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Alexa Search

Amazon
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Lead UX Designer /
Voice & Multimodal Designer
Santa Clara, CA



Alexa Personal Data Search

LAUNCHED 2019

Senior Lead UX – Voice and Multimodal Designer
Amazon, Santa Clara, CA.

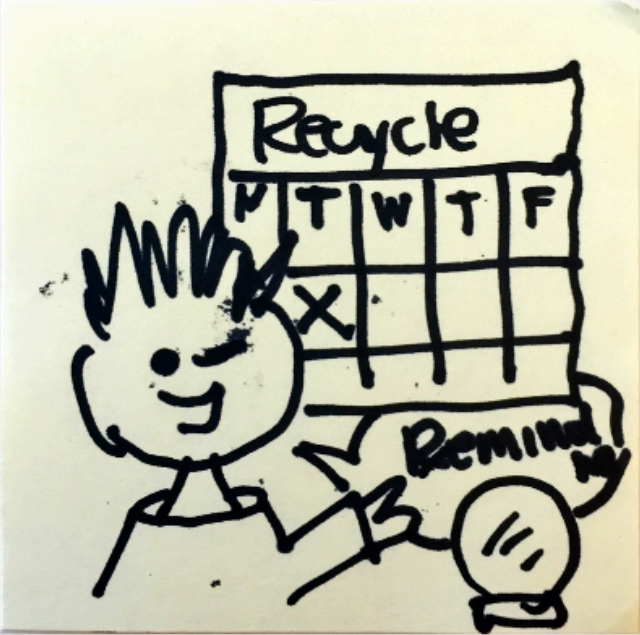
Imagine you are using your personal assistant to find any of your everyday information that you wanted your assistance to keep for you. You have told your assistant to keep this information in different places like on your calendar, or in your to do list or as a reminder. Someday you want to ask for these information.

User Interviews in UserTesting.com / Interview Sample

I conducted interviews in usertesting.com to find out people’s preferences when storing and finding their personal information in their digital assistant.

When is recycling day?

1.Storing your info



Imagine that your community has a recycling day every Tuesday and you ask your digital assistant to remind you that "Recycling days are on Tuesdays at 8:00 AM".

2. Finding your info



You ask:

"When is recycling days?"

Your assistance could respond in 2 ways:

"Recycling days are on Tuesdays at 8:00 AM"

"I found a reminder: Recycling days are on Tuesdays at 8:00 AM"

Next week...

Q: Would you like to hear where your information was stored? Like in your calendar, in your to do list, or as a reminder?

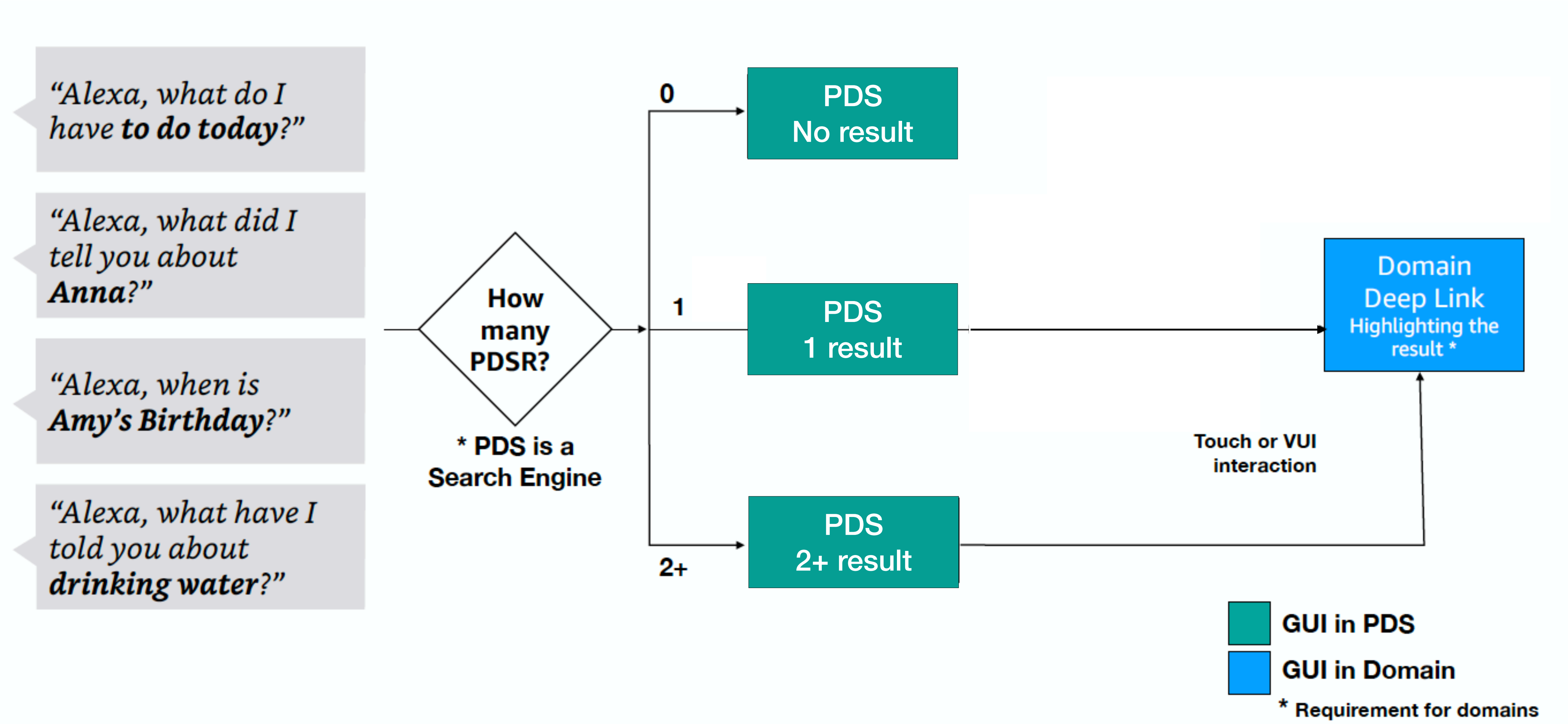
☐

Yes, I like to know where my info was stored

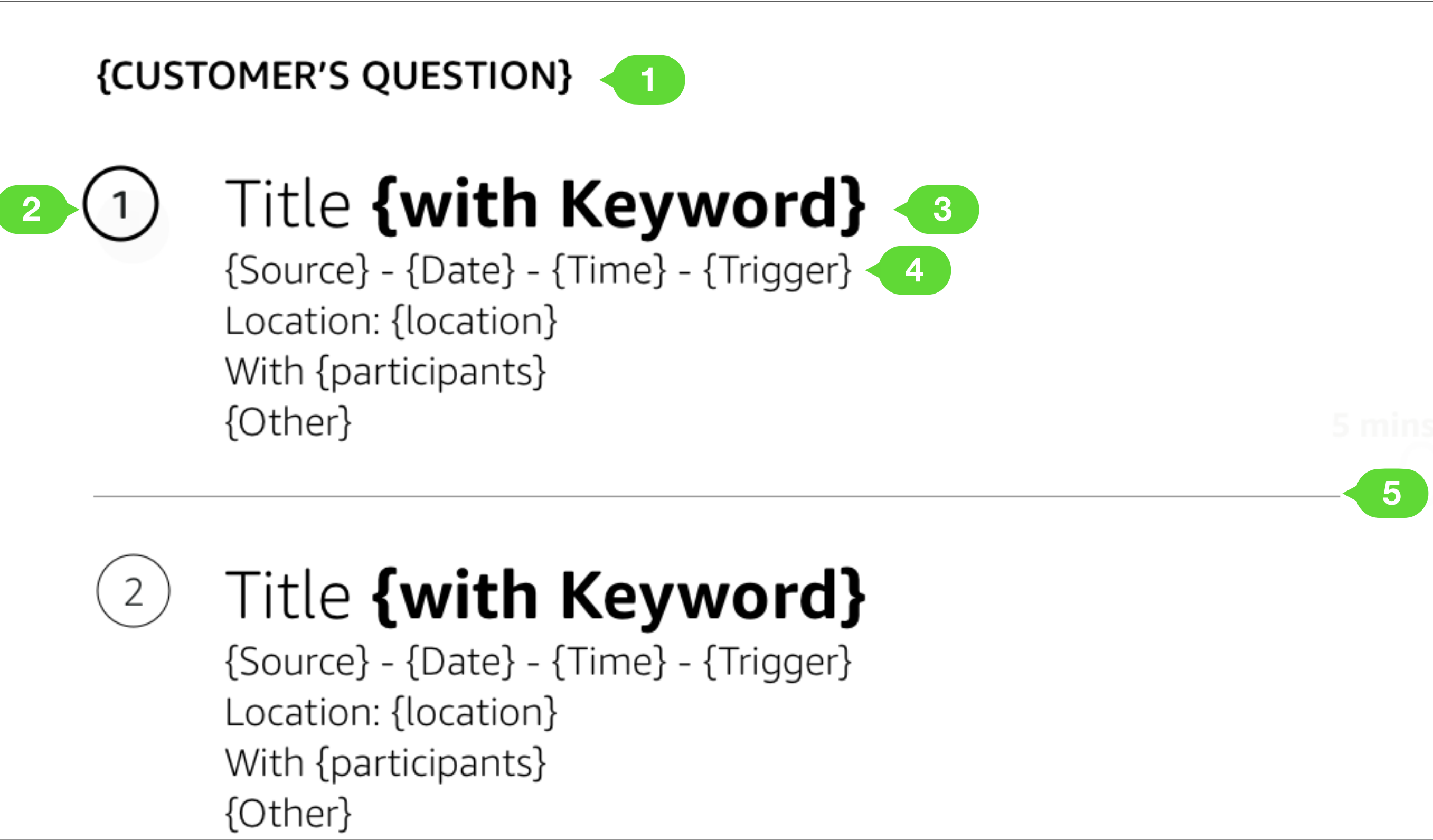
☐

No, I don't care

High Level Flow Multi-Modal GUI Diagram



Search list – 2+ results pattern wireframe sample



1.Customer Question

2.Search result ordinal

3.Search result Title with keyword highlighted

4.Search result metadata

- Source
- Date
- Time
- Trigger (Location)
- Location
- Participants
- Other

5.Divider

Search list – 1 result pattern

{CUSTOMER’S QUESTION} 1

1

Title {with Keyword} 2

{Source} - {Date} - {Time} - {Trigger} 1

Location: {location}

With {participants}

{Other}

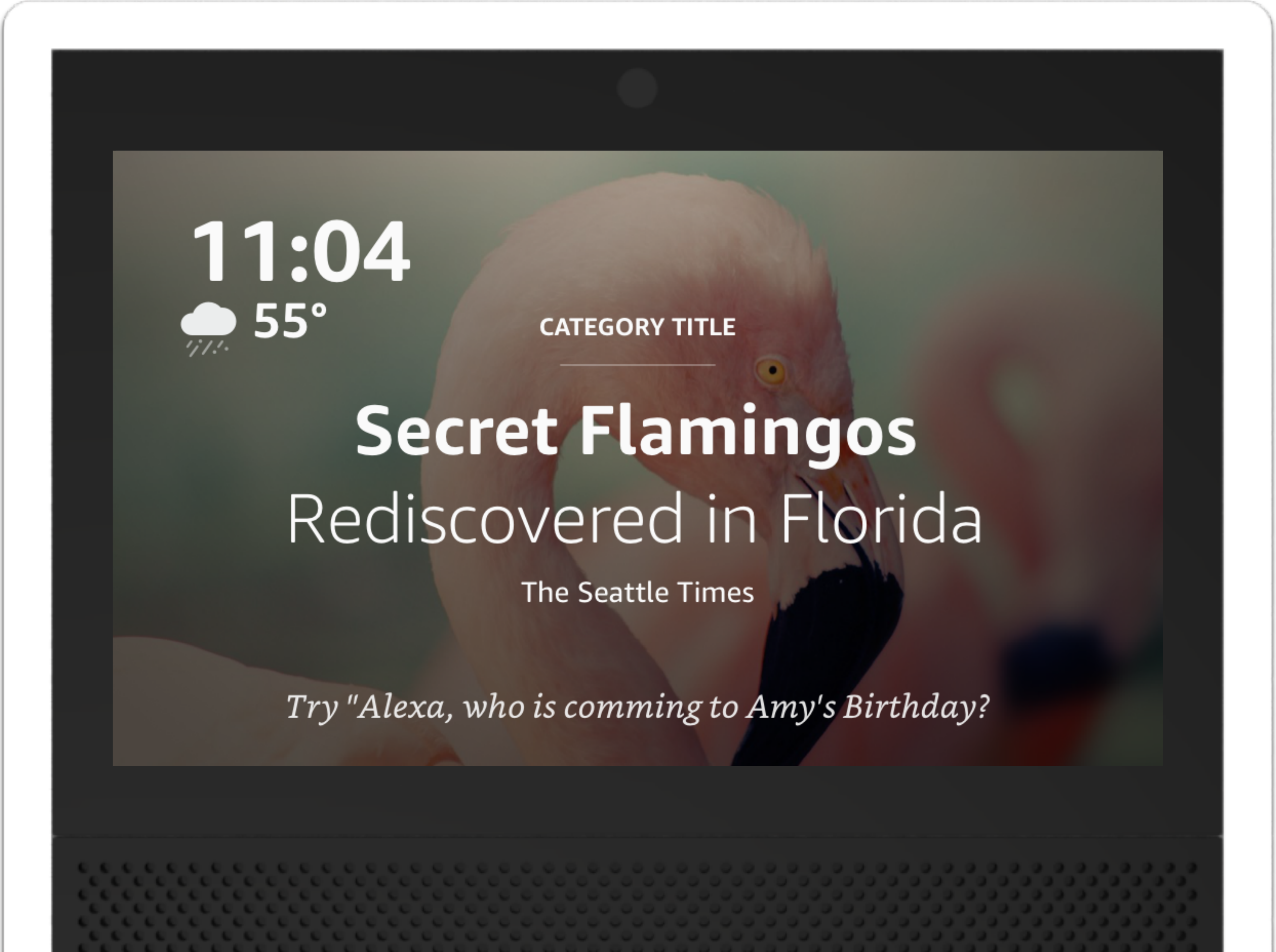
1.Customer Question

2.Search result Title

3.Search result metadata

- Source
- Date
- Time
- Trigger
- Source
- Location
- Participants
- Other

Home Screen



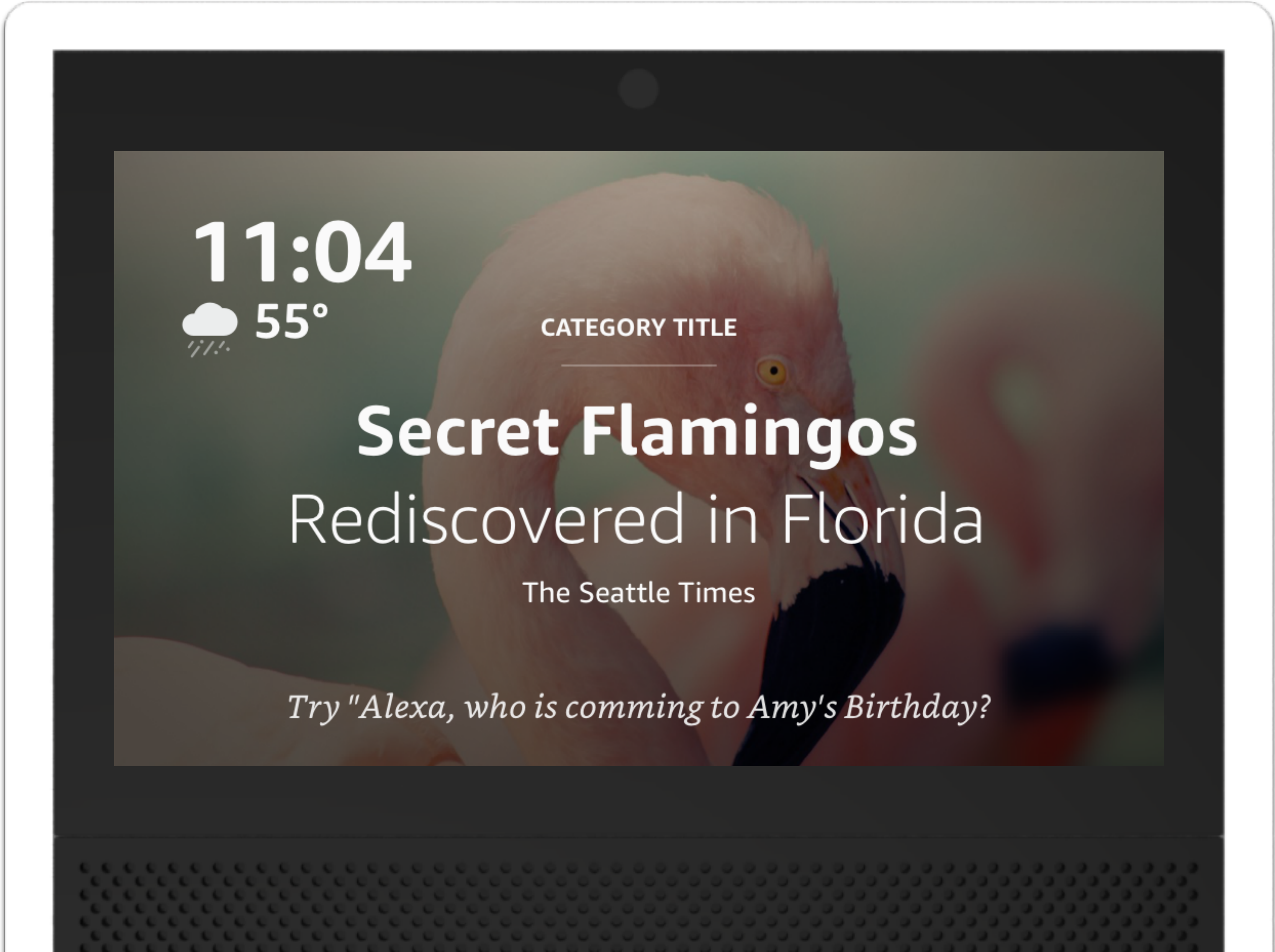
“Alexa, what have I told you about drinking water?”

Results List Screen

WHAT HAVE I TOLD YOU ABOUT DRINKING WATER?

- 1** Drink water
Reminders · Every day at 10:00 AM
- 2** **Drinking Water** Seminar
Calendar · Tomorrow · 3:00 PM
Location: Levi's Stadium, 4900 Marie P DeBartolo Way,
Santa Clara, CA 95054, USA
- 3** **Drinking Water** Seminar Schedule
Email · From Health Choices

“Here are 5 things I found that might be related: Drink water, everyday at 10:00 AM, Drinking water seminar, tomorrow at 3:00 PM and Drinking water seminar schedule email from Health Choices . Would you like to hear the last two?”



*"Alexa, do I have
bananas in my
shopping list?"*

DO I HAVE BANANAS IN MY SHOPPING LIST?

- 1 **Bananas**
Shopping list
- 2 **Green Bananas**
Costco list
- 3 **Banana cake**
Trader Joe's list

*"I've found 3 things:
bananas in your
shopping list, green
bananas in your costco
list, banana cake in
your Trader Joe's list"*

DO I HAVE BANANAS IN MY SHOPPING LIST?

- 1 **Bananas**
Shopping list
- 2 **Green Bananas**
Costco list
- 3 **Banana cake**
Trader Joe's list

"Alexa, select green bananas"

- * Every list item links to the
- * contextual list.

< COSTCO LIST

3 Pasta sauce

4 Vitamins

5 **Green Bananas**

6 Juice

"Alexa, go back"

*The list item will be shown in context in the current position highlighted.

Note: Each domain is free to decide the highlight style: like only the ordinal, or the keyword or the entire string.

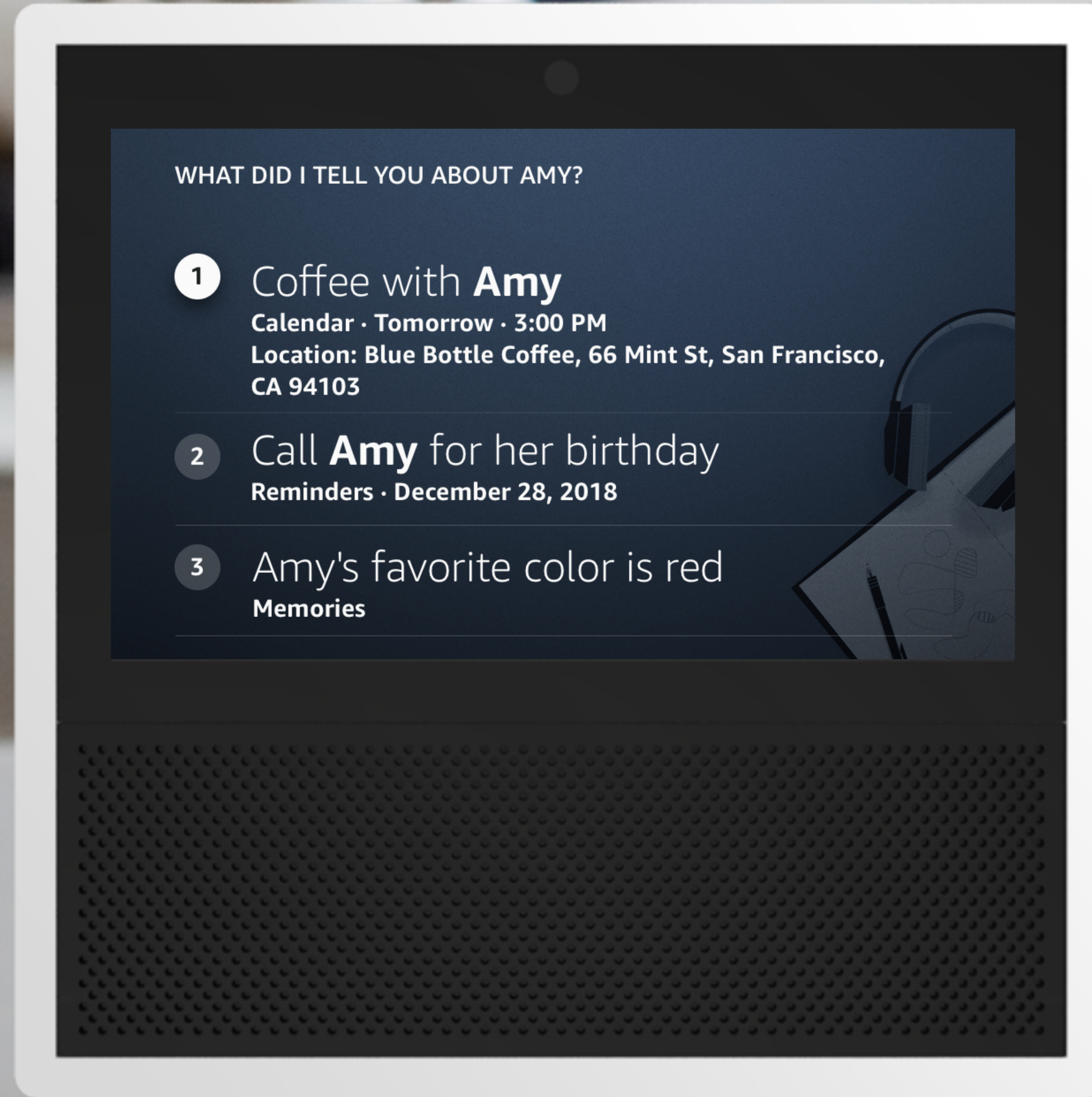
*Tapping on the back button or ask via VUI to go back to Personal Data Search (PDS)

Multi-Modal Echo Show

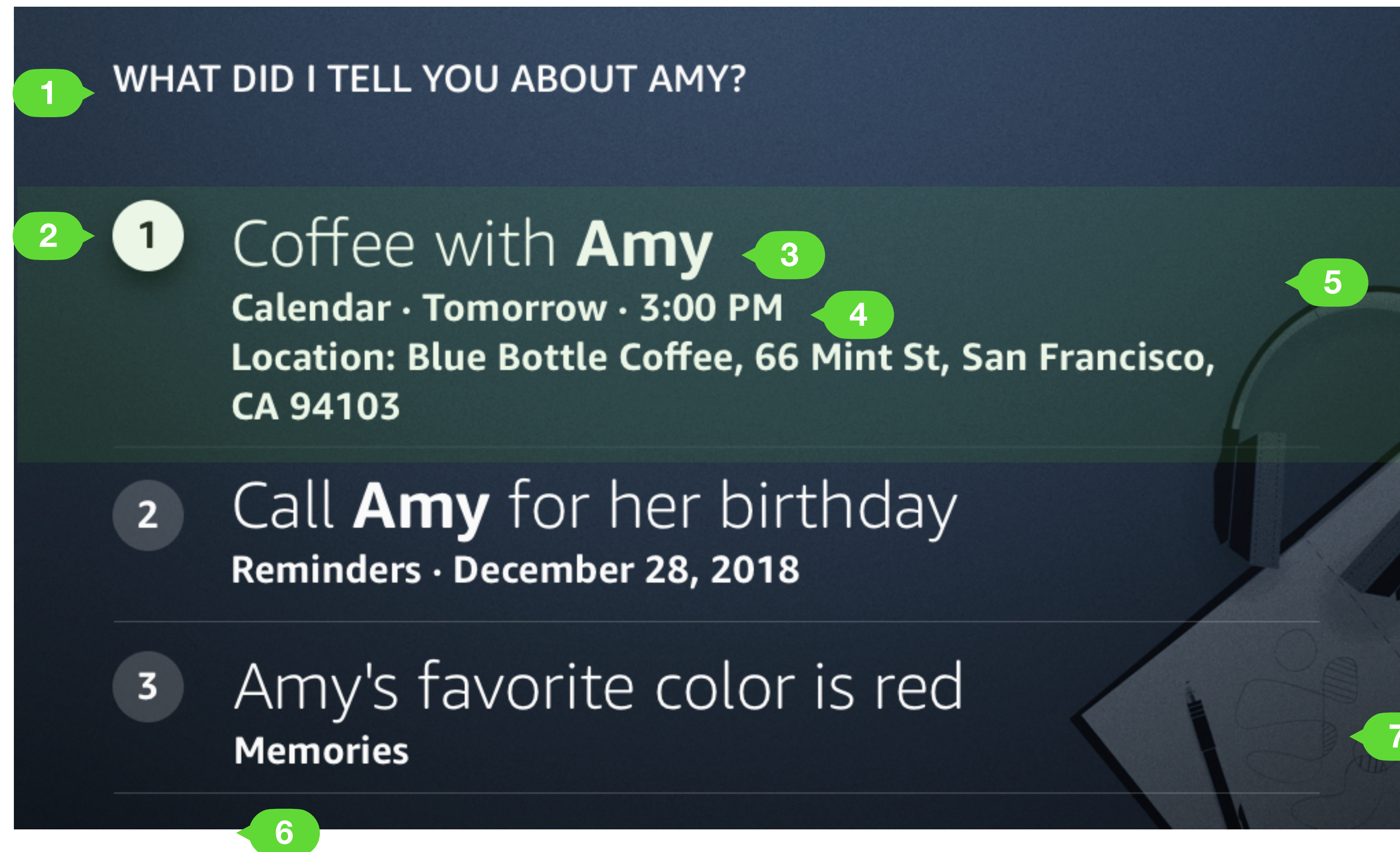
WHAT DID I TELL YOU ABOUT AMY?

- 1 Coffe with **Amy**
Calendar · Tomorrow · 3:00 PM
Location: Blue Bottle Coffee, 66 Mint St, San Francisco, CA 94103
- 2 Call **Amy** for her birthday
Reminders · December 28, 2018 · 10:00 AM
- 3 Amy's favorite color is red
Memories

Multi-Modal Echo Show & Echo Spot



Multiple results list components



1.Header:

Customer Question

Header pattern: layouts / headers / x600 / dark / 01

2. List item pattern control VDNA:

List item vertical / x600 / **secondary** / double / ordinal

3.Search result title style:

Keyword highlighted: Highlight font: Amazon ember, bold, size 48 pt

4.Search result metadata:

Depending on the domain PDS displays the available metadata in this order:

- Source
- Date
- Time
- Trigger (e.g. Location)
- Location
- Participants
- Other (another metadata specific from that domain)

Highlight the specific info that answers the users question, e.g. if it is a when question highlight the date and time information and unhighlight the rest.

5.Deep link to the domain: Show the result in the domain after the user taps on any point in the result control or select by voice. The domain should show clearly the result record but it is up to the domain how to highlight the specific keyword result.

6.Vertical Scroll: Scroll down interface if more results available.

7.Background: VDNA background with a folio illustration default

Results List Screen Sample

WHAT DID I TELL YOU ABOUT AMY?

- 1** Coffee with **Amy**
Calendar · Tomorrow · 3:00 PM
Location: Blue Bottle Coffee, 66 Mint St, San Francisco, CA 94103
- 2** Call **Amy** for her birthday
Reminders · December 28, 2018
- 3** Amy's favorite color is red
Memories

"Alexa, what did I tell you about Amy?"

Here are 3 things I found that might be related: Coffee with Amy tomorrow at 3:00 PM; Call Amy for her birthday on December 28; and Amy's favorite color is red.

Results List Screen Sample

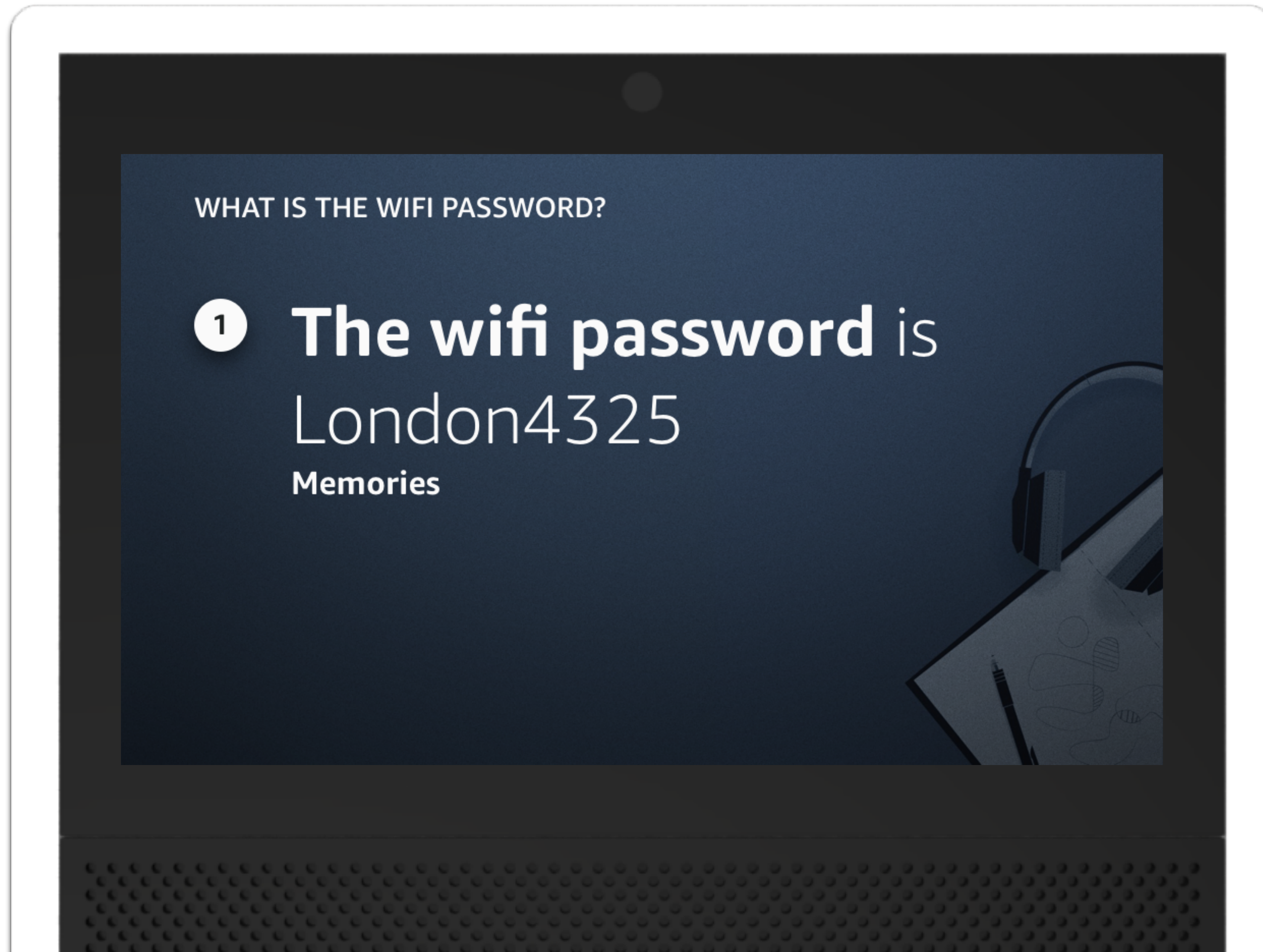
WHERE IS SOCCER PRACTICE?

- 1 Soccer practice**
Calendar · Tomorrow, 3:00 PM
**Location: Cal North, 1040 Serpentine Lane, Ste. 206
Pleasanton, CA 94566**
- 2 Soccer practice**
Calendar · Sat, December 29, 2018 · 3:00 PM
**Location: Cal North, 1040 Serpentine Lane, Ste. 206
Pleasanton, CA 94566**

"Alexa, where is soccer practice?"

*"Here's what I found:
Soccer practice
tomorrow:
Location: Cal North,
1040 Serpentine Lane,
Ste. 206
Pleasanton, CA 94566;
and Soccer practice
Saturday, December
29th:
Location: Cal North,
1040 Serpentine Lane,
Ste. 206
Pleasanton, CA 94566*

Results List Screen Sample

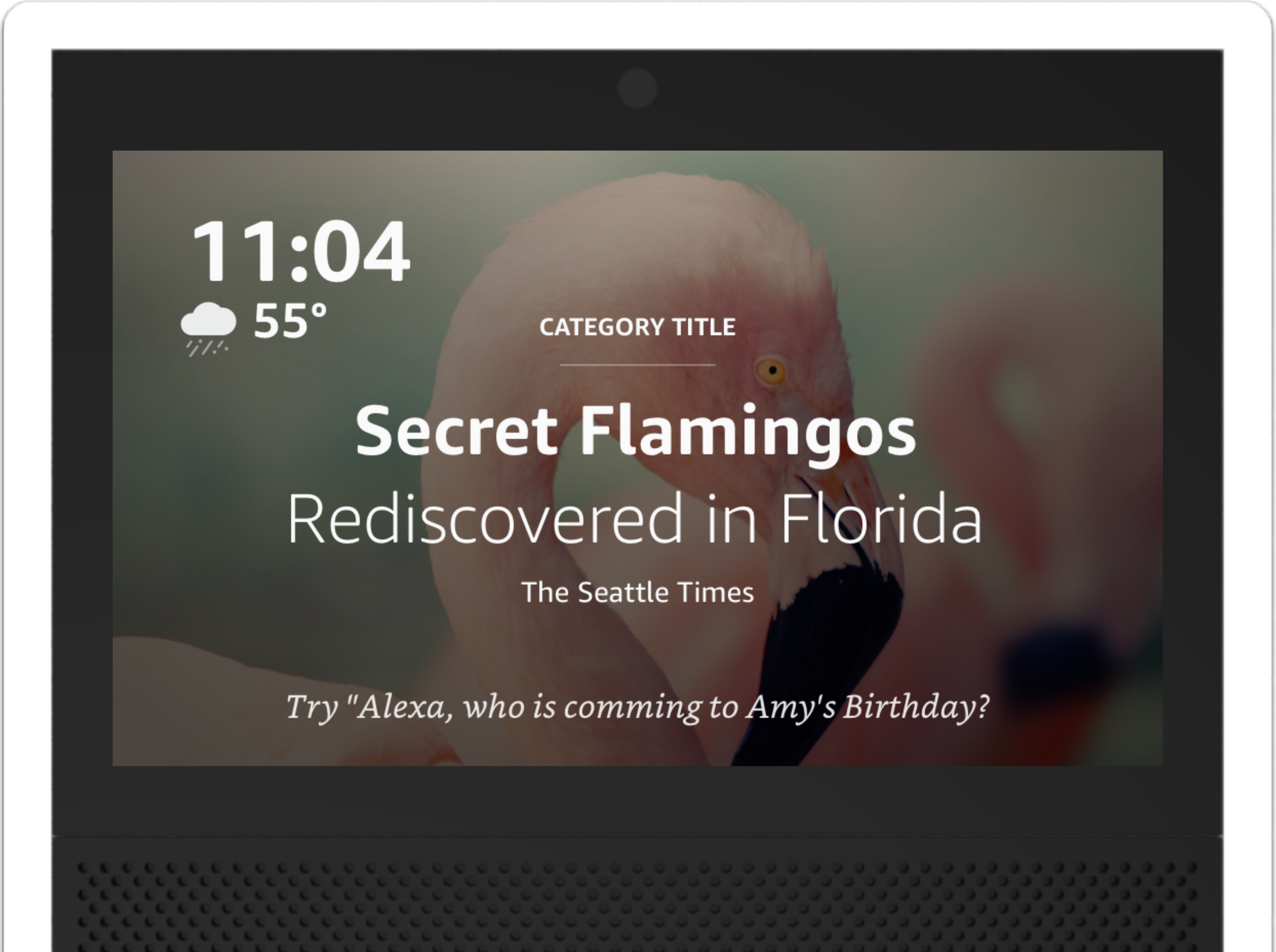


"Alexa, what is the wifi password?"

Here is what I found: The wifi password is London4325

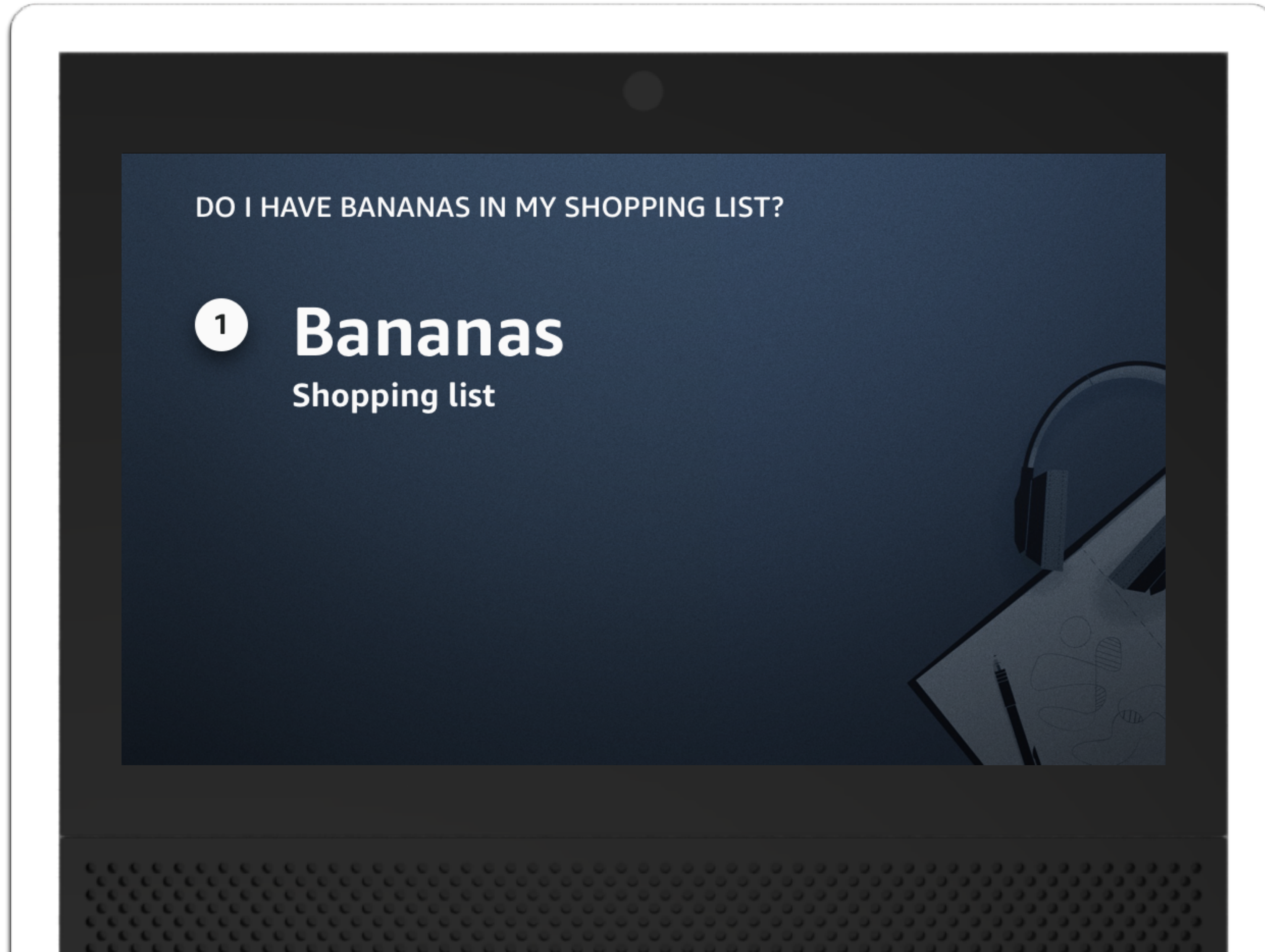
Storyboard

"Alexa, do I have bananas in my shopping list?"



*"Alexa, do I have
bananas in my
shopping list?"*

Q:"Alexa, do I have bananas in my shopping list?" (1 result)



*"I've found 1 thing:
bananas in your
shopping list"*

Q:"Alexa, do I have bananas in my shopping list?" (No results)

DO I HAVE BANANAS IN MY SHOPPING LIST?

I couldn't find that in your shopping list

Try, "Alexa, add bananas to my shopping list"

"Alexa, do I have bananas?"

I couldn't find that in your shopping list

Q:"Alexa, do I have milk in my shopping list?" (No results)

DO I HAVE MILK?

I couldn't find that in your shopping list

Try, "Alexa, add milk to my shopping list"

"Alexa, do I have milk?"

I couldn't find that in your shopping list

Personalized lists

LAUNCHED 2019 / COLLABORATE, SHARE, ORGANIZE TOGETHER

PATRICIA PANQUEVA

Senior UX - Multi-Modal Designer

Amazon, Santa Clara, CA.

2018 - 2019

Personal & Communal

Alexa knows who is speaking to her, who you are, and who your family or household is. **She can distinguish between personal and share family or communal experiences, and will respond accordingly to help you manage your dependencies on each other.** She remembers context and past conversations, is aware of your location, and knows meaningful details in order to maintain familiarity and be more efficient in future exchanges.

North Star, Alexa tenet

Personal & Communal

"Voice Profiles (Speaker ID) integration: We will integrate with Speaker ID to allow customers to identify in the companion app who added items to the list, and to create and organize information in their own personal lists, where they can restrict access to the list to certain speakers."

OP1page (1)

ALEXA PERSONALIZED LISTS

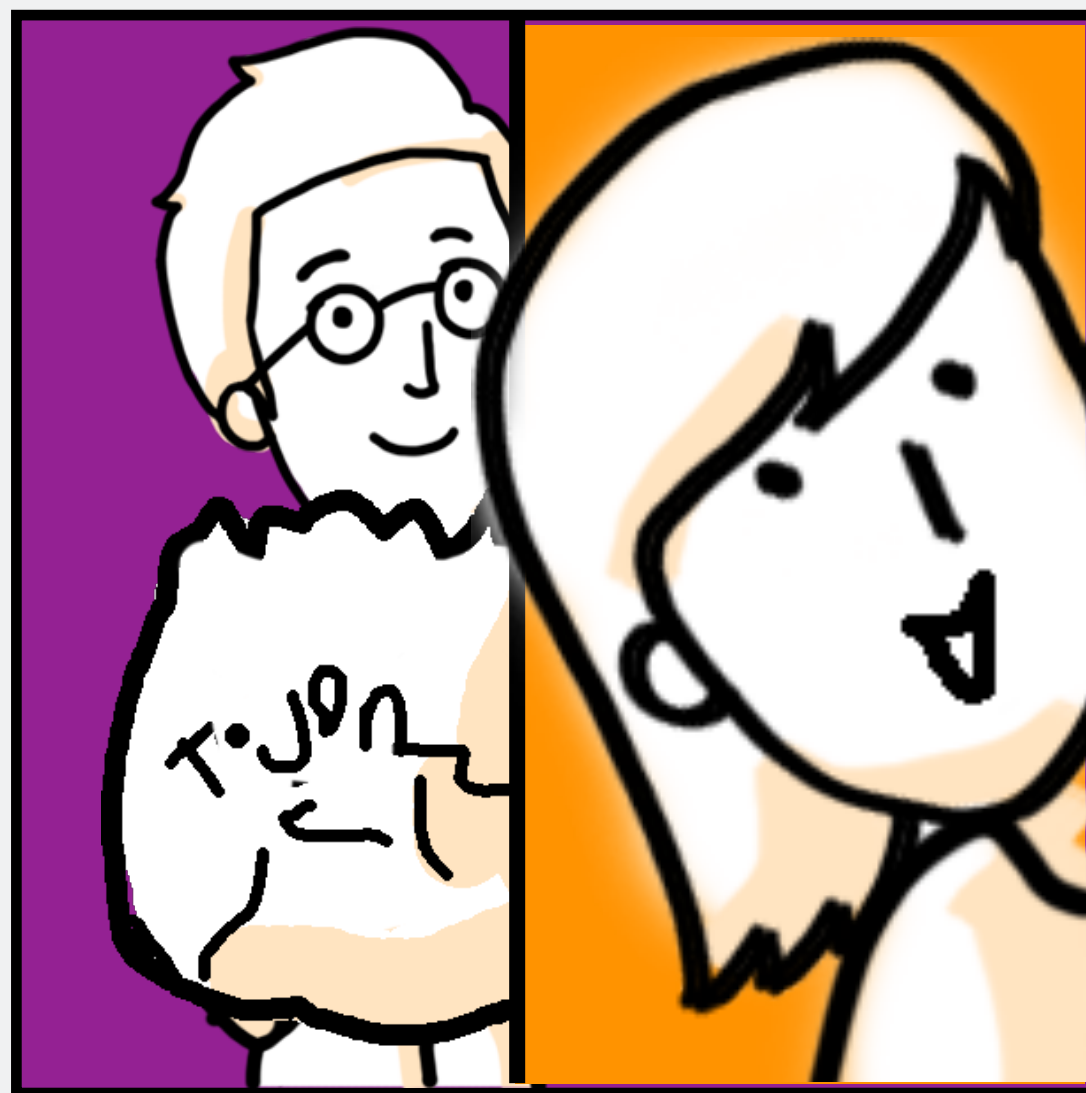
Storyboards & Dialogs

COLLABORATE, SHARE, ORGANIZE TOGETHER

User group

FAMILIES WITH MIDDLE/HIGH SCHOOL AGE CHILDREN

- Increasing responsibilities among the members of the family
- Parents are teaching independence. Difficulties around managing shared resources
- Home is space, but much of our lives happens outside the home.



Add items to the communal list

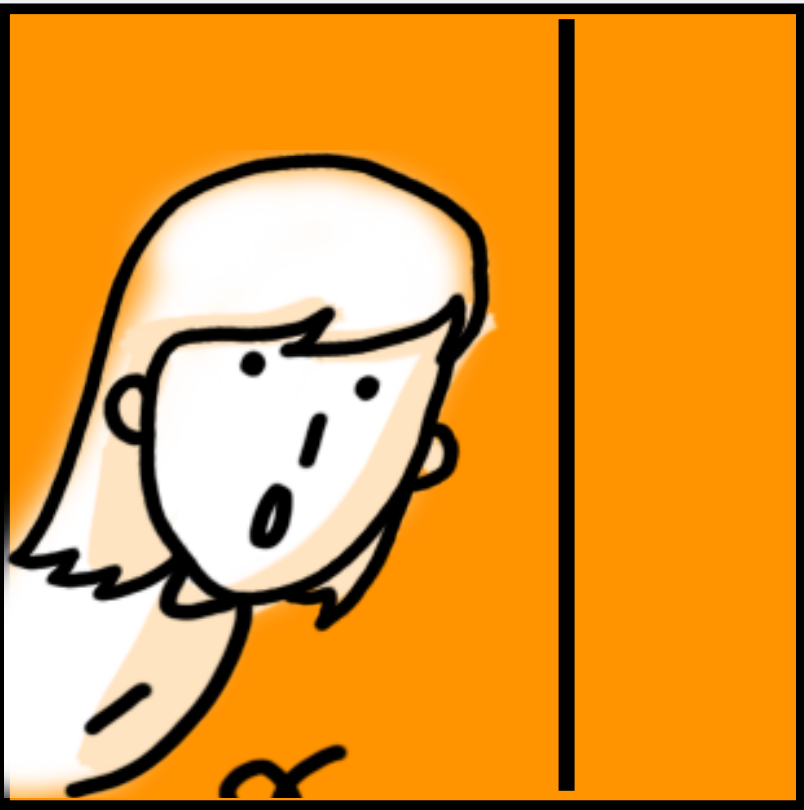
Storyboard A | Anna creates a new private list and wants to have the control to who access it (Restricted list)

“Alexa, create a new personal list”

“Alexa, share my Birthday list with Tom”



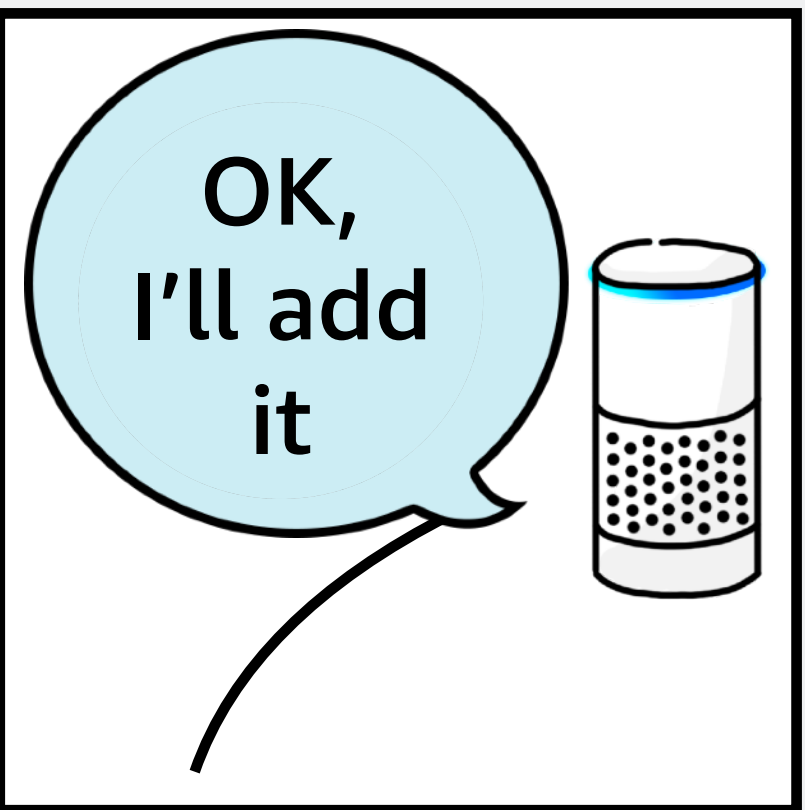
Anna loves cooking, she finds Alexa very helpful in the kitchen. She lives with her husband Tom and her two teenage children.



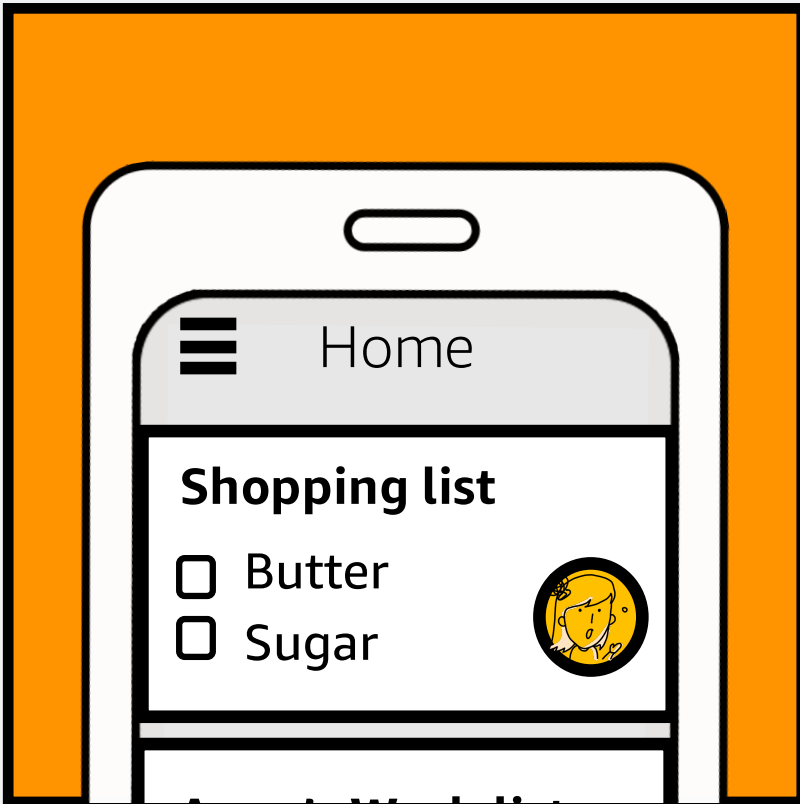
She is about to start baking the cake for her daughter's birthday and after checking the recipe notices she's missing two main ingredients



So she says: "Alexa, add butter and sugar to the shopping list"



Alexa added the ingredients to the family list.



Then she remembers she's missing the candles and balloons for decoration. She doesn't want her daughter to find out, so she creates a new private list.



She says: "Alexa add candles and balloons to the private birthday list."



And then shares the list with her husband from the app



Now her husband, Tom, is notified and has access to the private Birthday list.

Add items to the communal list (Collaborative list)



Alexa, add butter to my shopping list

Anna

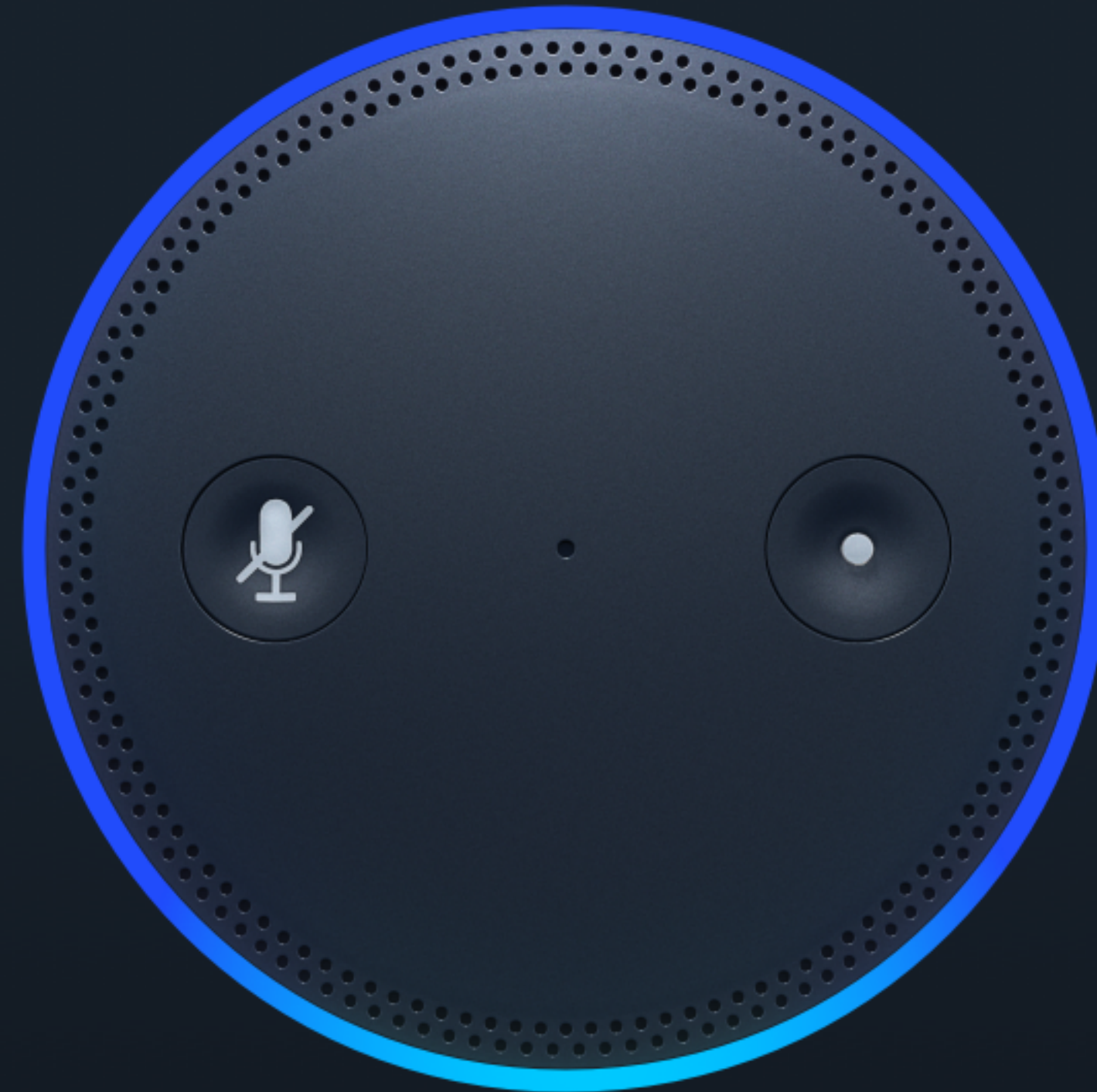
Butter added to your shopping list.



Alexa, add eggs to the shopping list.

Tom

I added eggs to your shopping list.



Alexa knows who is adding something to the list (Anna, Tom or unknown).

Add items to the communal list (Collaborative list)



Alexa, add butter to my shopping list

Anna

Butter added to your shopping list.



Alexa, add eggs to the shopping list.

Tom

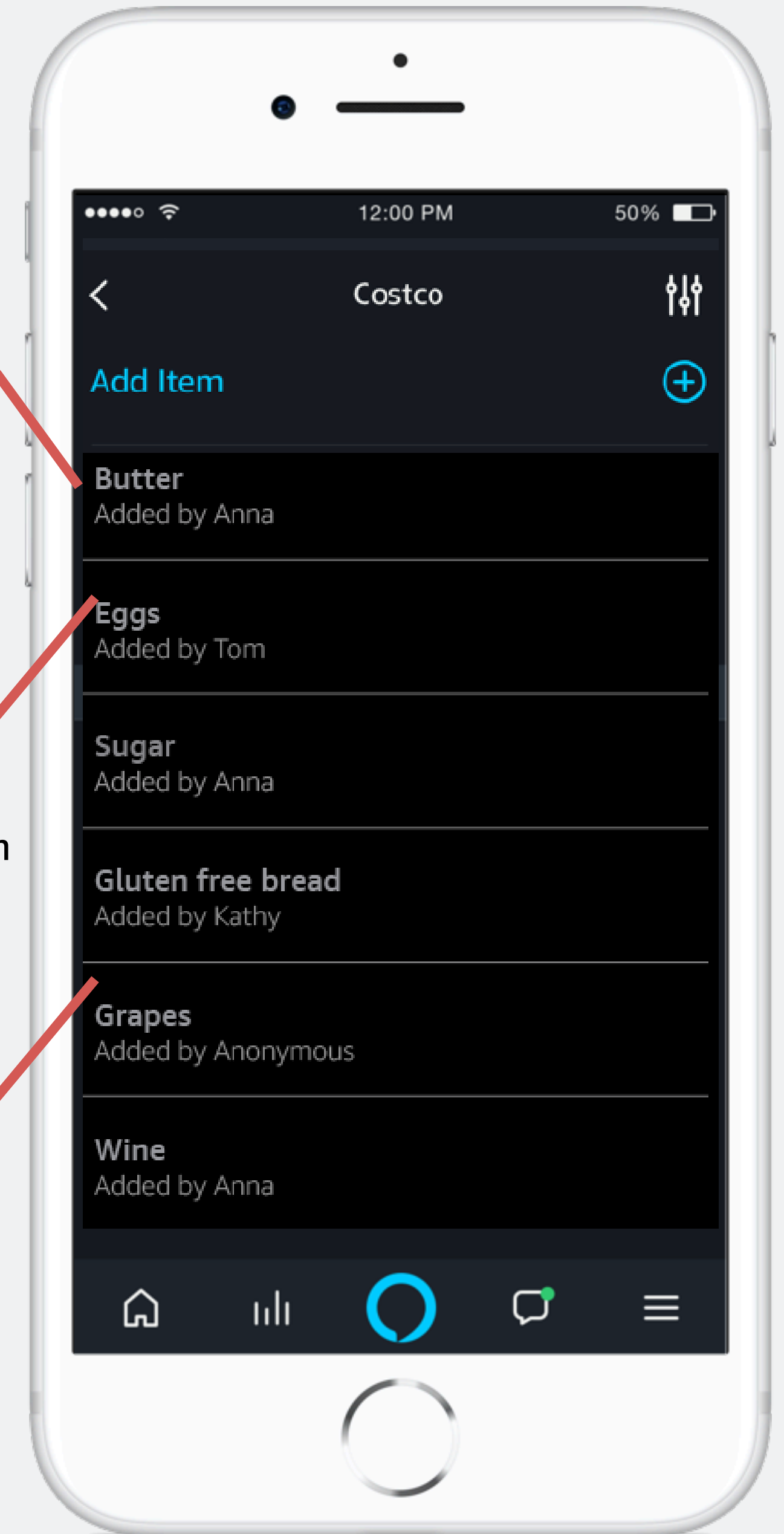
I added eggs to your shopping list.

Alexa knows who is adding something to the list (Anna, Tom or unknown).

1
Butter added by Anna

2
Eggs added by Tom

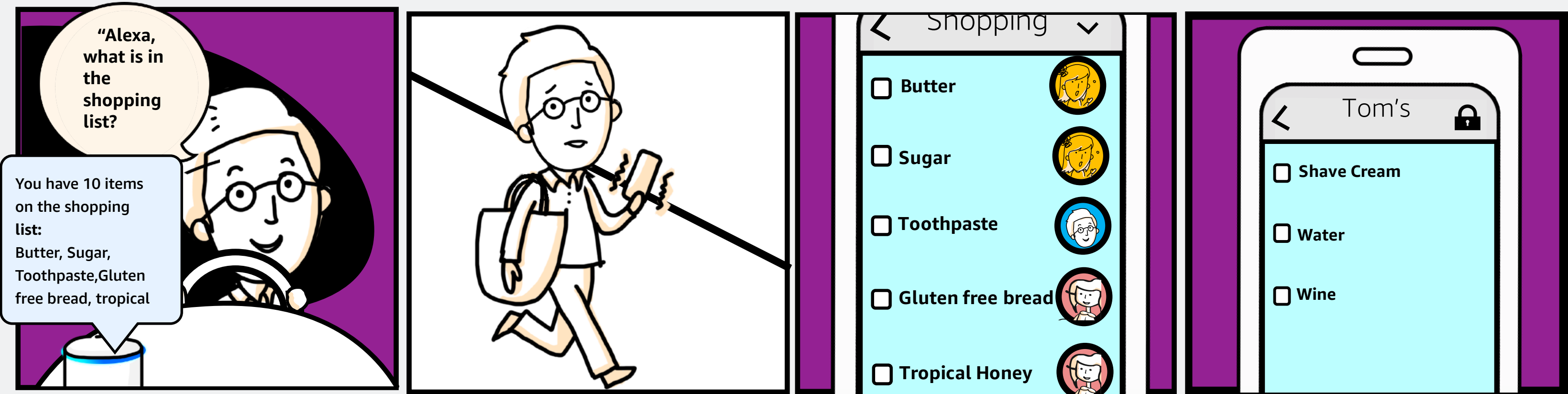
3
Grapes added by Anonymous



Browse the communal list

Storyboard B | Tom browses, his private lists, the communal list and Anna’s private Birthday list (Shared list)

“Alexa, what is in the shopping list”



Tom is on his way home when Anna calls to ask him to stop by the supermarket and buy the recently added items on their shopping list. He wants to review the list: “Alexa, what is in the shopping list?” Alexa lists every item on the common list.

At the grocery store, he opens the family list and reviews all the items, he loves that he can see who adds what to the list.

He is surprised about his daughter’s items, among them are a special gluten free bread and the finest honey in the supermarket.

Simultaneously, Tom also checks his personal list, and gets his personal items at the store.



Tom checked all the items.

It is convenient to have all the family items in one list, he wants everyone to have what they need.

Tom was almost done when he receives Anna’s new list, he sees a note from her about the Birthday list. The list contains disposable plates, special napkins, balloons and candles.

Only he and his wife can see this list, as they want to have surprise party for their daughter. He is happy to buy everything in one go and not to have to be back to the shop during the week.

Tom, arrives home with all the items needed for the week. The family is now set for the celebration!

Browse search for a specific item list (Collaborative list / filtering items by speaker)



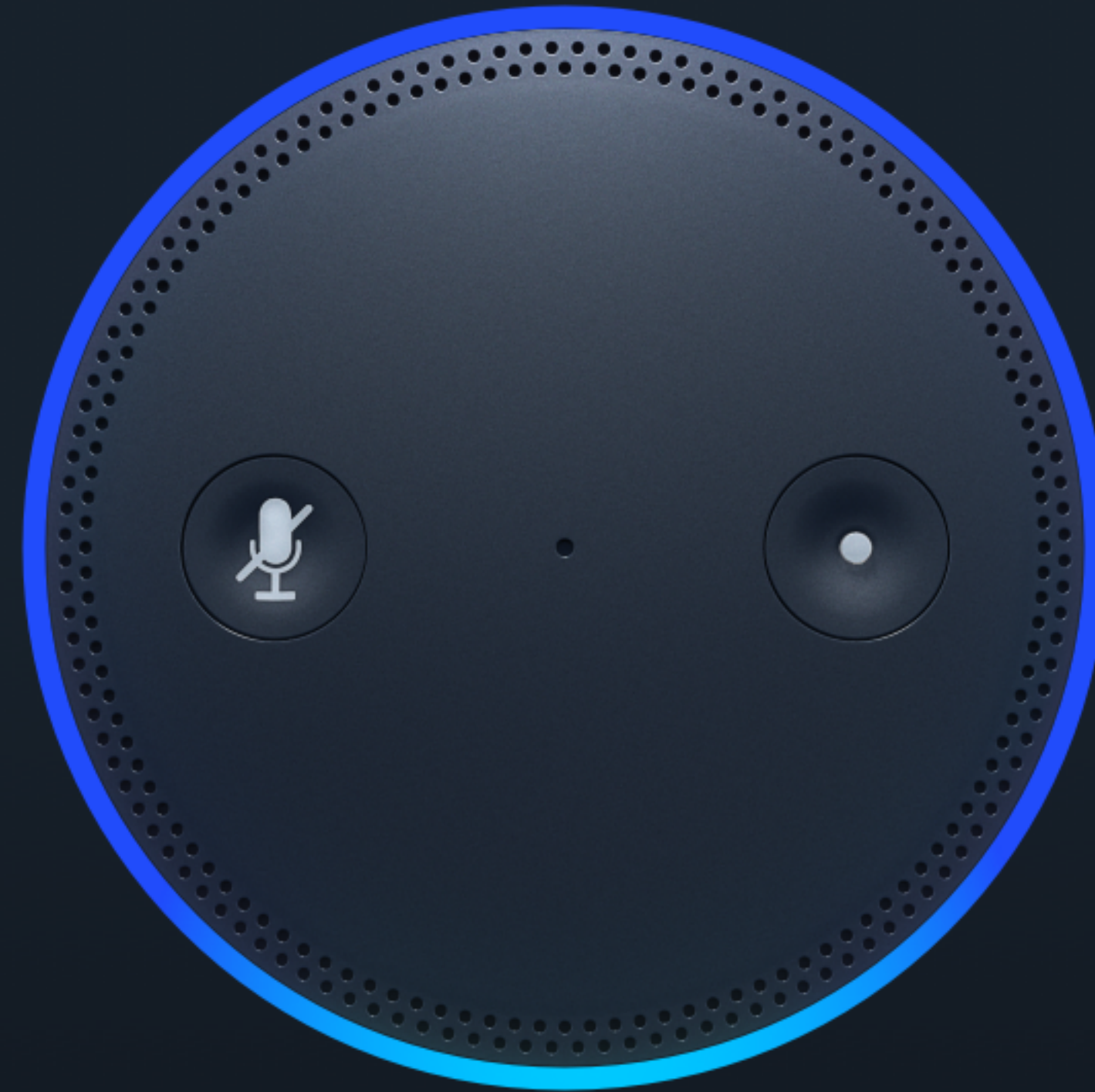
Tom

Alexa, what's in my shopping list?

*You have 3 items in your shopping list: Bananas,
wine, and grapes*

Alexa, who added wine to the list?

Anna did.



Alexa will filter the list and answer who added the requested item.

ALEXA PERSONALIZED LISTS

Design Options in the App

COLLABORATE, SHARE, ORGANIZE TOGETHER

Attribution Option A | Speaker Initial



Alexa, add butter to my shopping list

Anna

Butter added to your shopping list.

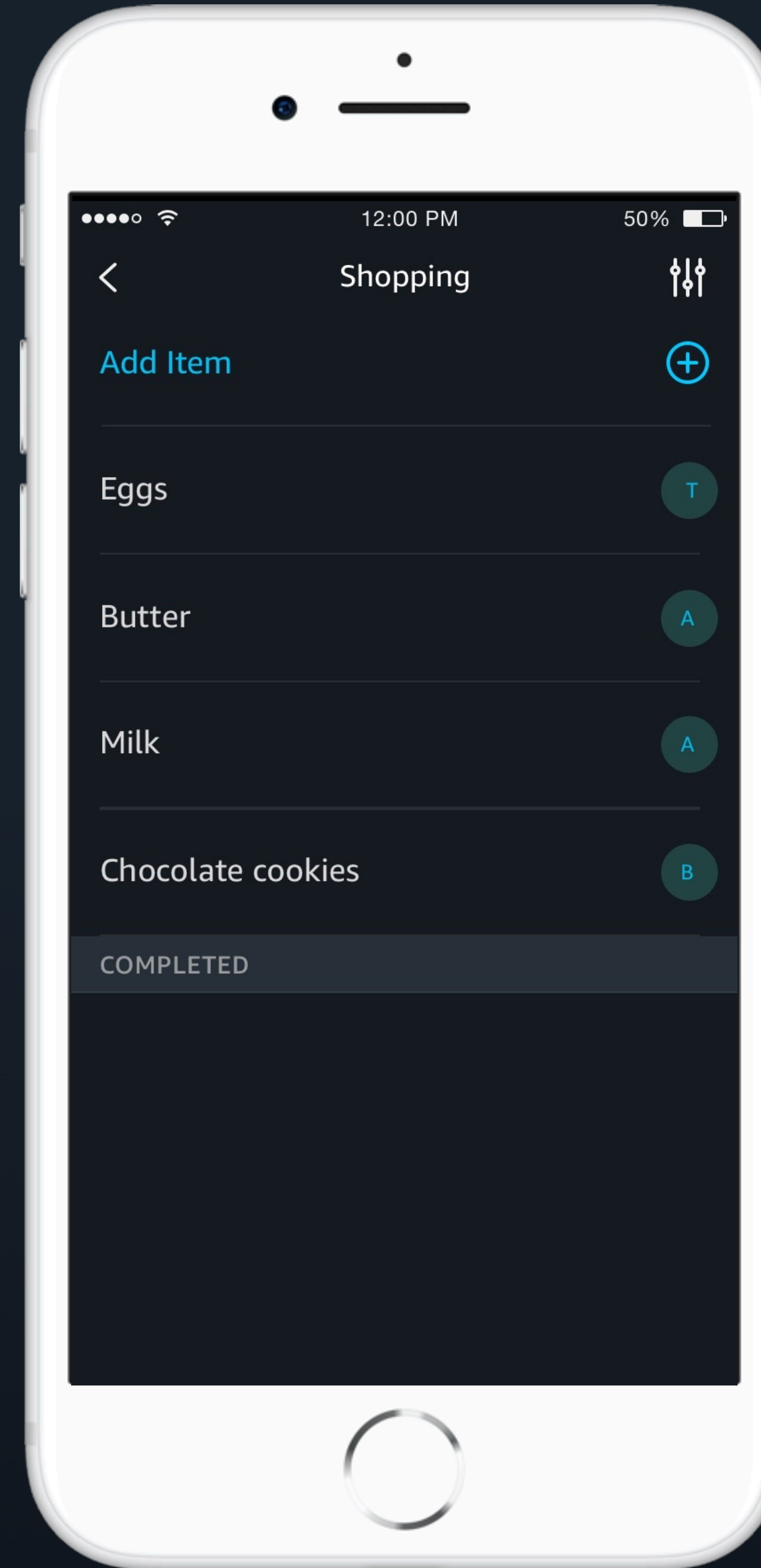


Alexa, add eggs to the shopping list.

Tom

I added eggs to your shopping list.

Alexa knows who is adding something to the list (Anna, Tom, other or unknown).



Attribution Option B | Speaker Name



Alexa, add butter to my shopping list

Anna

Butter added to your shopping list.

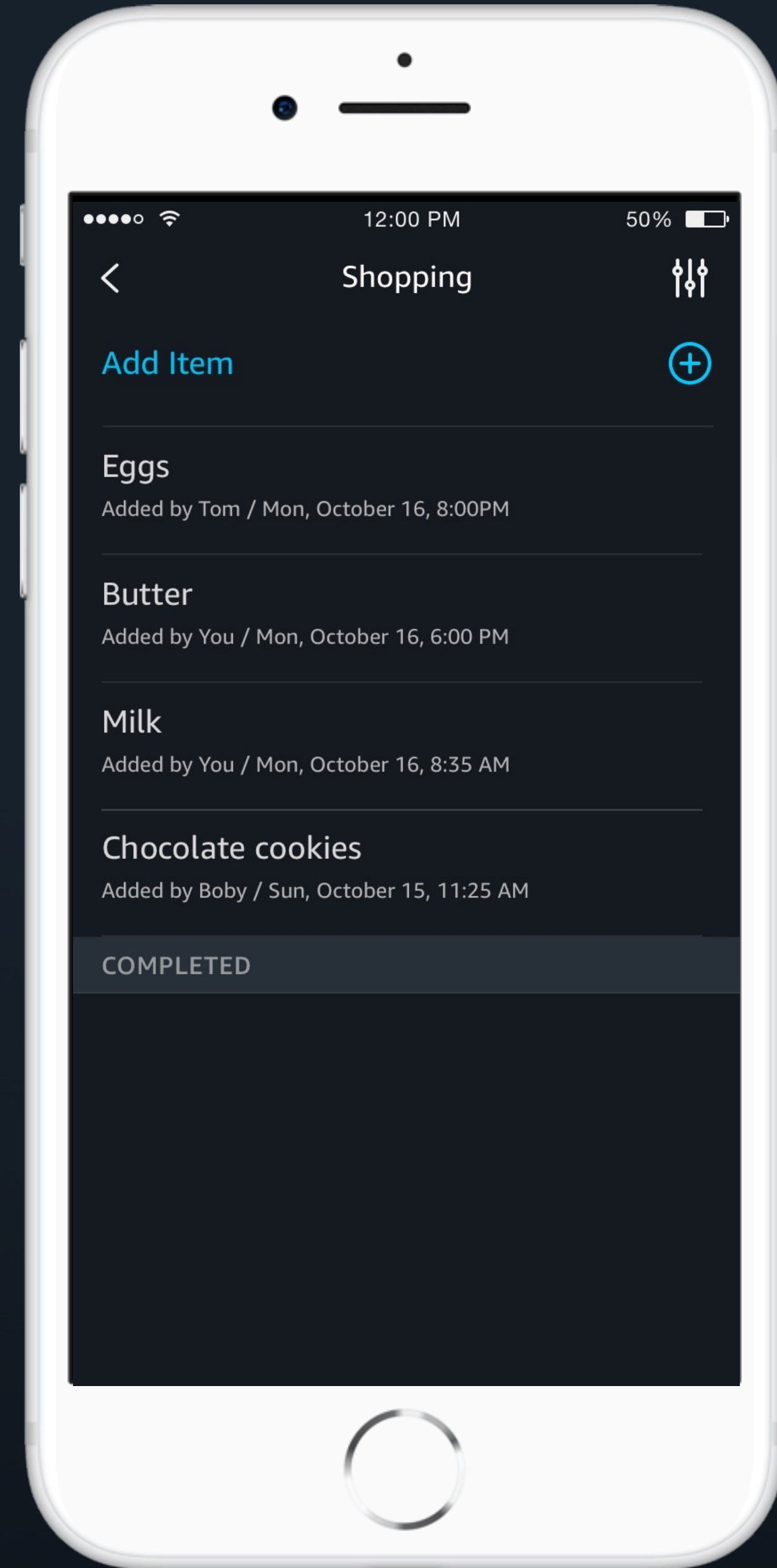


Alexa, add eggs to the shopping list.

Tom

I added eggs to your shopping list.

Alexa knows who is adding something to the list (Anna, Tom, other or unknown).



Attribution Option C | Speaker Avatar



Alexa, add butter to my shopping list

Anna

Butter added to your shopping list.

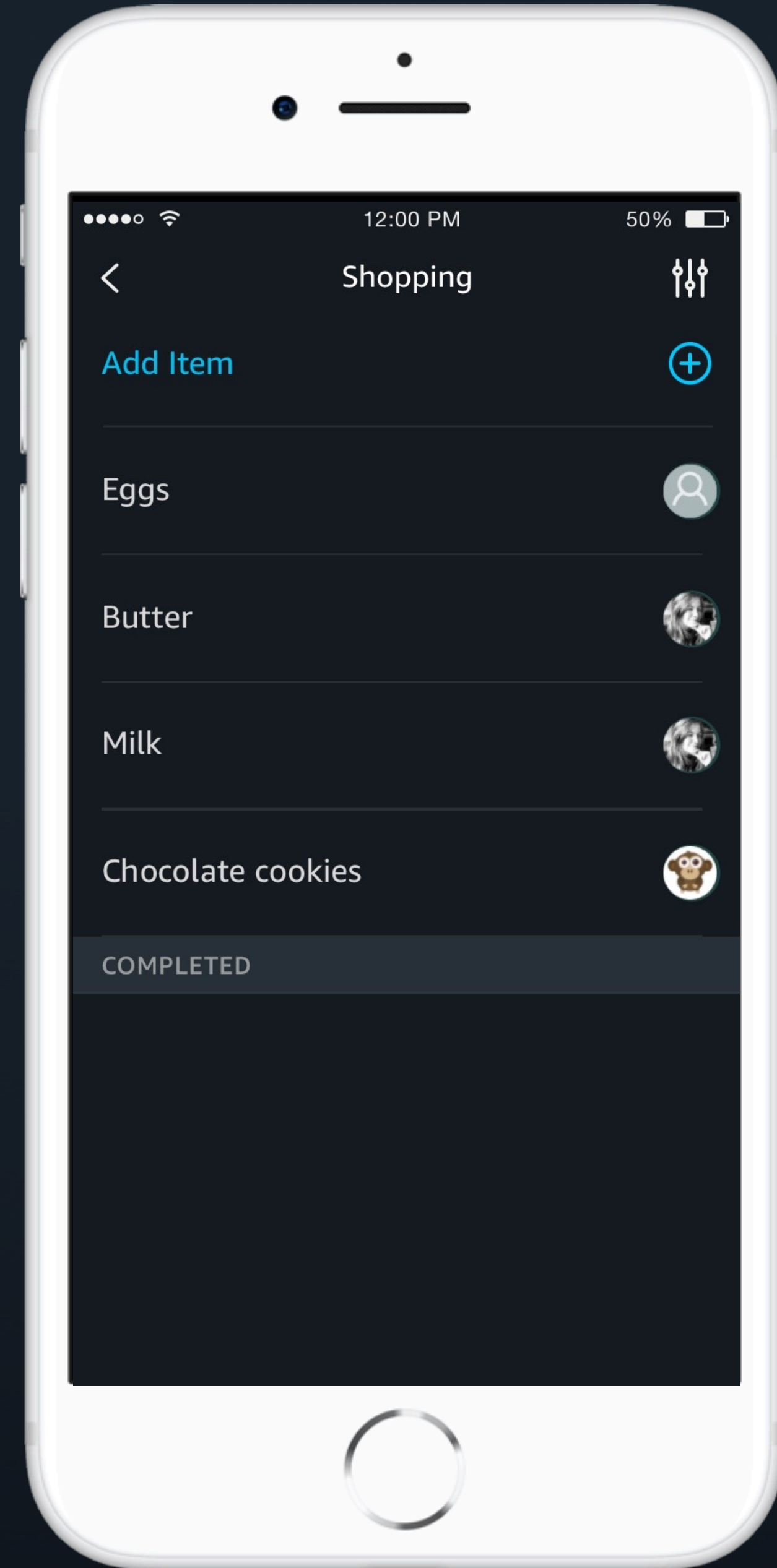


Alexa, add eggs to the shopping list.

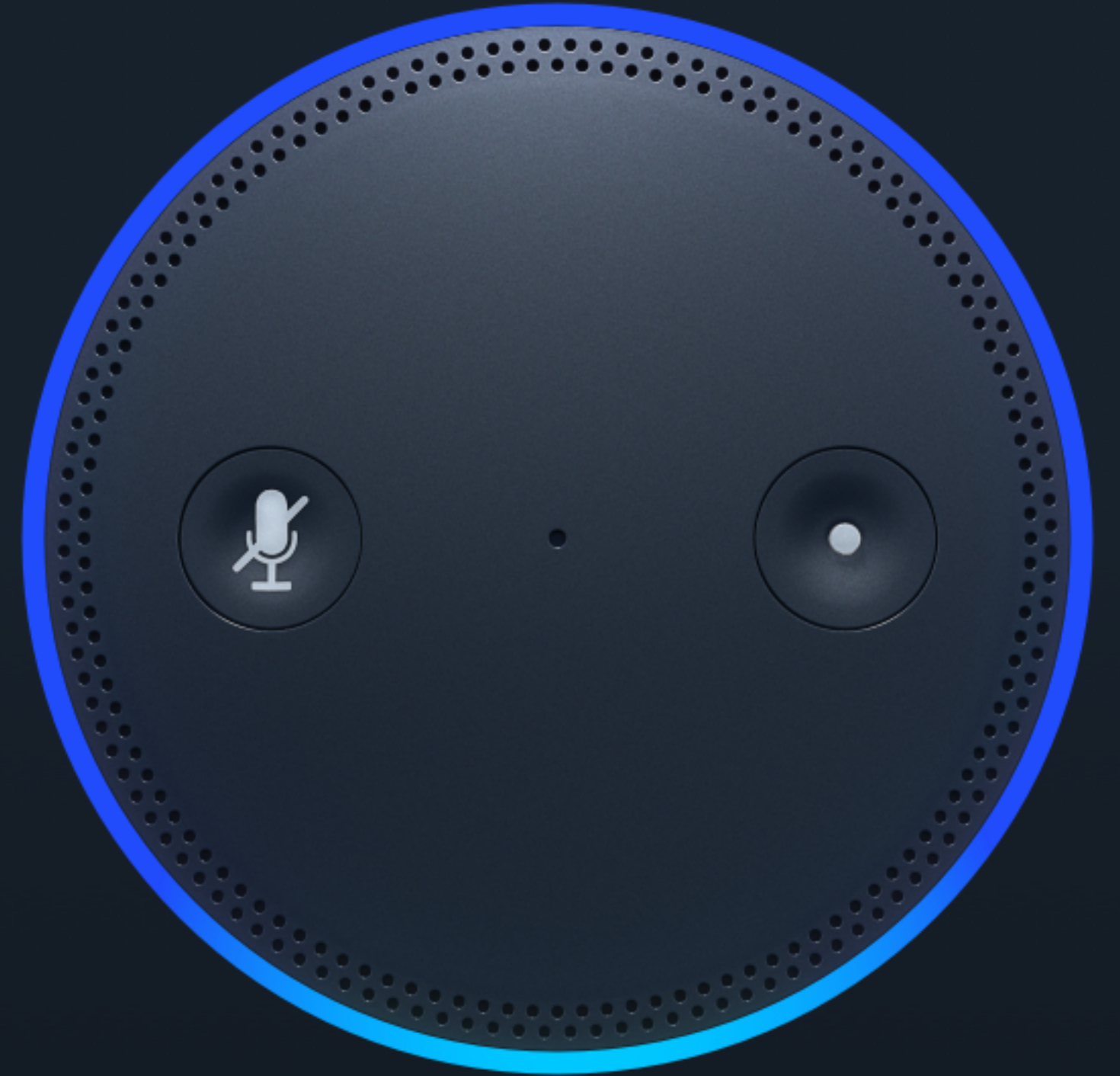
Tom

I added eggs to your shopping list.

Alexa knows who is adding something to the list (Anna, Tom, other or unknown).



ALEXA PERSONALIZED LISTS



ALEXA PERSONALIZED LISTS

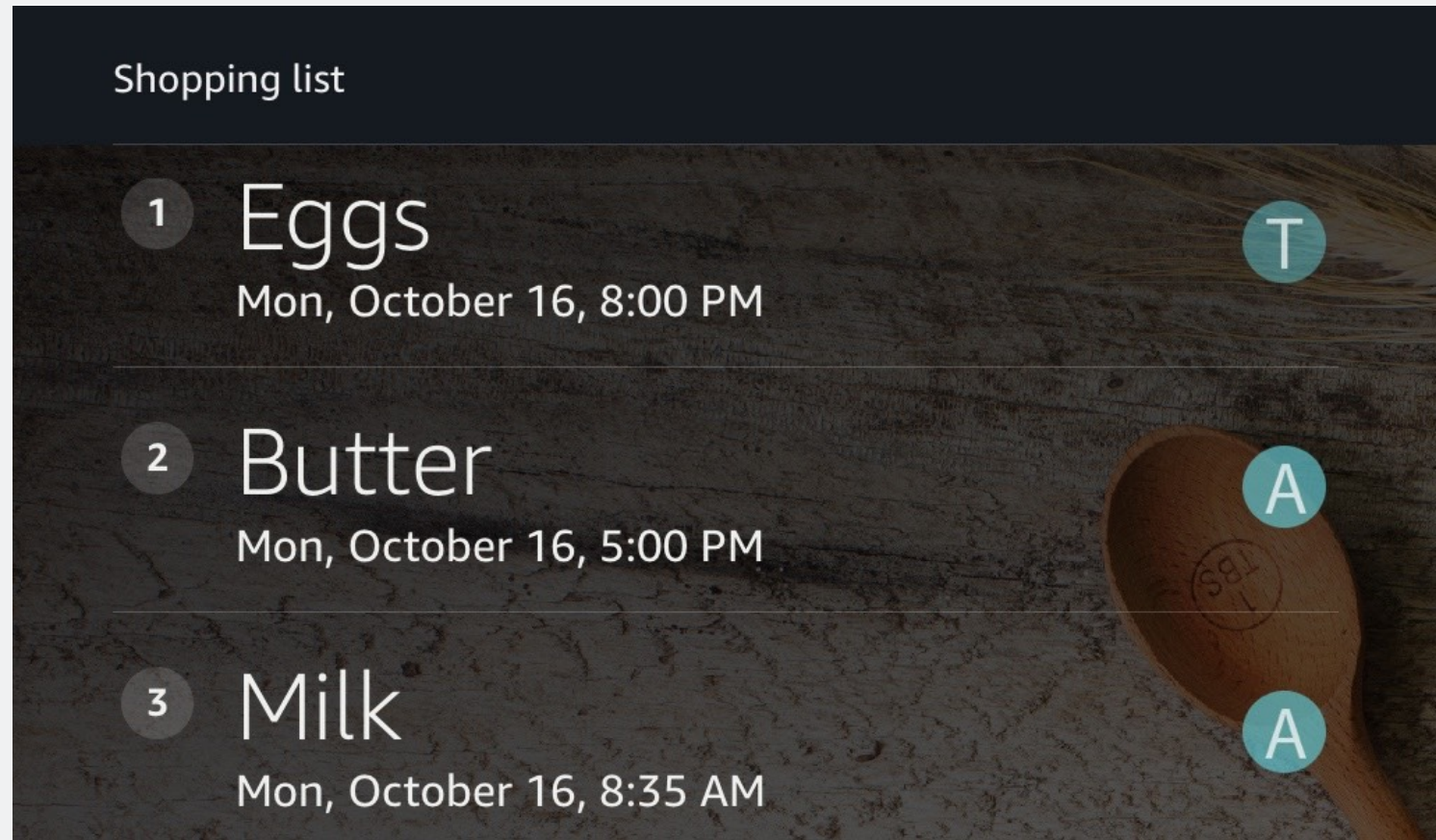
Design Options in Multimodal devices

COLLABORATE, SHARE, ORGANIZE TOGETHER

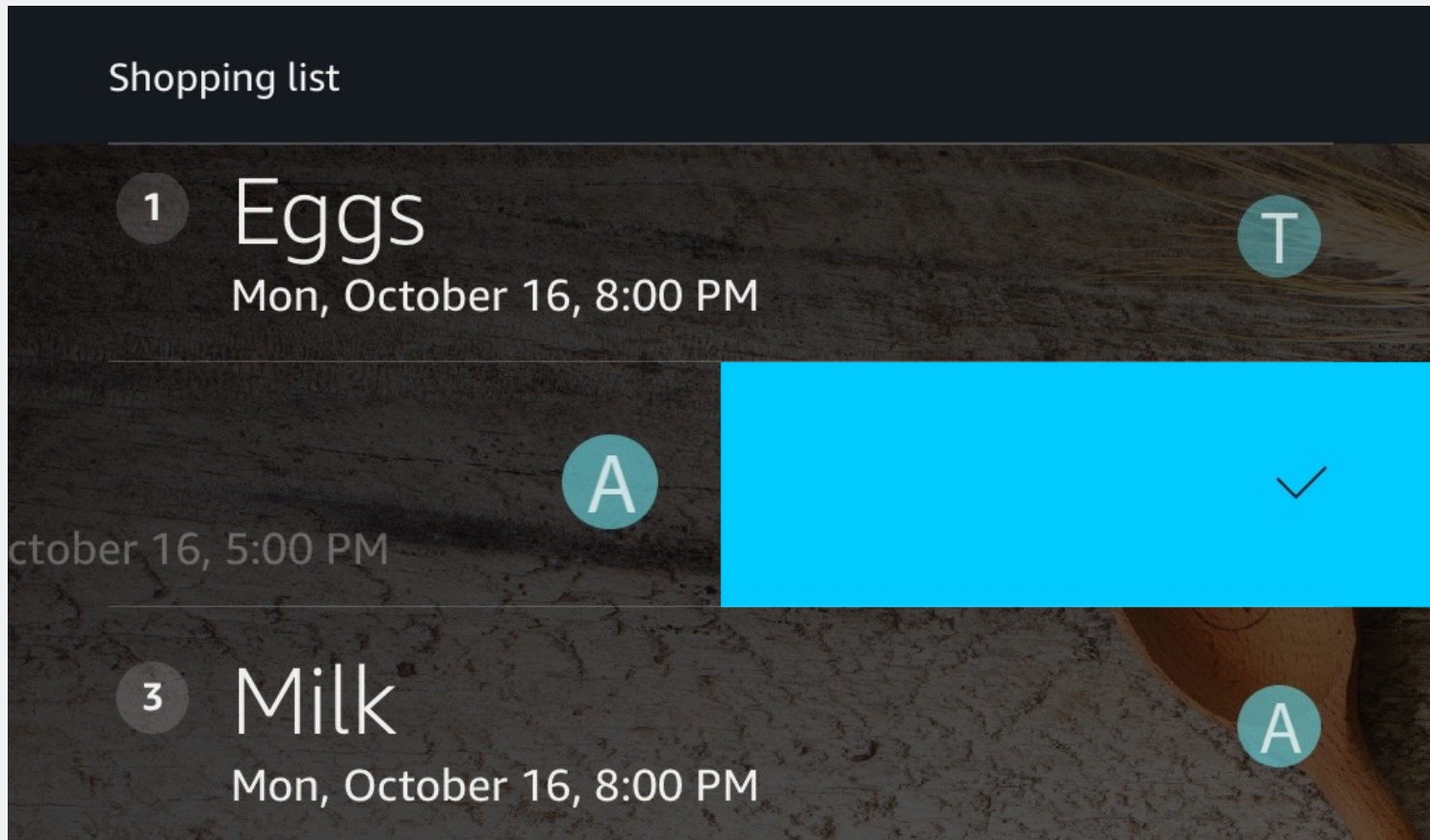
ALEXA PERSONALIZED LISTS

Attribution Option A | Speaker Initial

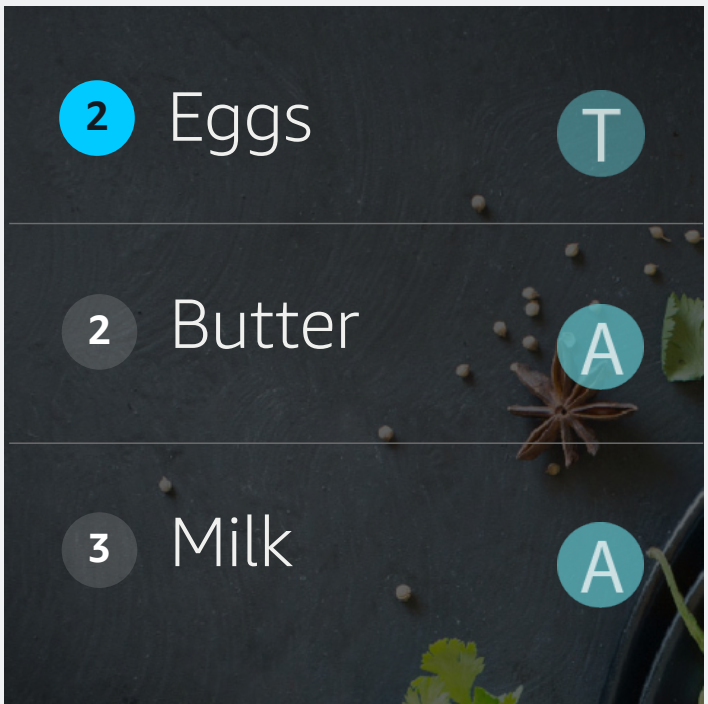
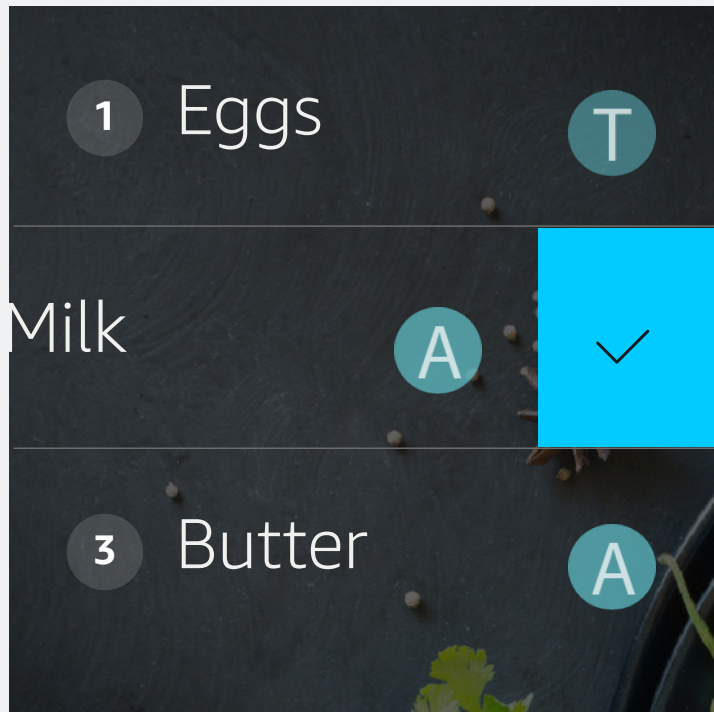
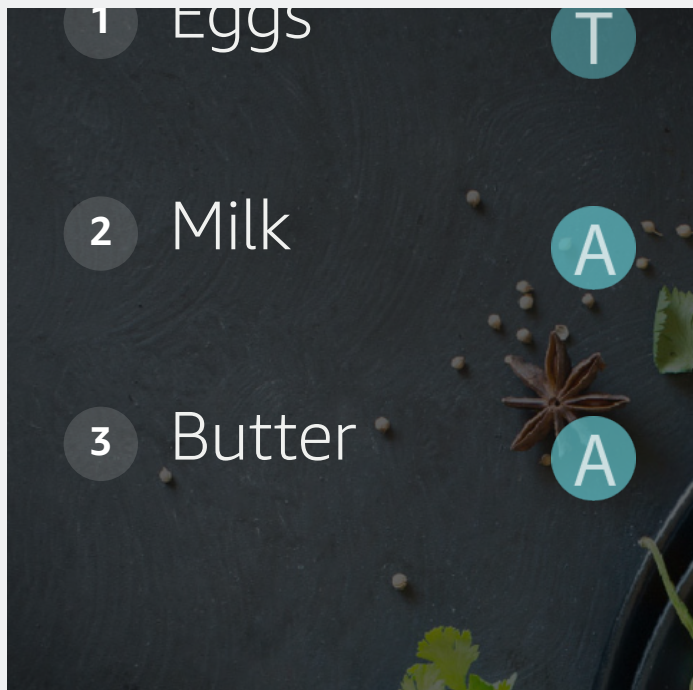
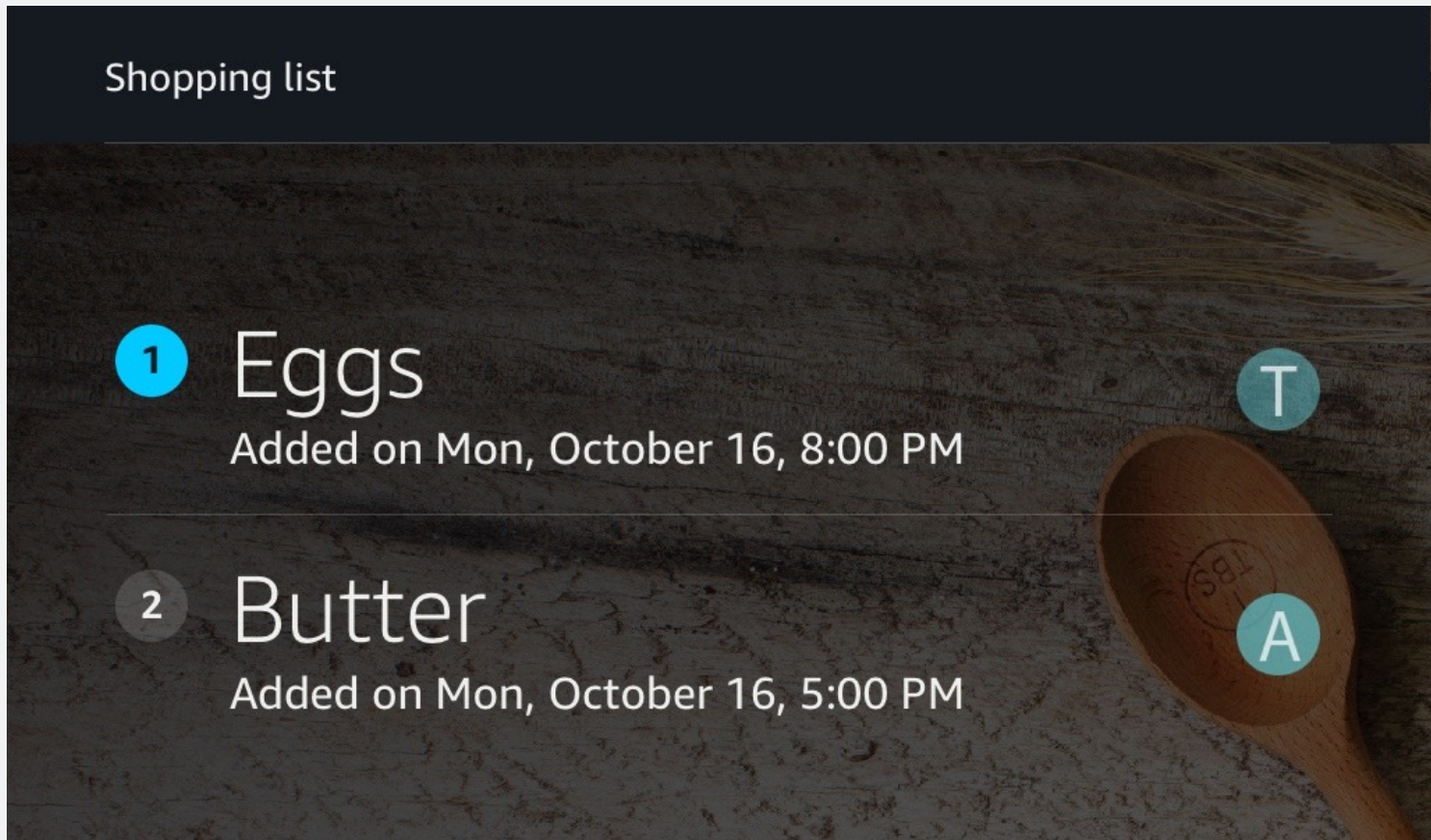
Browsing



Done / Delete



Querying items

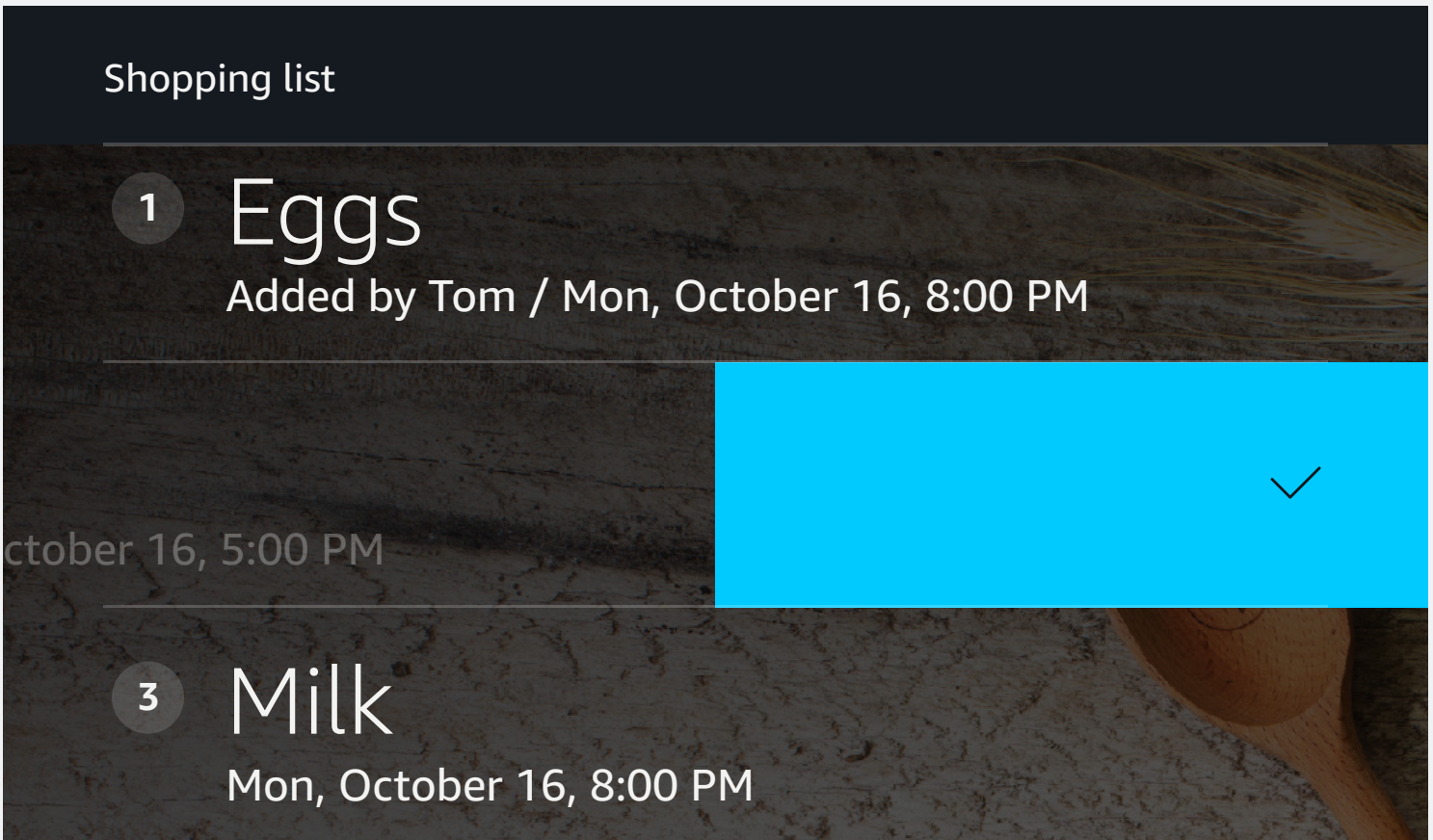


Attribution Option B | Speaker Name

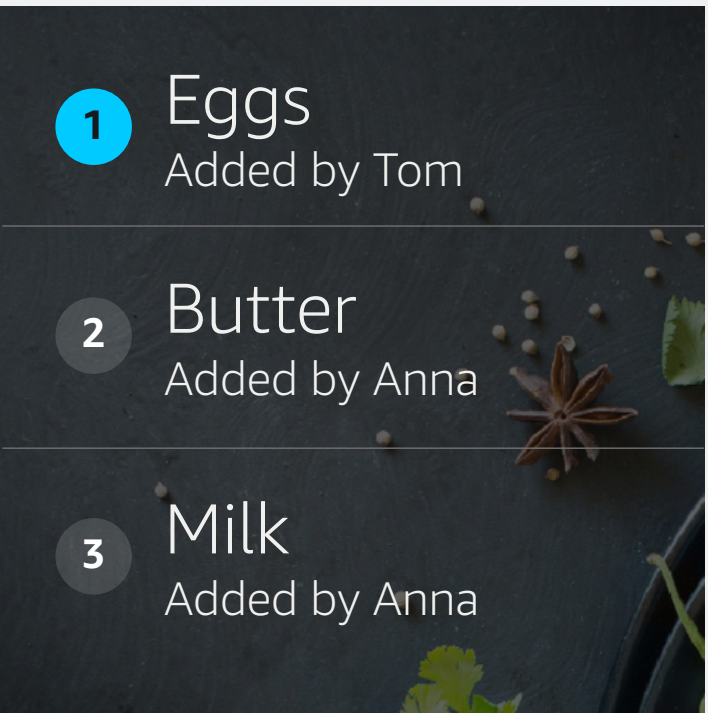
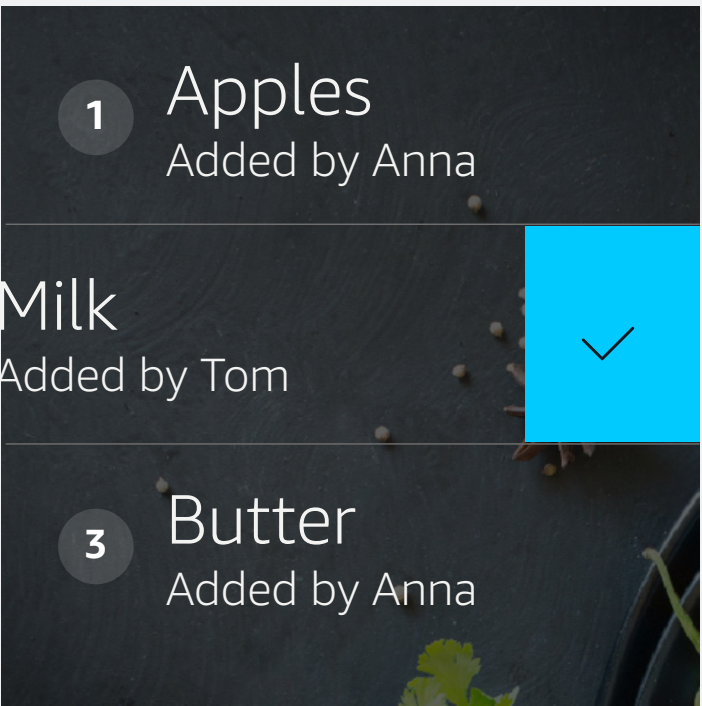
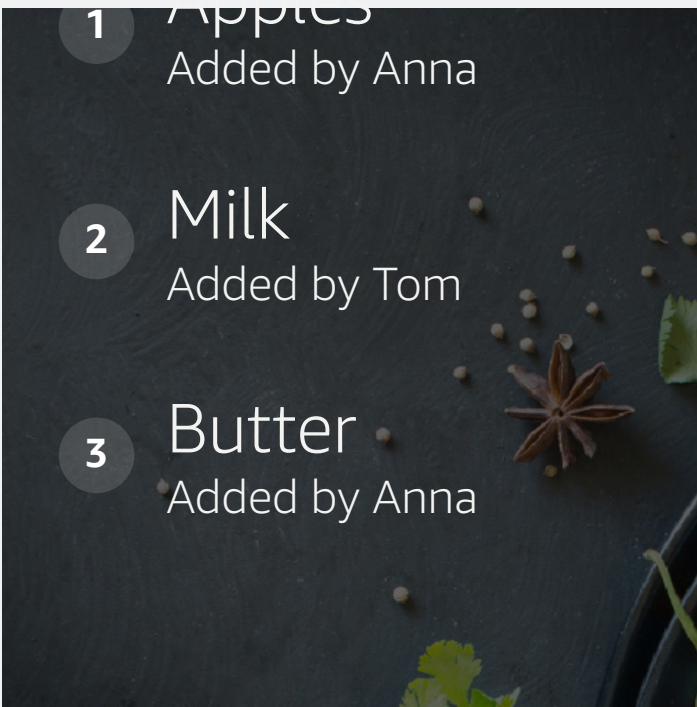
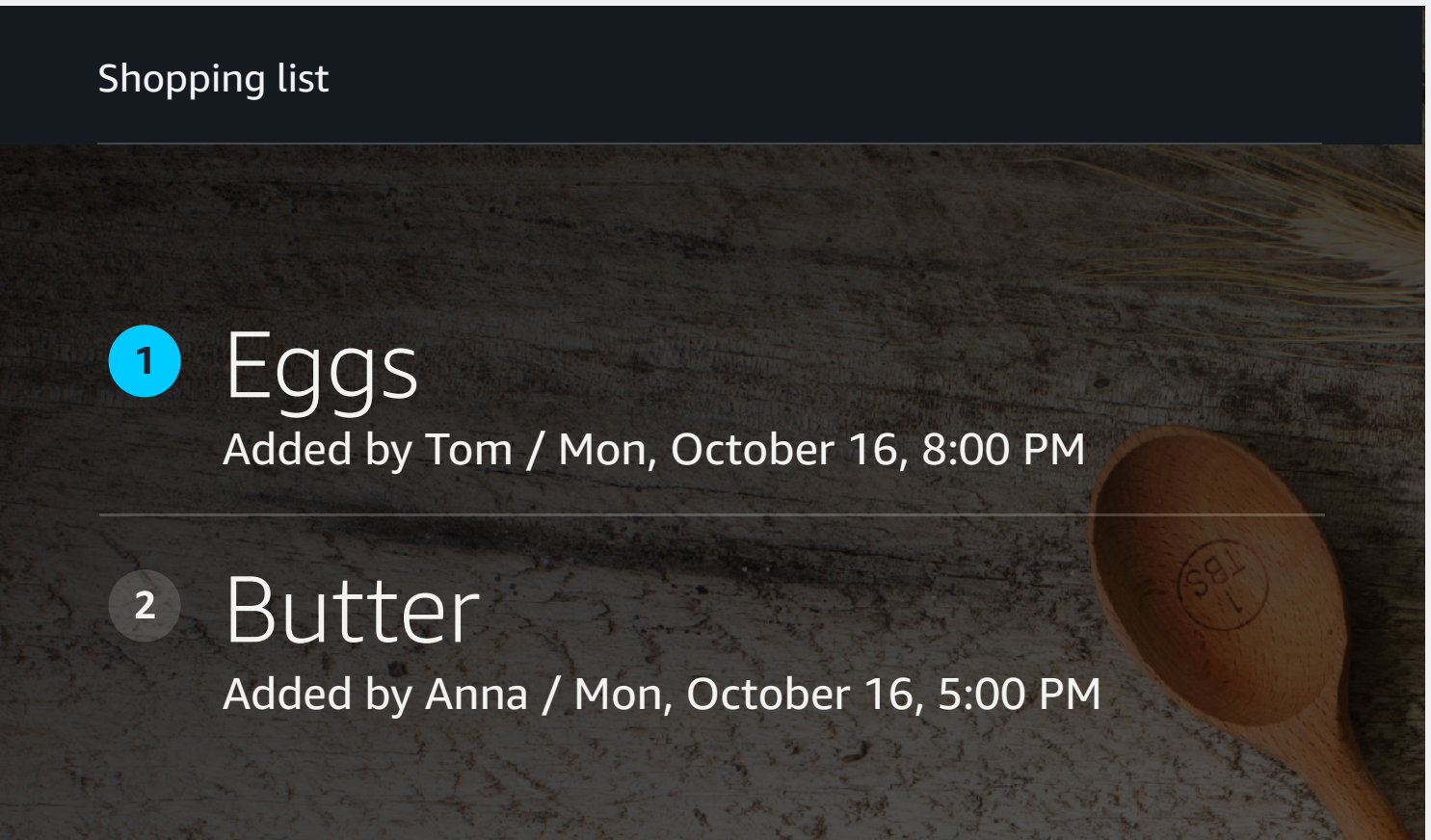
Browsing



Done / Delete



Querying items



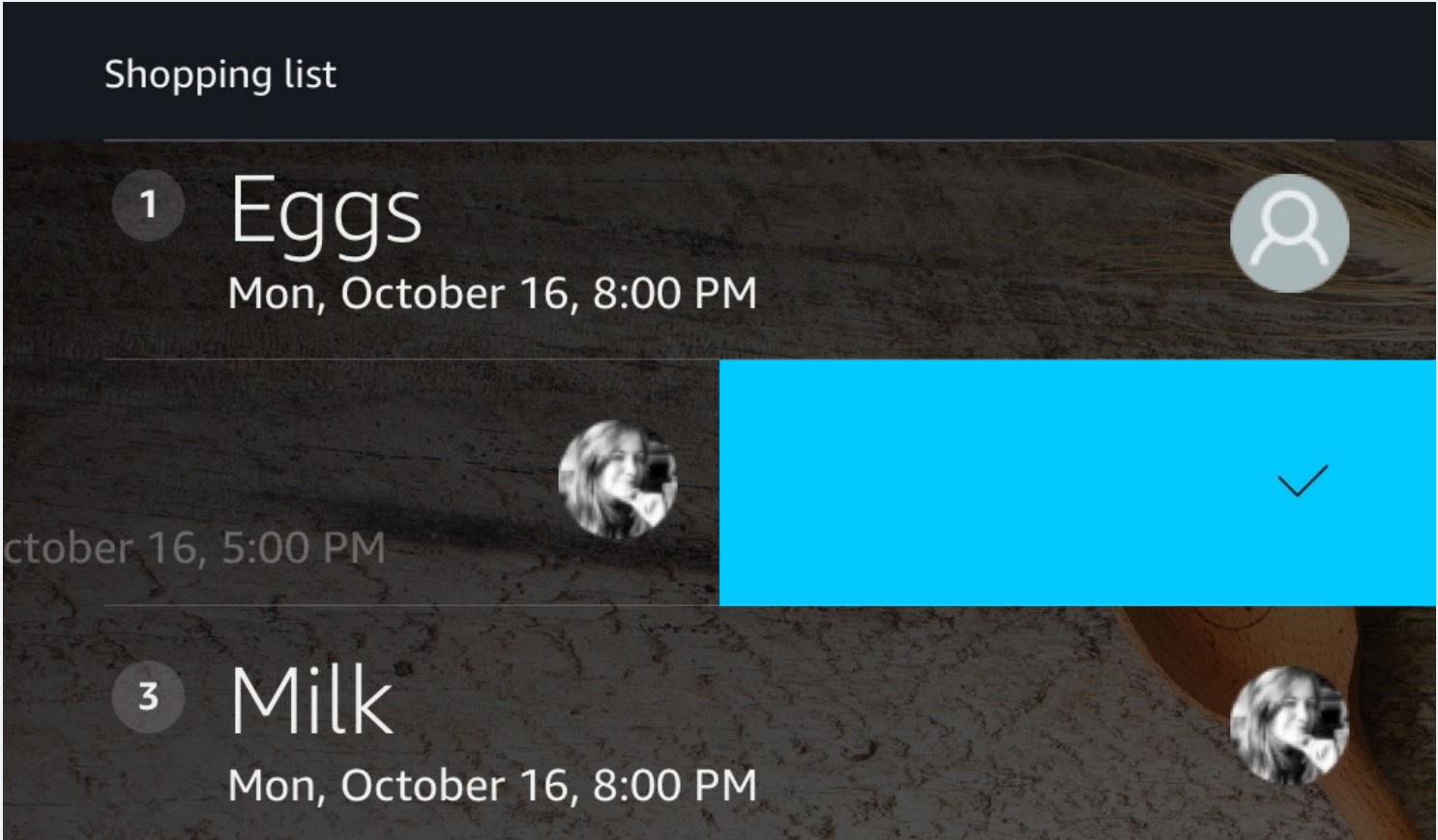
ALEXA PERSONALIZED LISTS

Attribution Option B | Speaker Avatar

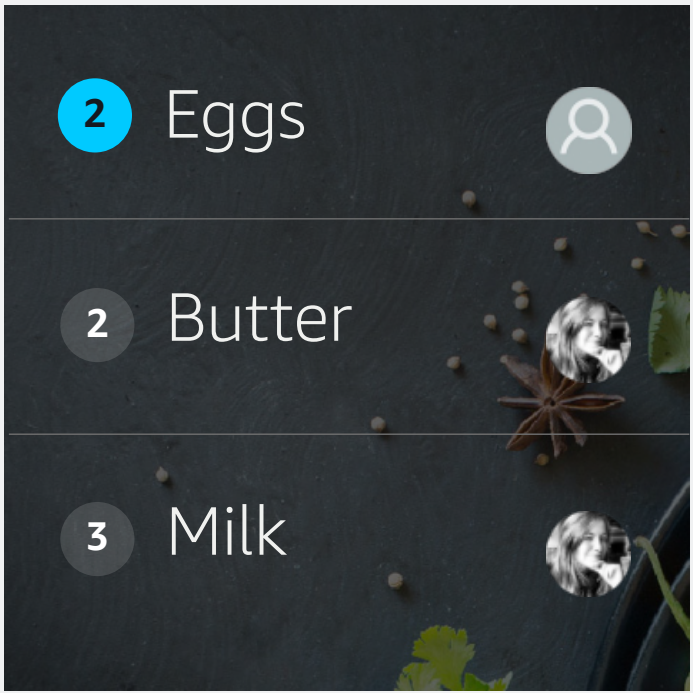
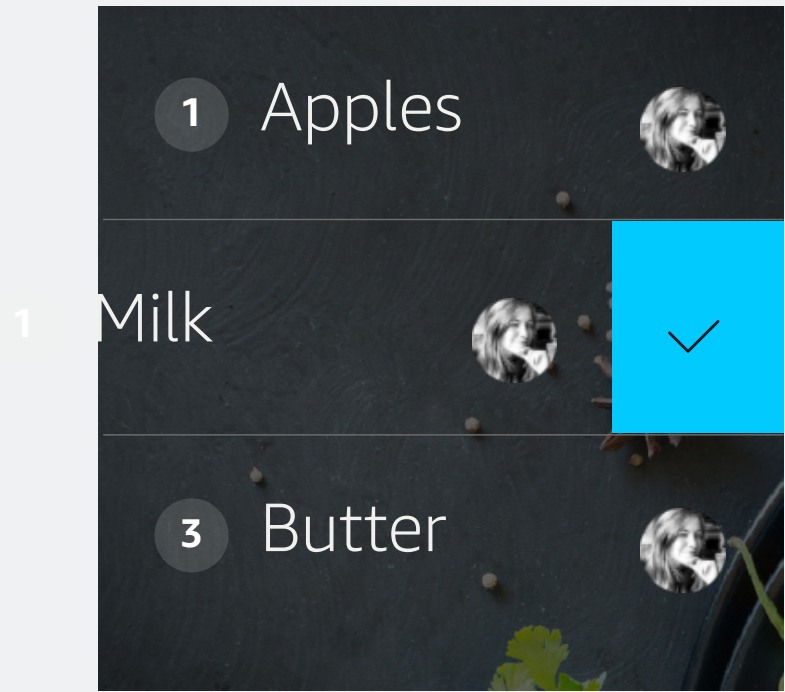
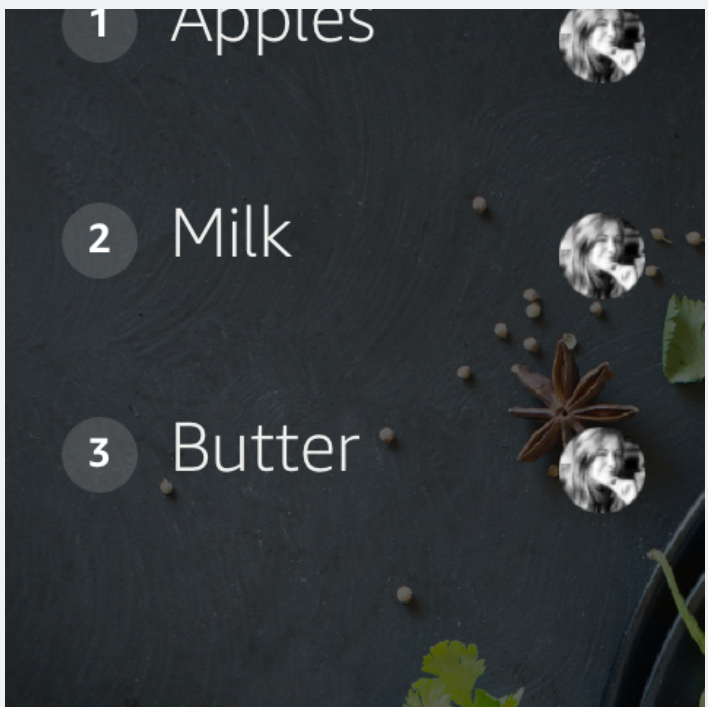
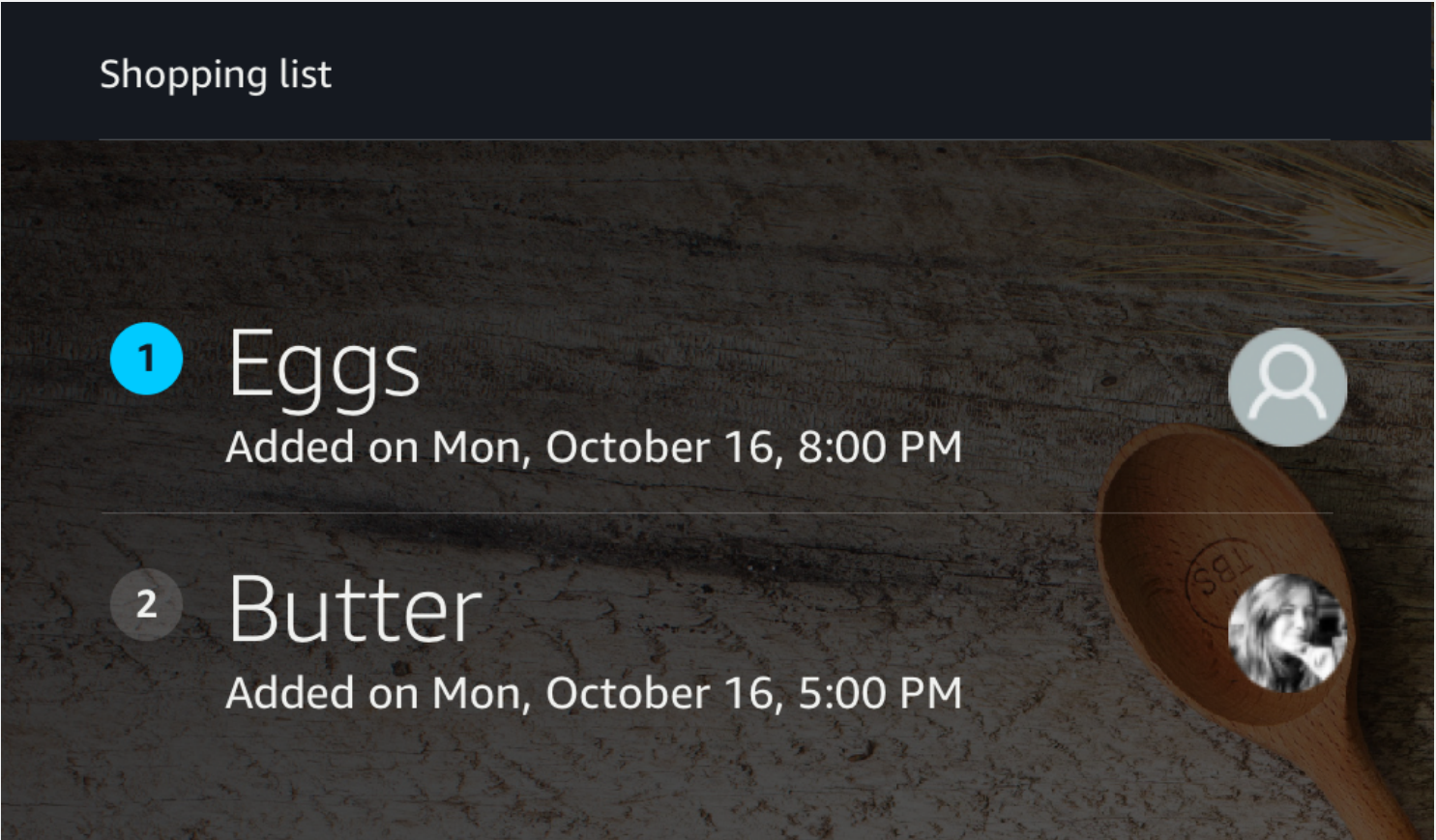
Browsing



Done / Delete



Querying items





Thank you!

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