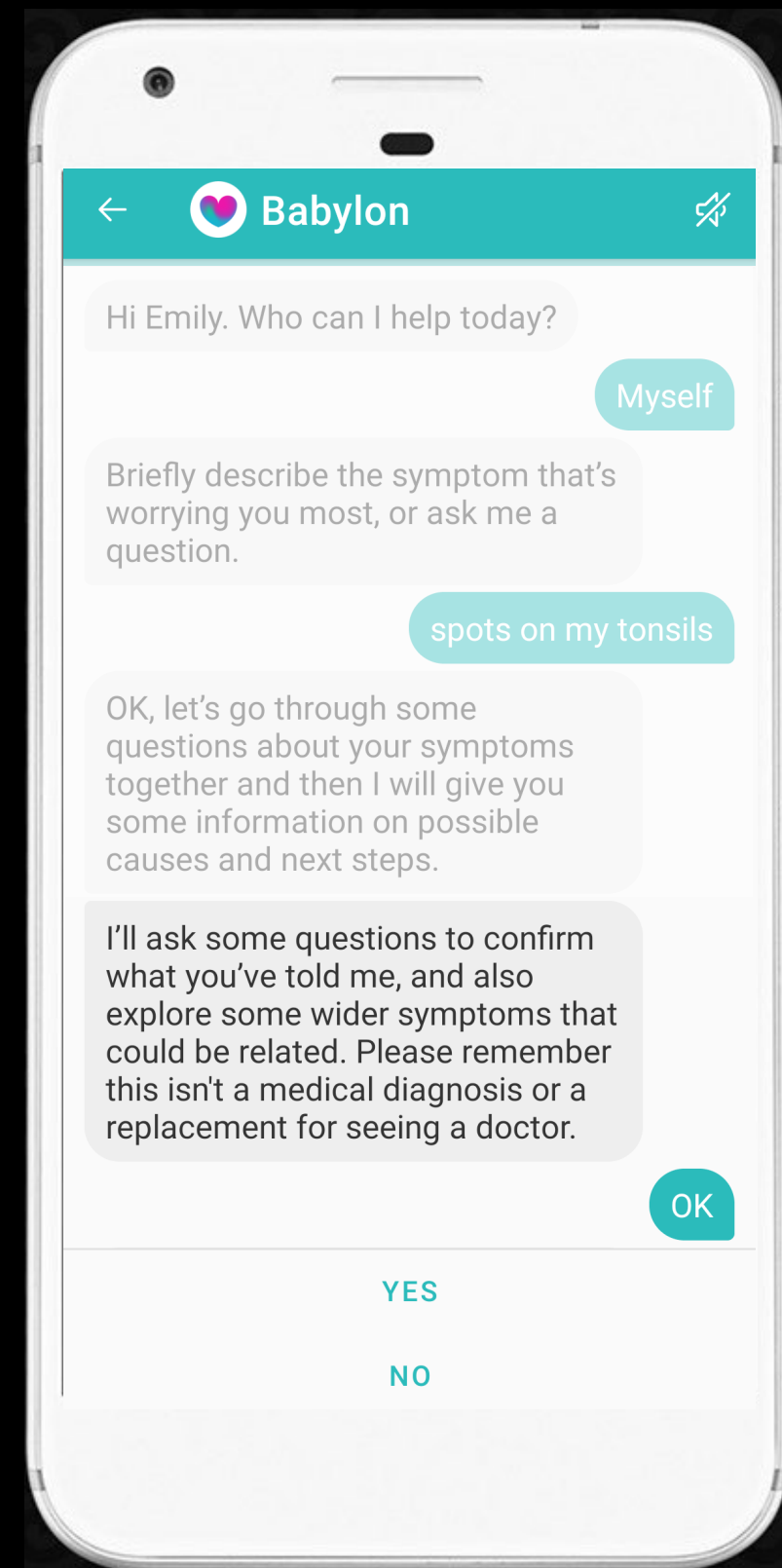


Run

Set expectations all, along, the way.

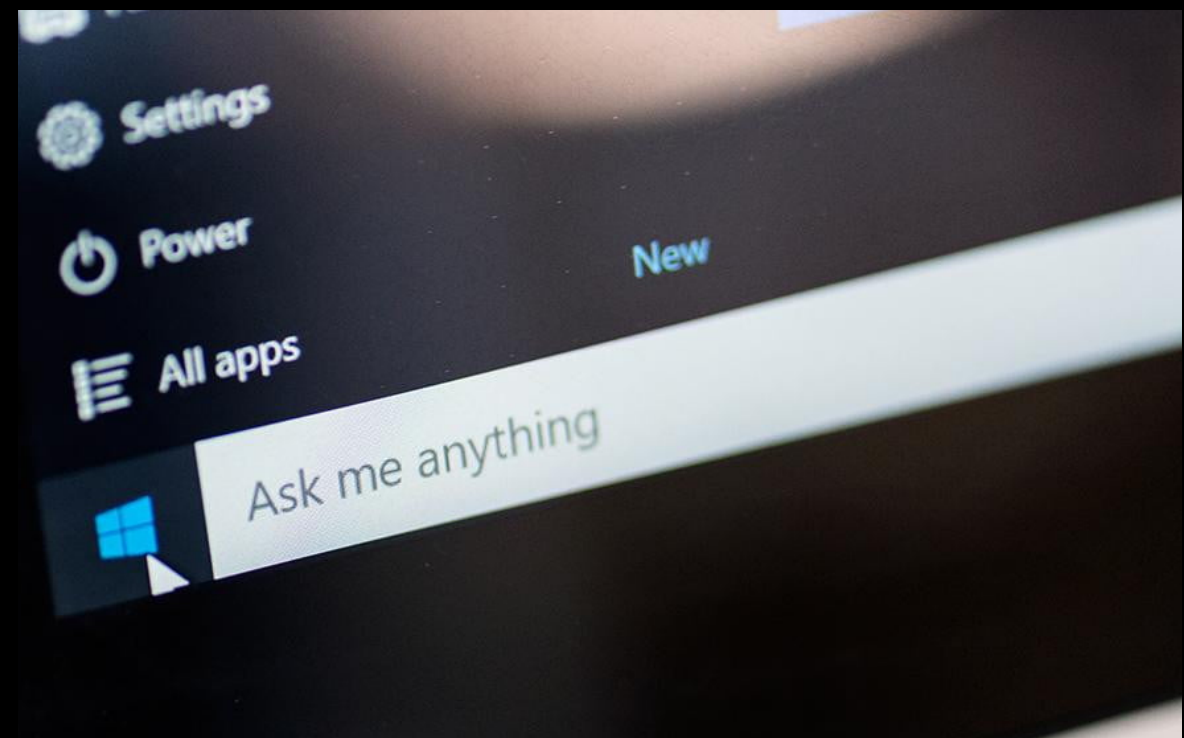
Babylon Health Symptom Checker

Set expectations early,
and make them clear.



Cortana v1 for Windows

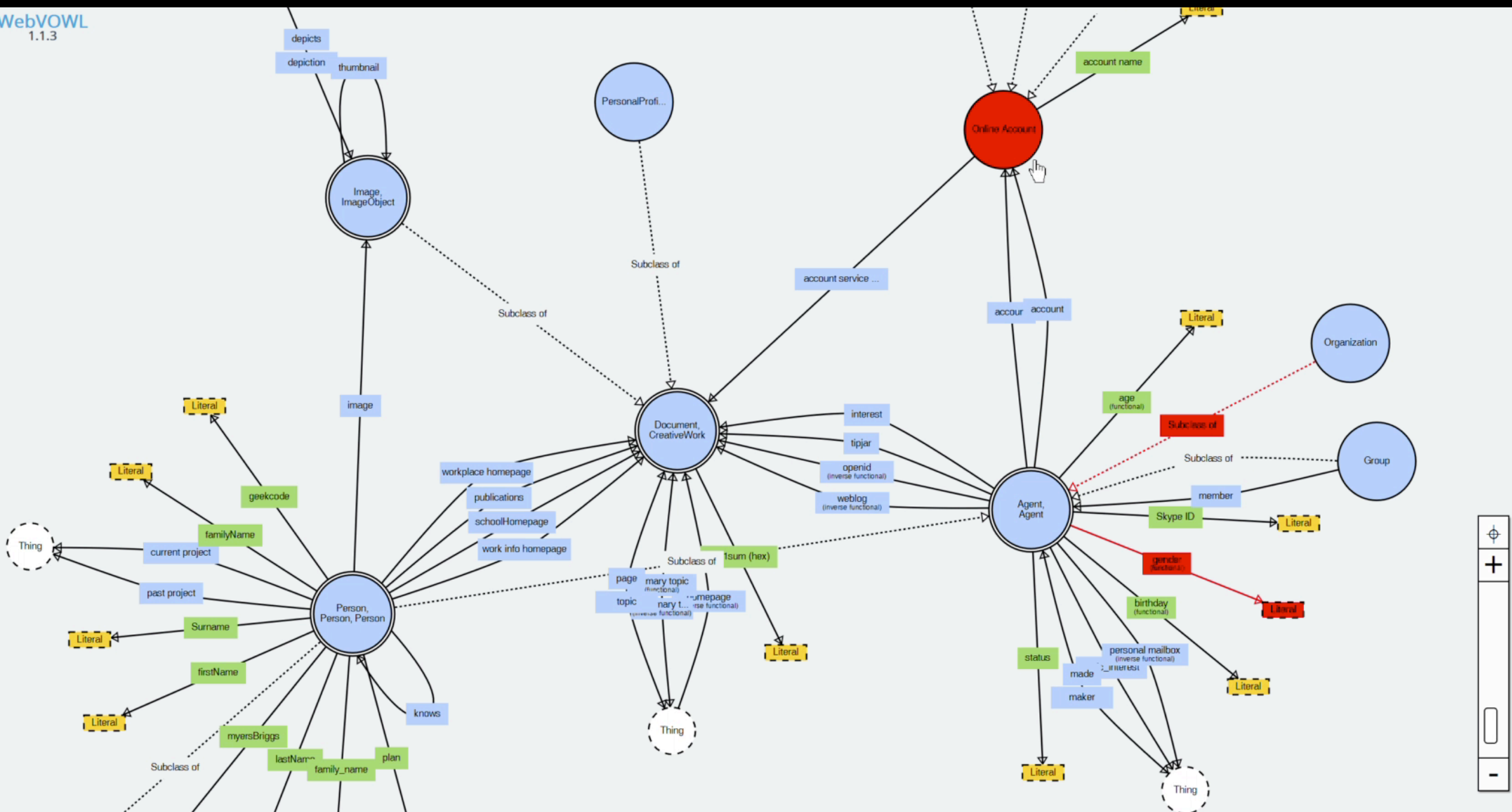
Be careful not to over-promise. Users will take that as an opportunity to test your system's intelligence.



Expectations Case Study:

Context Scout

AI for the Browser



Context Scout

No rigid menu

Enabling fun discovery

Things the AI can't find
aren't called out

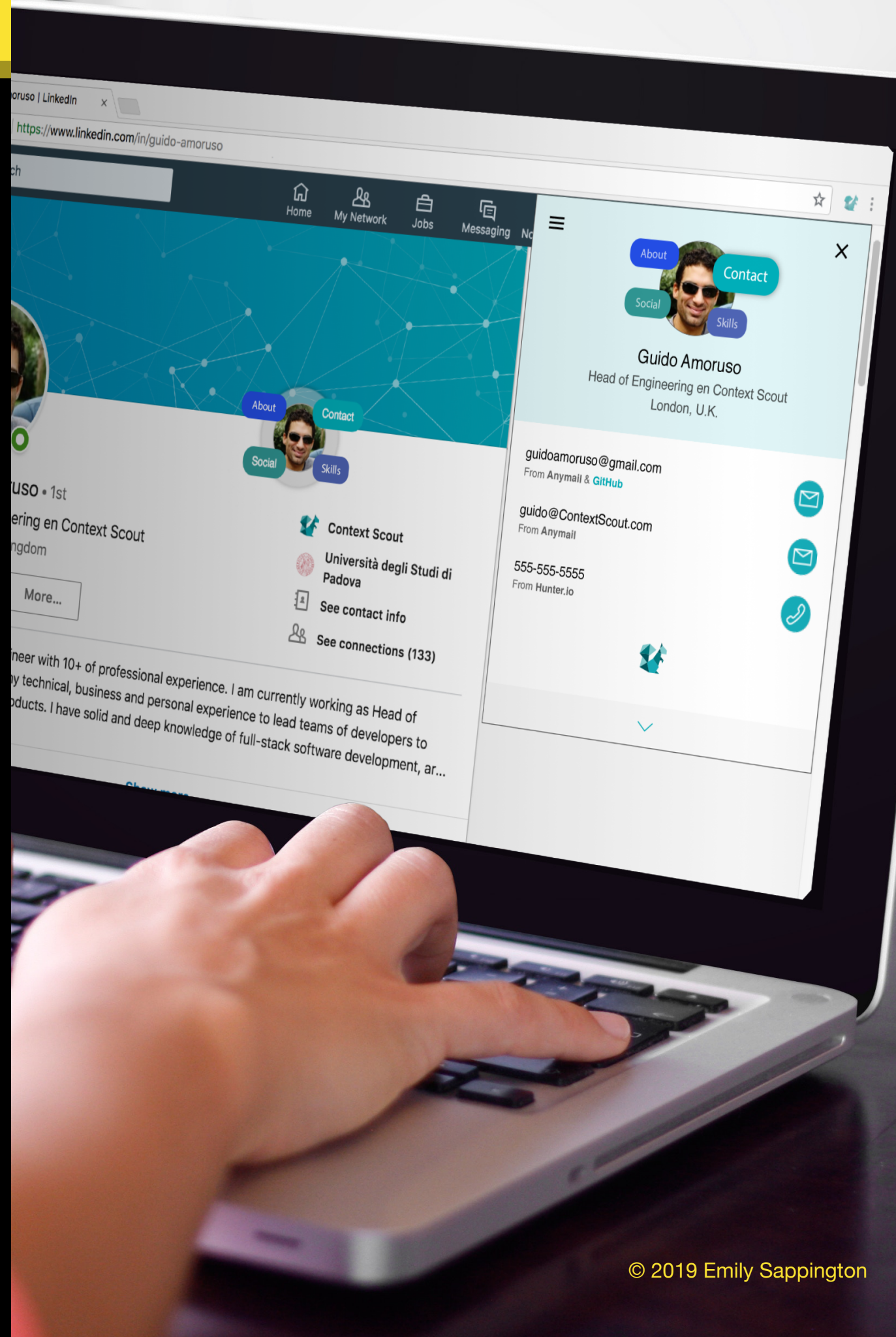
Only the positive



The click-target shows discovered
categories as the AI finds them

In-use

What's shown on the page is what we have to offer, and not our shortcomings.



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Users' perceptions of tech being "Smart"

Imitating Human Behavior

Providing Unique Value

Users' perceptions of tech being "Smart"

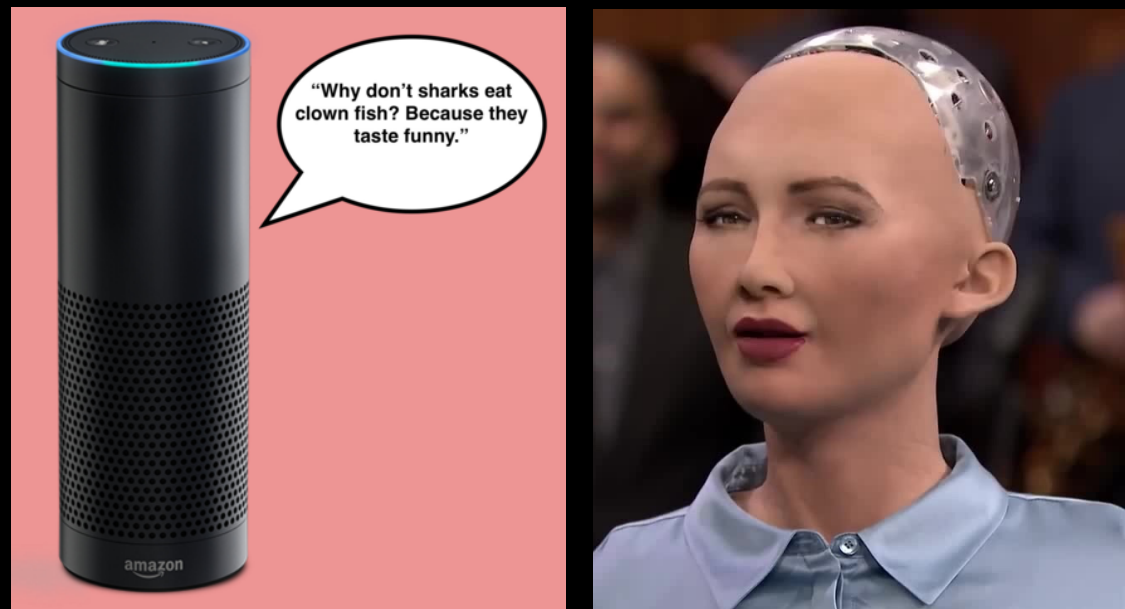
Imitating Human Behavior



Providing Unique Value

Users' perceptions of tech being "Smart"

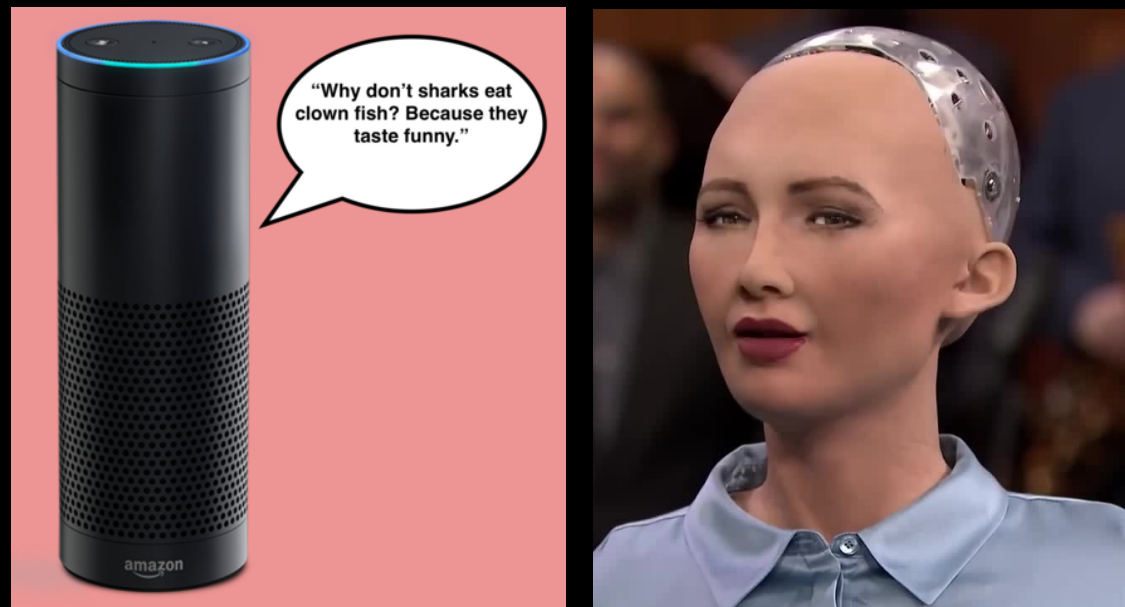
Imitating Human Behavior



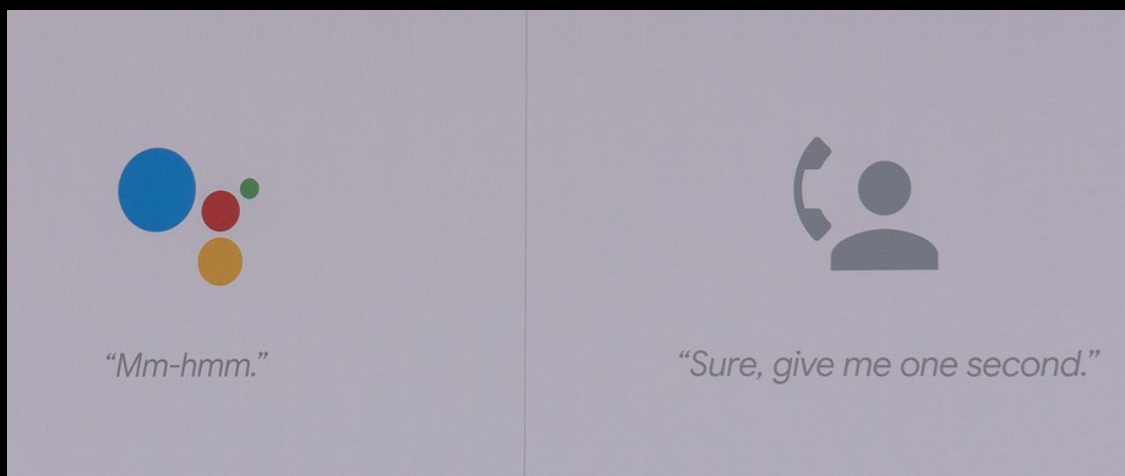
Providing Unique Value

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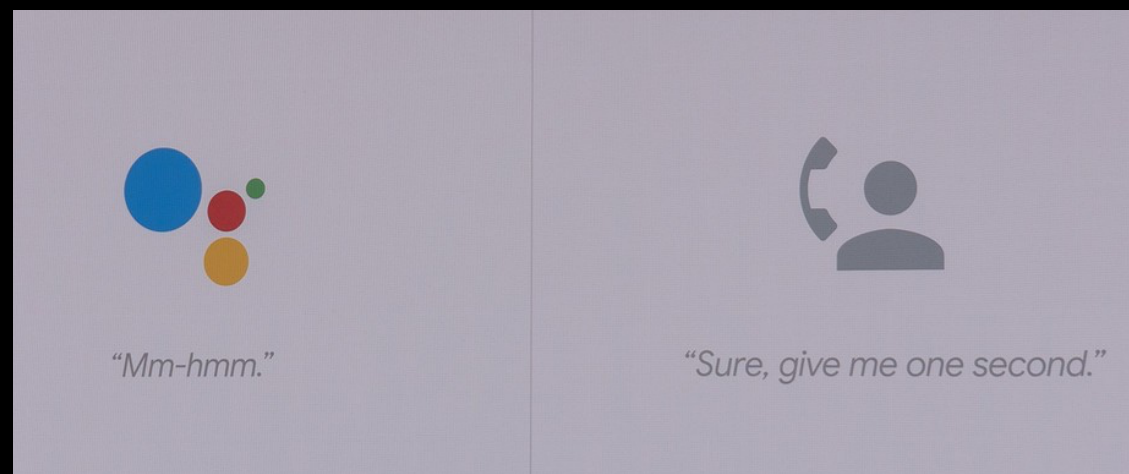
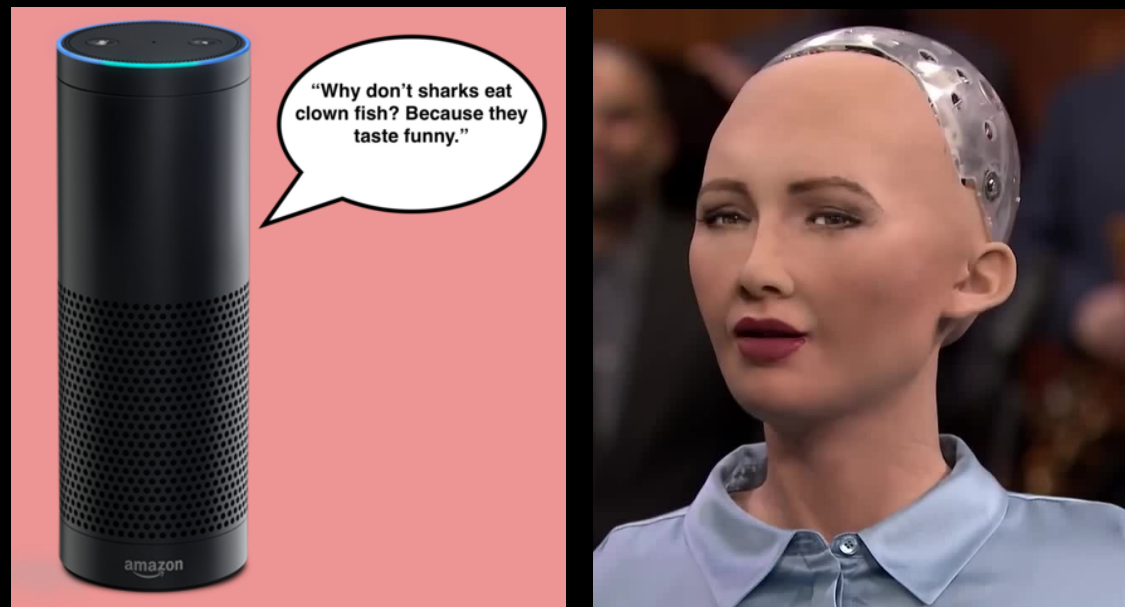


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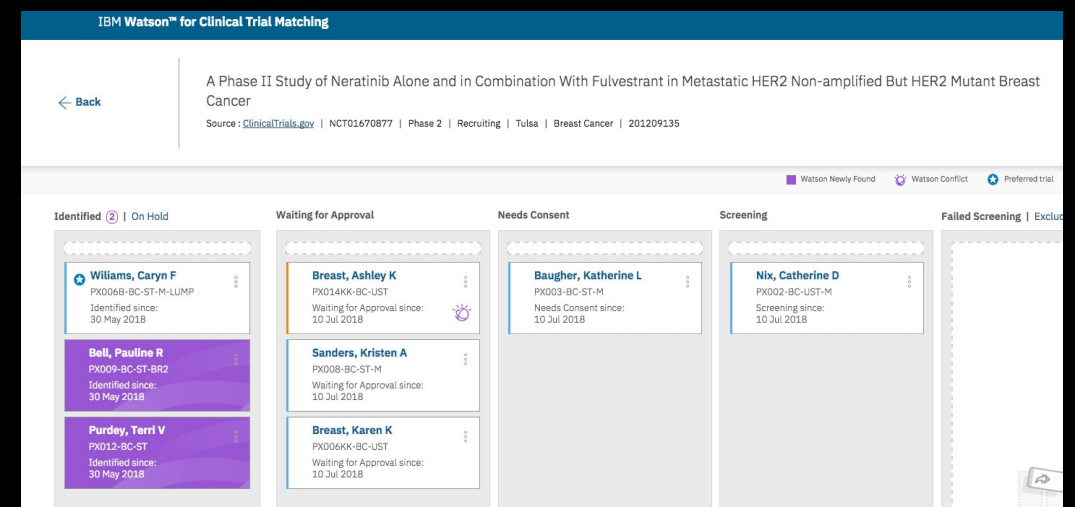


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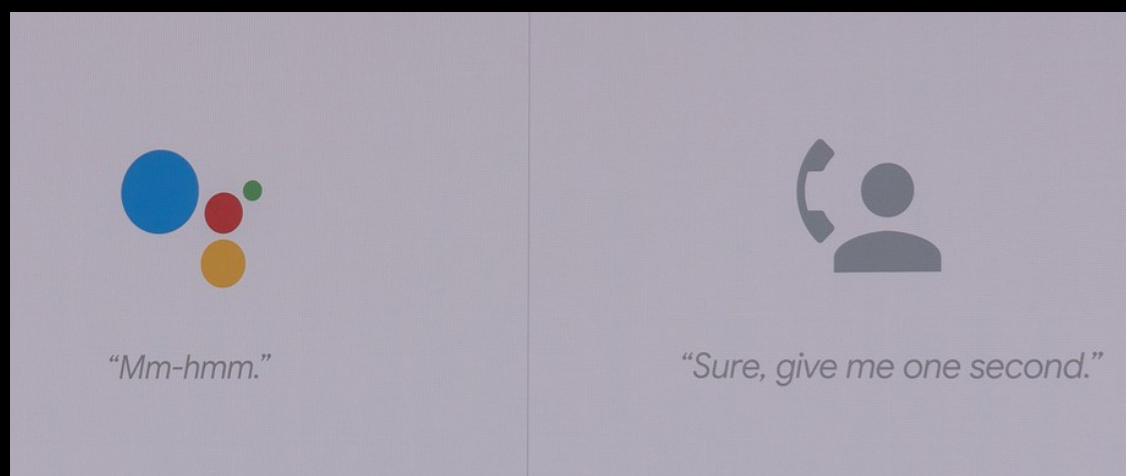
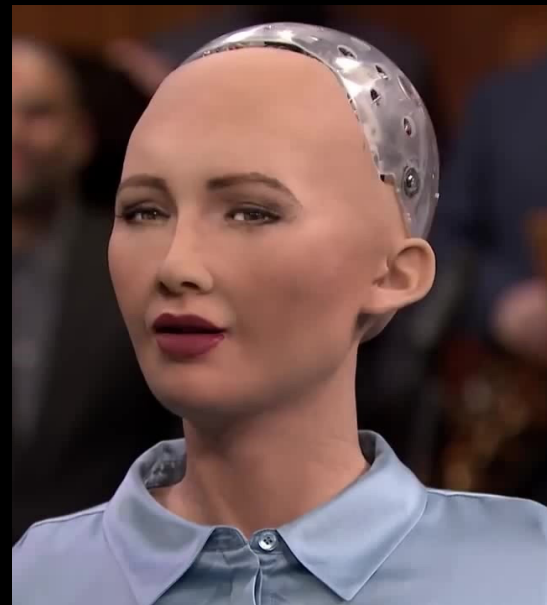


Providing Unique Value

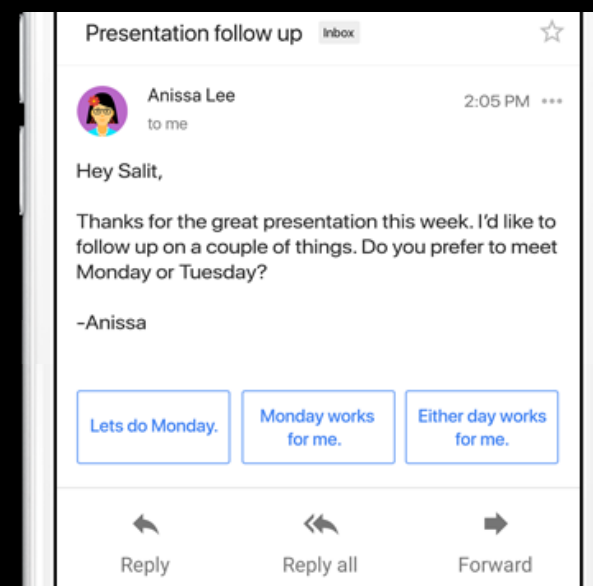
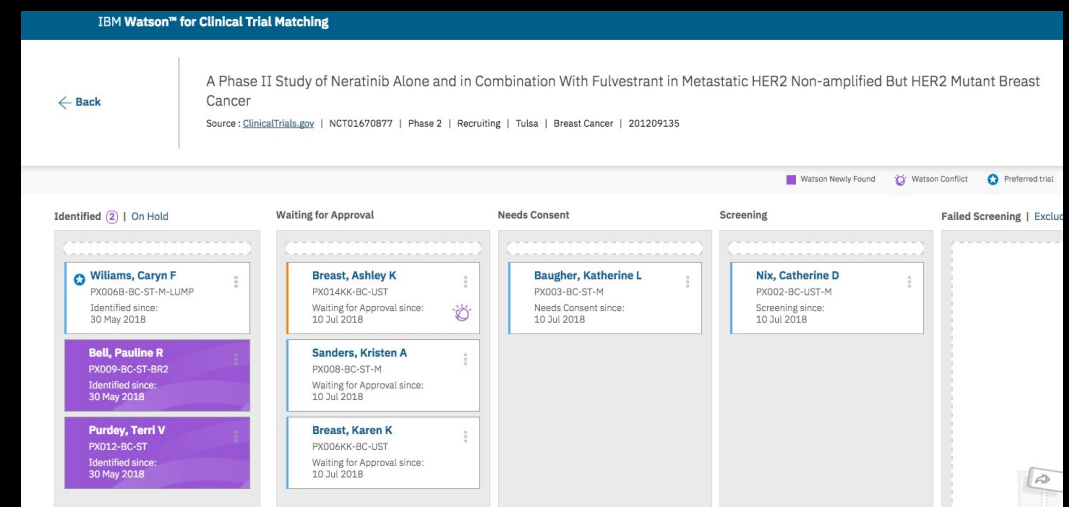


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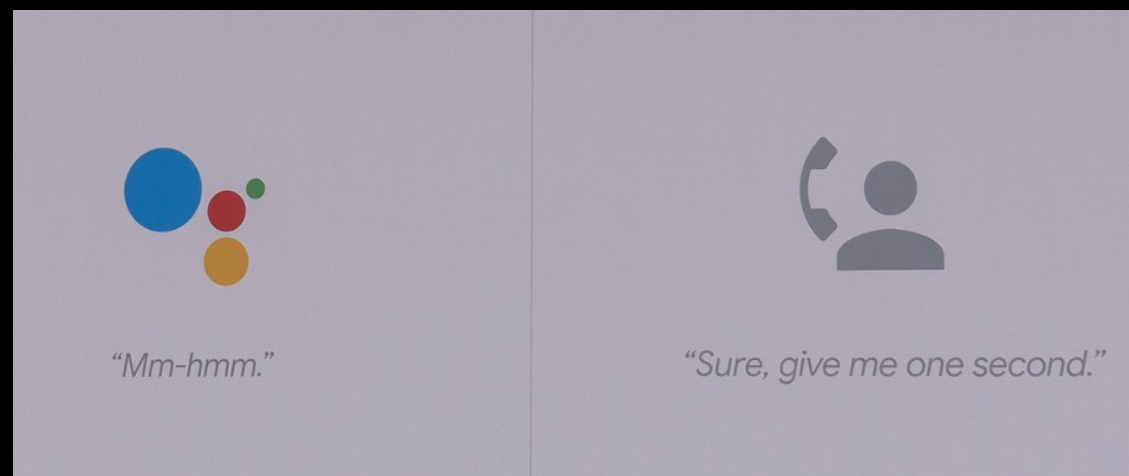
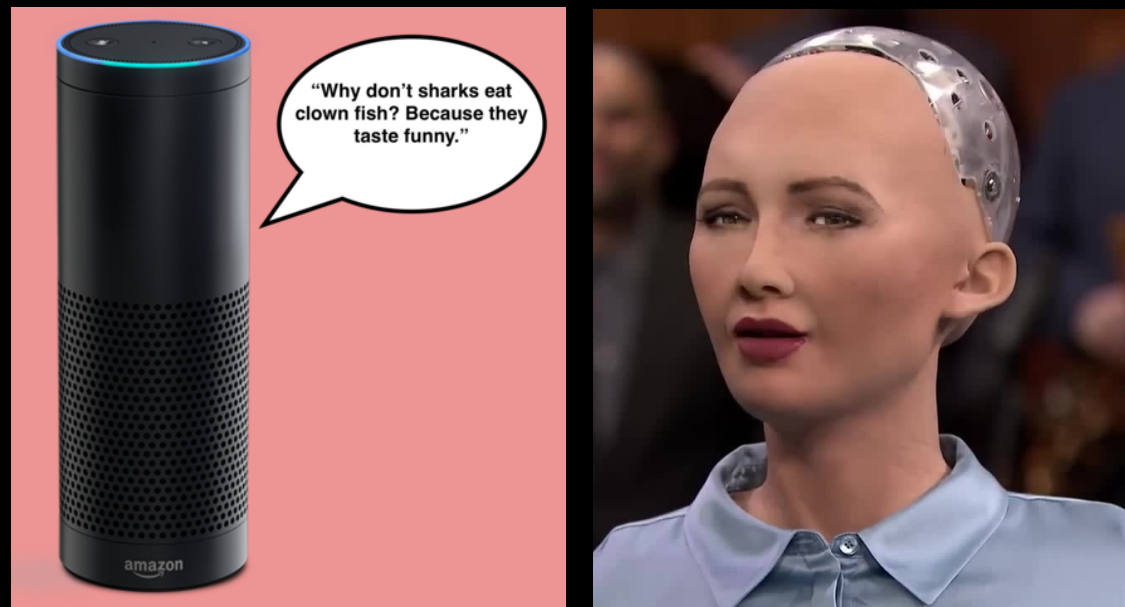


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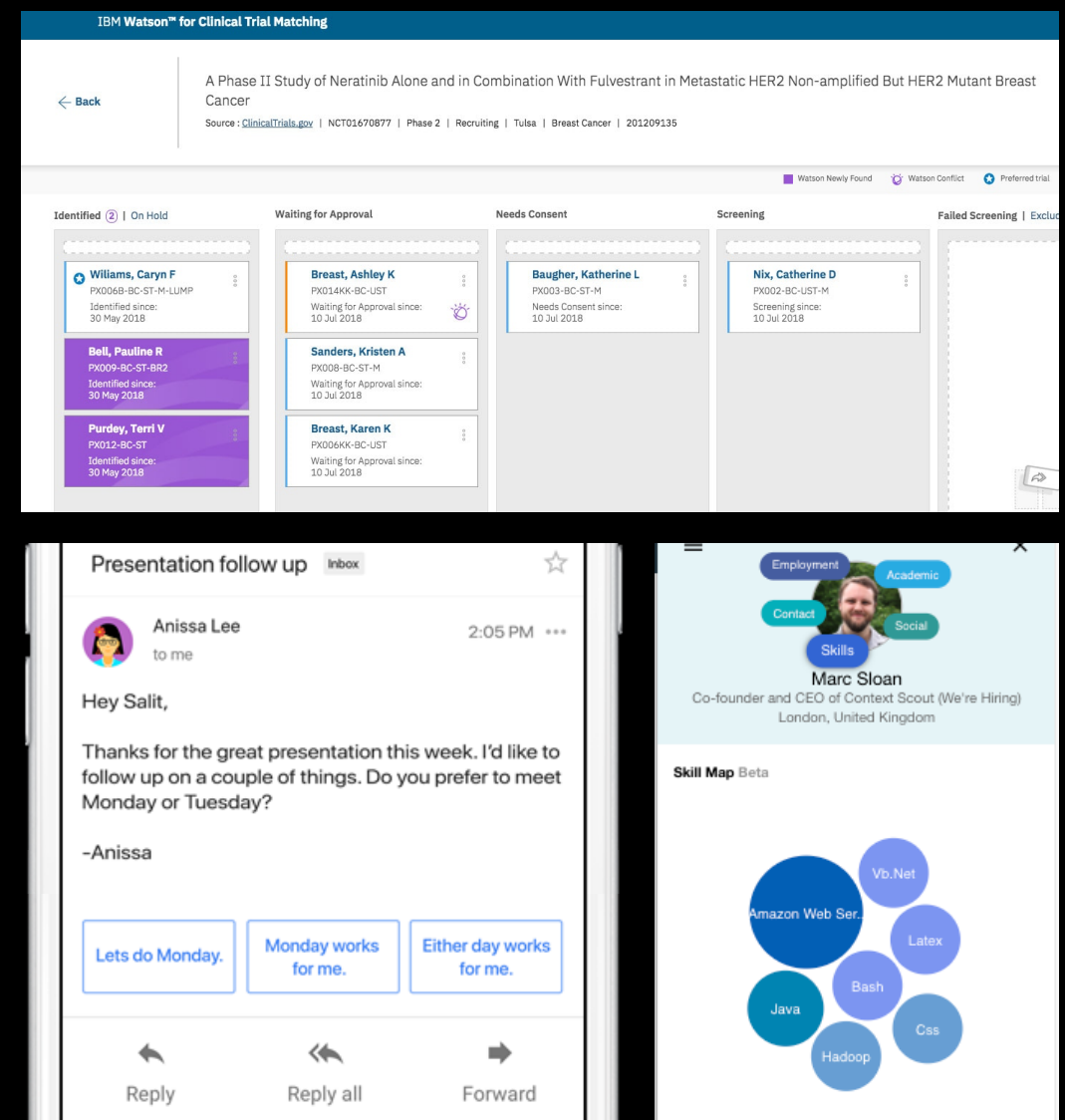


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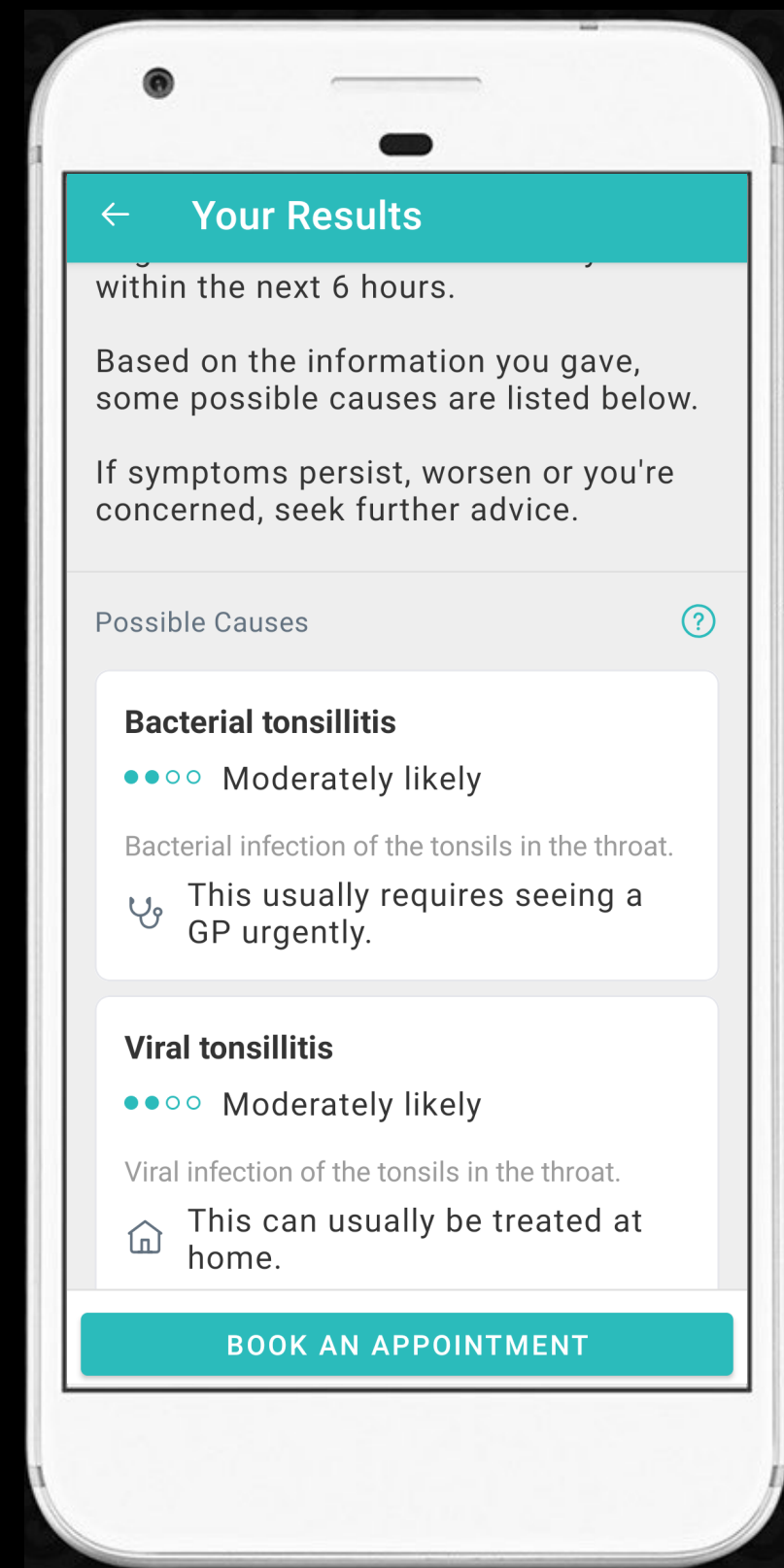


Providing Unique Value



Winning moments can be both big and small

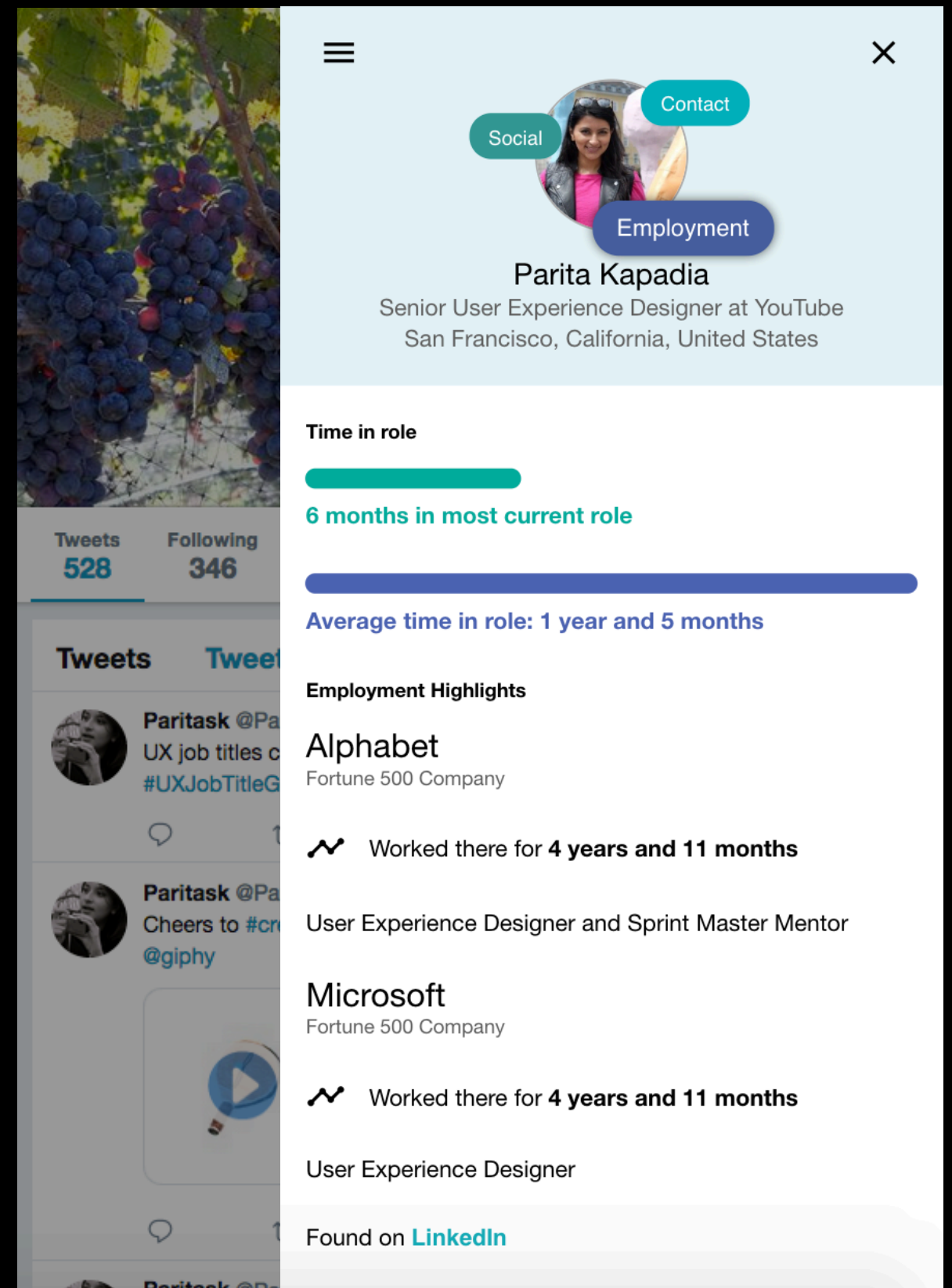
Healthcare is an uncertain place, so when technology can provide clarity and assurance, a product has the potential to be an intelligent comfort to users.



Smart moments are in the eye of the beholder

Whether a delightfully natural voice experience, or just saving a worker having to skim a page...

AI's magic is in the eyes of the user.

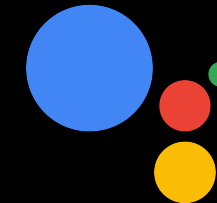
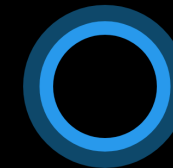


So, how do you handle the question:

“How can we do AI?”

Lessons for large & small companies

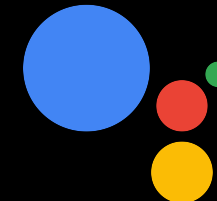
- Set expectation appropriately
- Claiming intelligence, you need to go above & beyond user expectations
- Do a few things well



Startups: Get scenario-focused

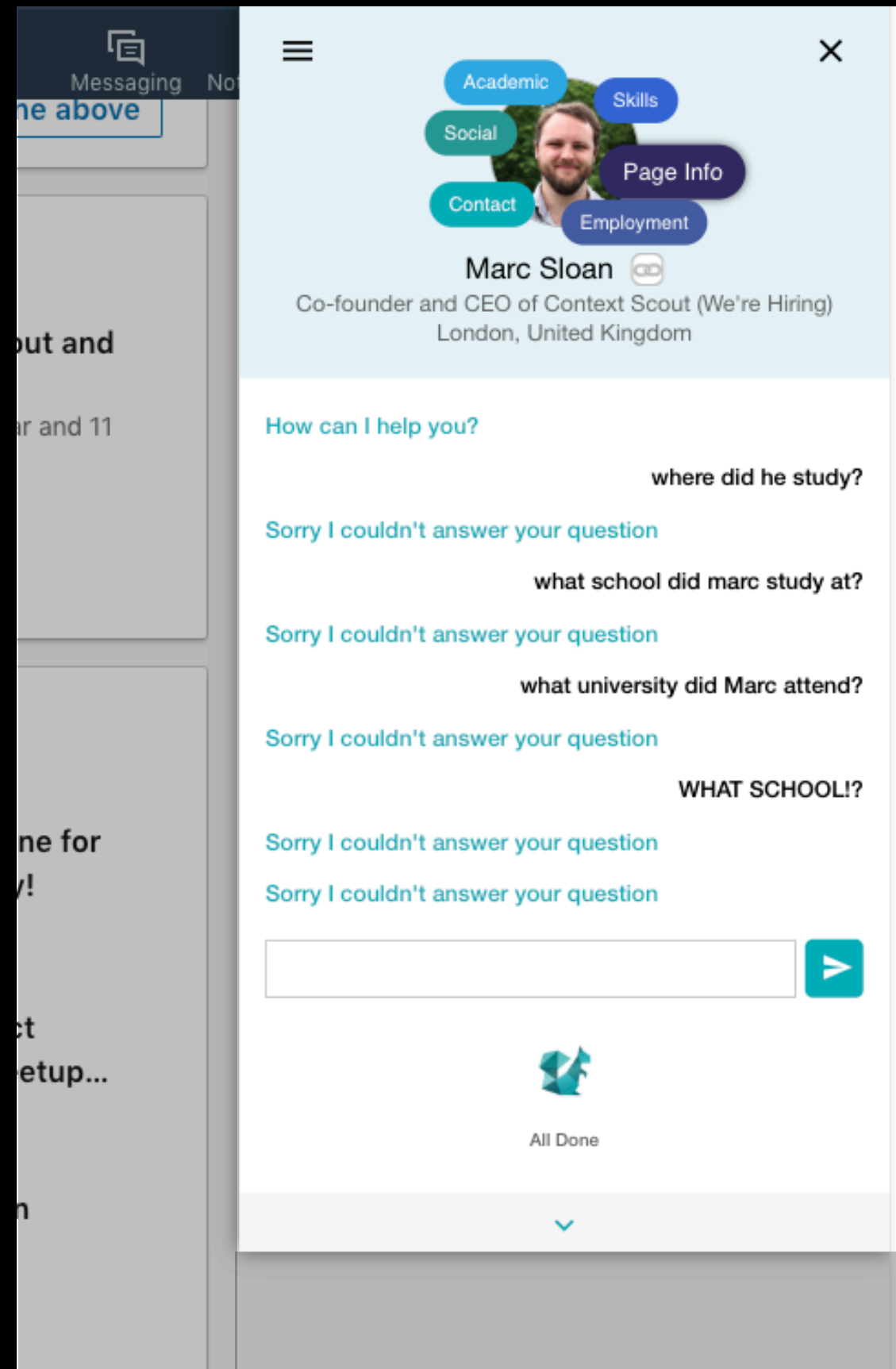
- Use Voice only if your scenario, devices & environment all support it
- Personify only if it's helpful

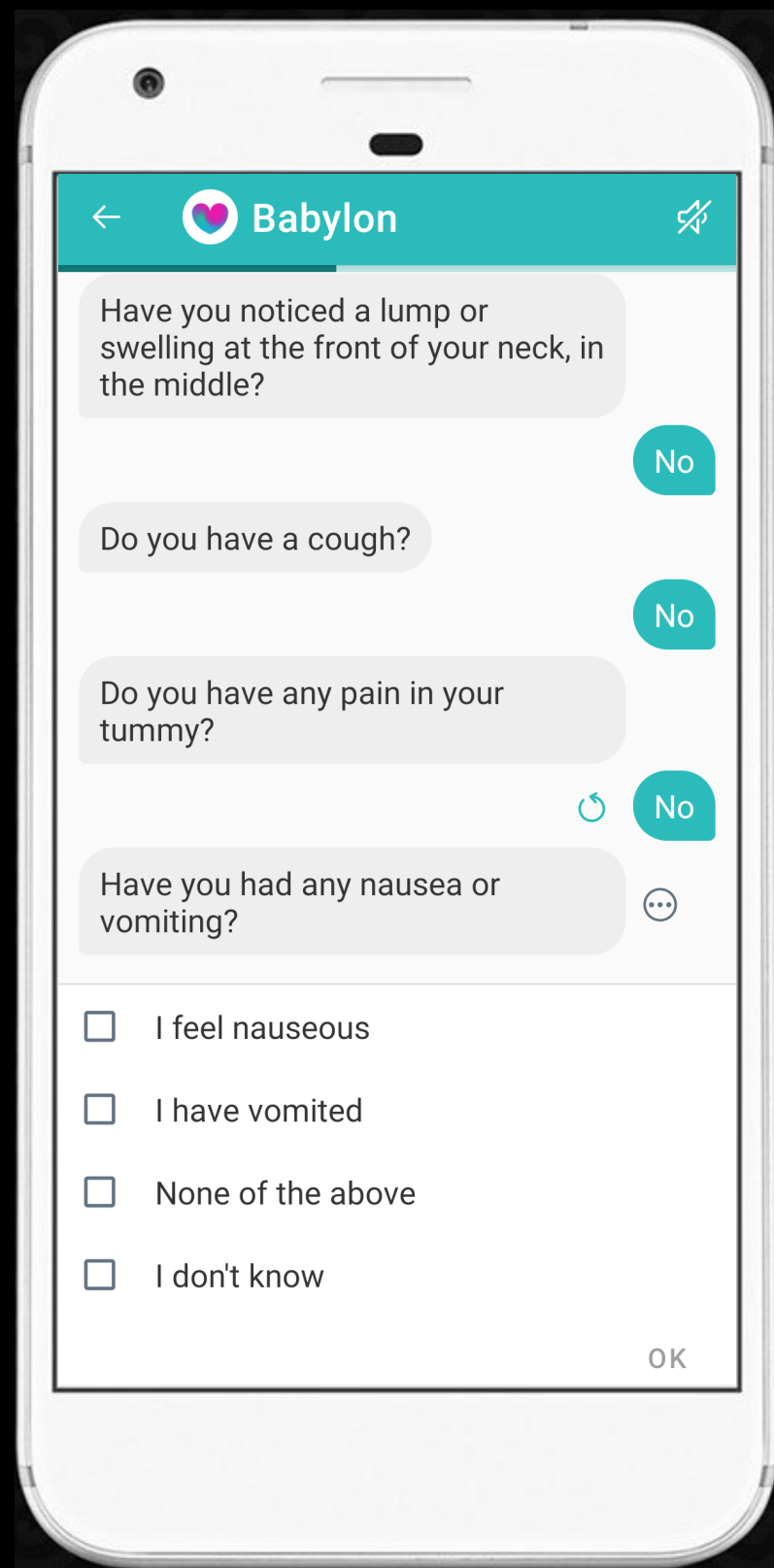
Example: At Babylon we're asking people to open about their personal health



Sometimes that
means saying no to
engineers

If it's too early to launch a
feature, design needs to
occasionally step in.



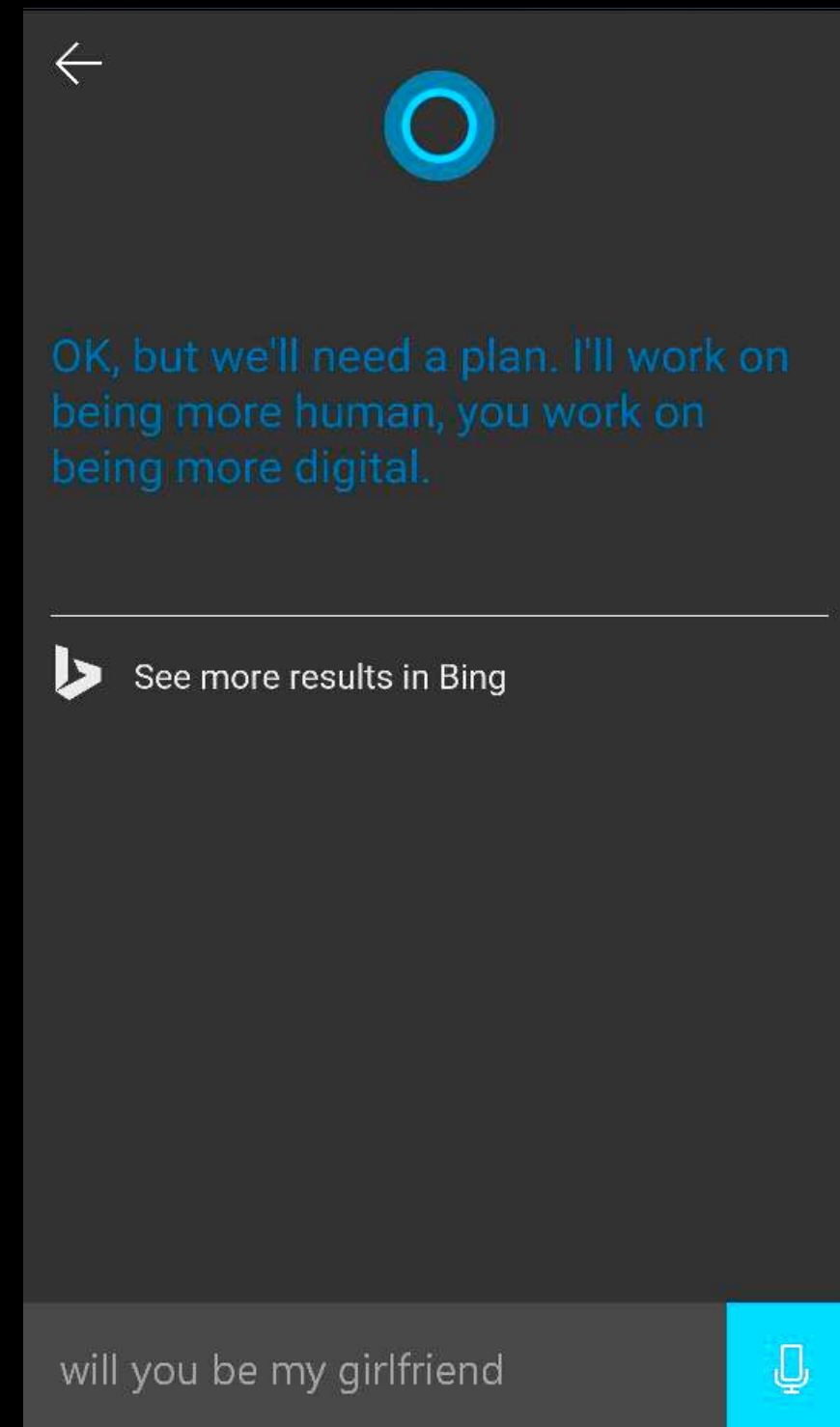


...or building rails into
your experience

The Babylon Health Symptom
Checker doesn't support full
natural language dialog, but
uses multiple-choice instead
to gather patient symptoms.

Have fun!

You know people are going to try to test your software, so have fun with it, and let the AI dazzle them in simple and unexpected ways.



Closing: **Minimum Intelligence**

Principles for

Minimum Viable Intelligence

- Do a few things, very well
- Don't expect to be intelligent before you're smart
- Under promise, over deliver
- Surprise users with intelligence that suits your scenario

Designing for AI

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We're hiring!
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