

DESIGN MATTERS 2023

Designing with AI: Building the Flagship GPT-4 Language Product

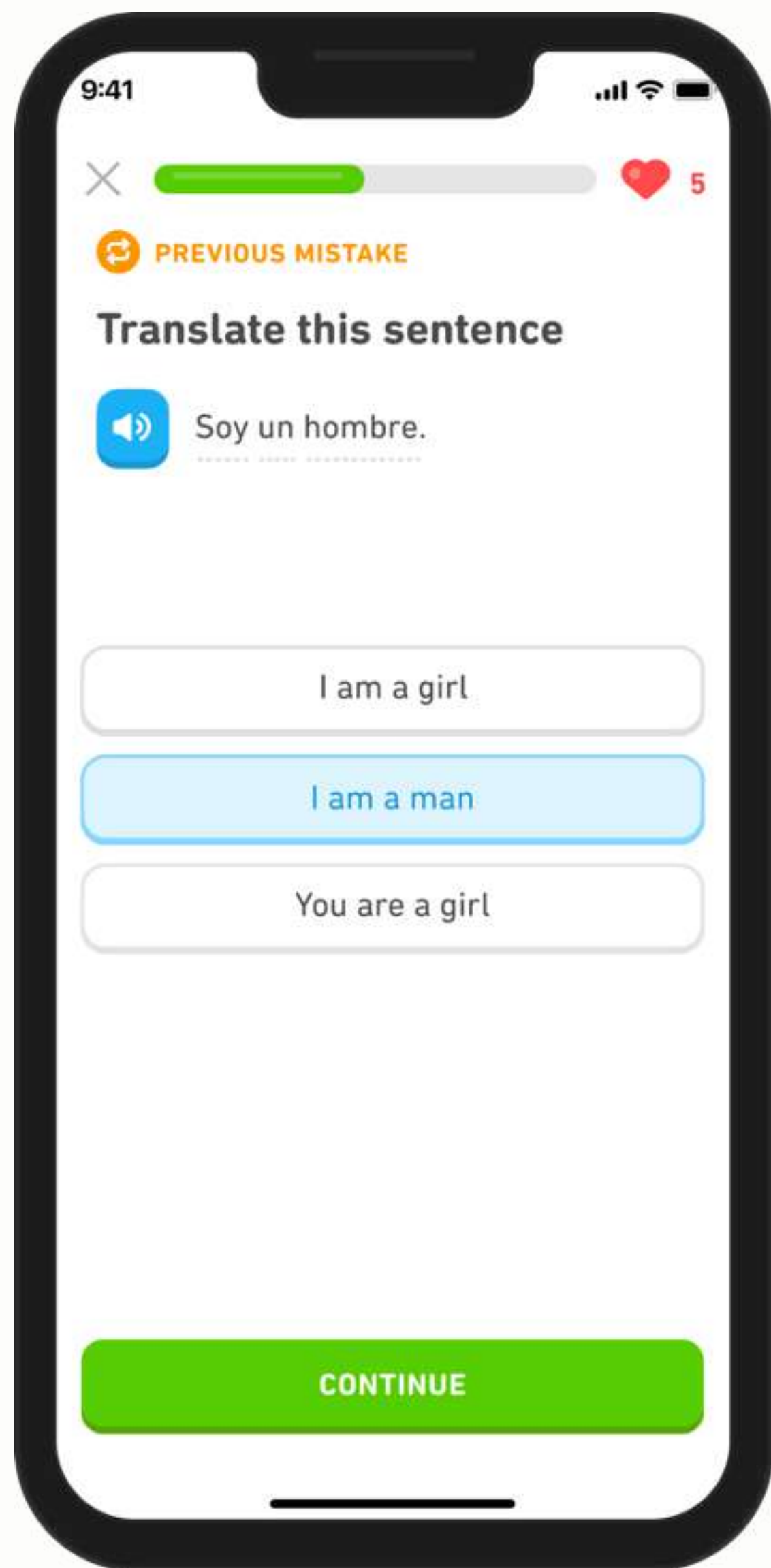


duolingo

MAX







The duolingo bird showing up in your
bedroom @ 2am demanding you
practice your chinese



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OUR MISSION

Develop the best
education in the world
and make it universally
available.



SUPER
duolingo



duolingo
MAX





AI and
education
make a
good duo



Edwin / Luis

mon sep 19, 2022

yes

no

Write a story about a girl from Guatemala who dreams of being an astronaut

Write a story about a girl from Guatemala who dreams of being an astronaut

Once upon a time, in the lush mountains of Guatemala, there was a village called La Esperanza. This village was home to a kind-hearted, curious girl named Flor ...

Rewrite it at a beginner level

Rewrite it at a beginner level

**In a small village in Guatemala, there was
a kind girl named Flor ...**

Include the word 'chili cheese dog'

Include the word 'chili cheese dog'

In a small village where they are famous for chili cheese dogs, there was a kind girl named Flor ...

Rewrite this as a sassy teenager

Rewrite this as a sassy teenager

Ugh, like, there's this tiny, insignificant village that thinks it's SO cool because of its chili cheese dogs - yeah, right - and there's this girl named Flor, who's like, kinda nice, or whatever...

Translate it to Spanish

Translate it to Spanish

En un pequeño pueblo guatemalteco famoso por sus perros calientes con chili y queso, vivía una niña amable llamada Flor...

Explain “niña amable”

Explain “niña amable”

In Spanish, it's common for adjectives to come after the noun they modify, unlike English, where the adjective typically comes before the noun ...

**“Pivot your team immediately—
this is going to transform education.”**







PRODUCT LESSON 1

**You haven't
won yet**





| Ask me...anything?



**AI products need to have an opinion,
rather than requiring the user to know
what to ask.**

- 01 What **user needs** should focus on?
- 02 How can we use **gen ai** to solve them?

help me
understand
grammar



improve my
speaking &
pronunciation



prep me for
real world
conversations



help me
understand
my progress





Natalia O.

Pretend you are my Spanish tutor. I need help ordering a coffee when I travel to Barcelona. Create a fill in the blank exercises to help me practice.



GPT-4

Excuse me, I would like a coffee, please.

- Perdón, me gustaría un _____ , por favor.
- Answer: café

open ai playground



David C.

I'd like to practice my conversational Spanish. You are a taxi driver, named Lily driving me to the airport.



GPT-4

¡Hola! Soy Lily. ¿Por qué tengo que llevarte al aeropuerto?



David C.

Hola, estoy viajando a Hawaii



Jack H.

Pretend you are a Spanish tutor, explain my mistake
My answer: "ir a la playa en autobus"



GPT-4

Mistake: You used "ir" instead of "voy".

Explanation: "Ir" is the infinitive form of the verb "to go", while "voy" is the conjugated form for the first person singular (I go). You need to use the conjugated form to correctly express "I go to the beach by bus."



Angela H.

I made the following mistakes while practicing Spanish. Could you summarize what I'm doing wrong?



GPT-4

Yes, the primary issue is with the proper use of verbs in different contexts. Focusing on understanding and practicing verb forms and their usage in various situations should help you improve your Spanish.



duolingo

**prep me for
real world
conversations**



**improve my
speaking &
pronunciation**



**help me
understand
grammar**



**help me
understand
my progress**



**generate learning
exercises**

**be a conversation
partner**

**explain language
concepts**

**provide learning
insights**

prep me for
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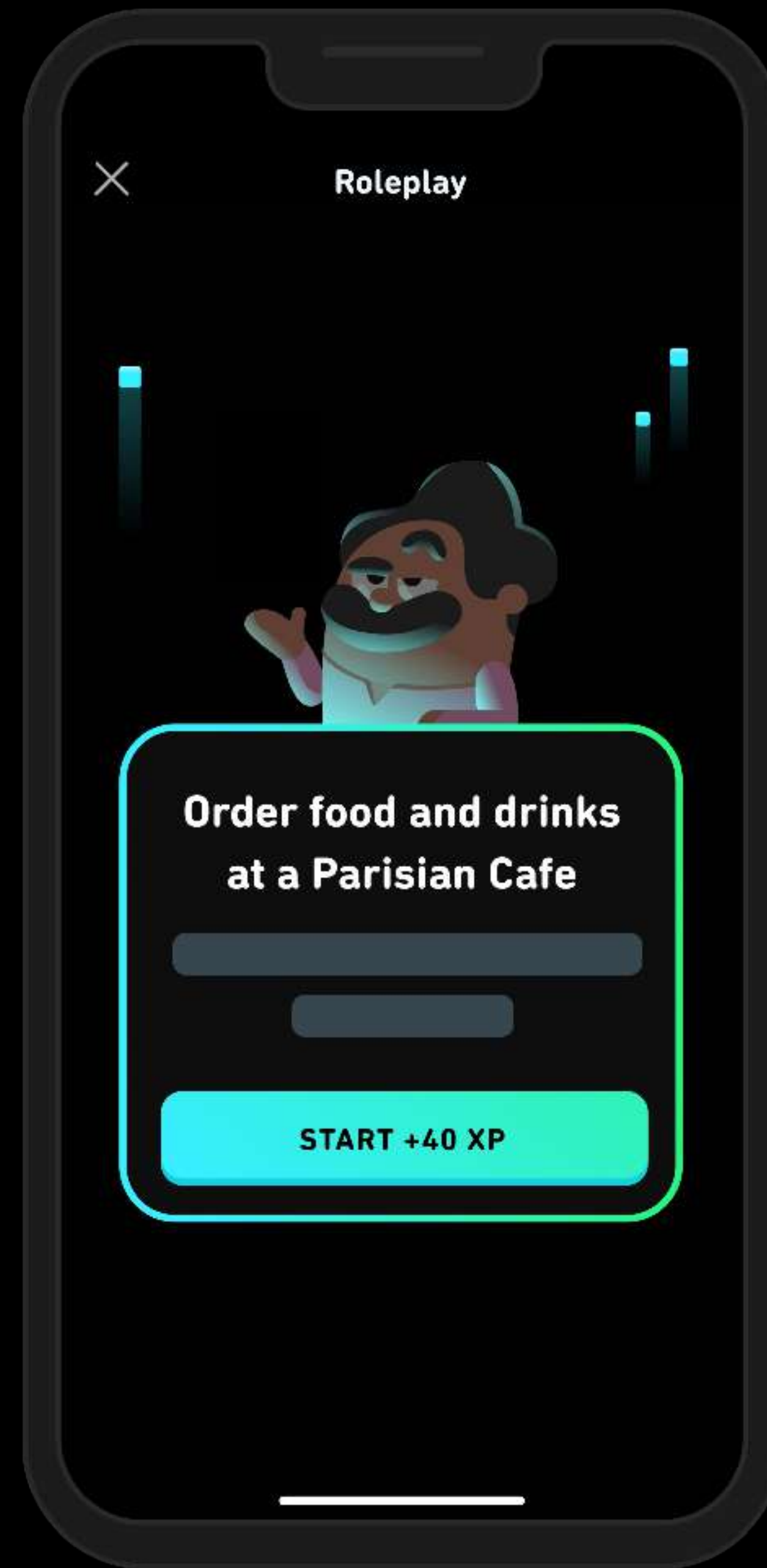
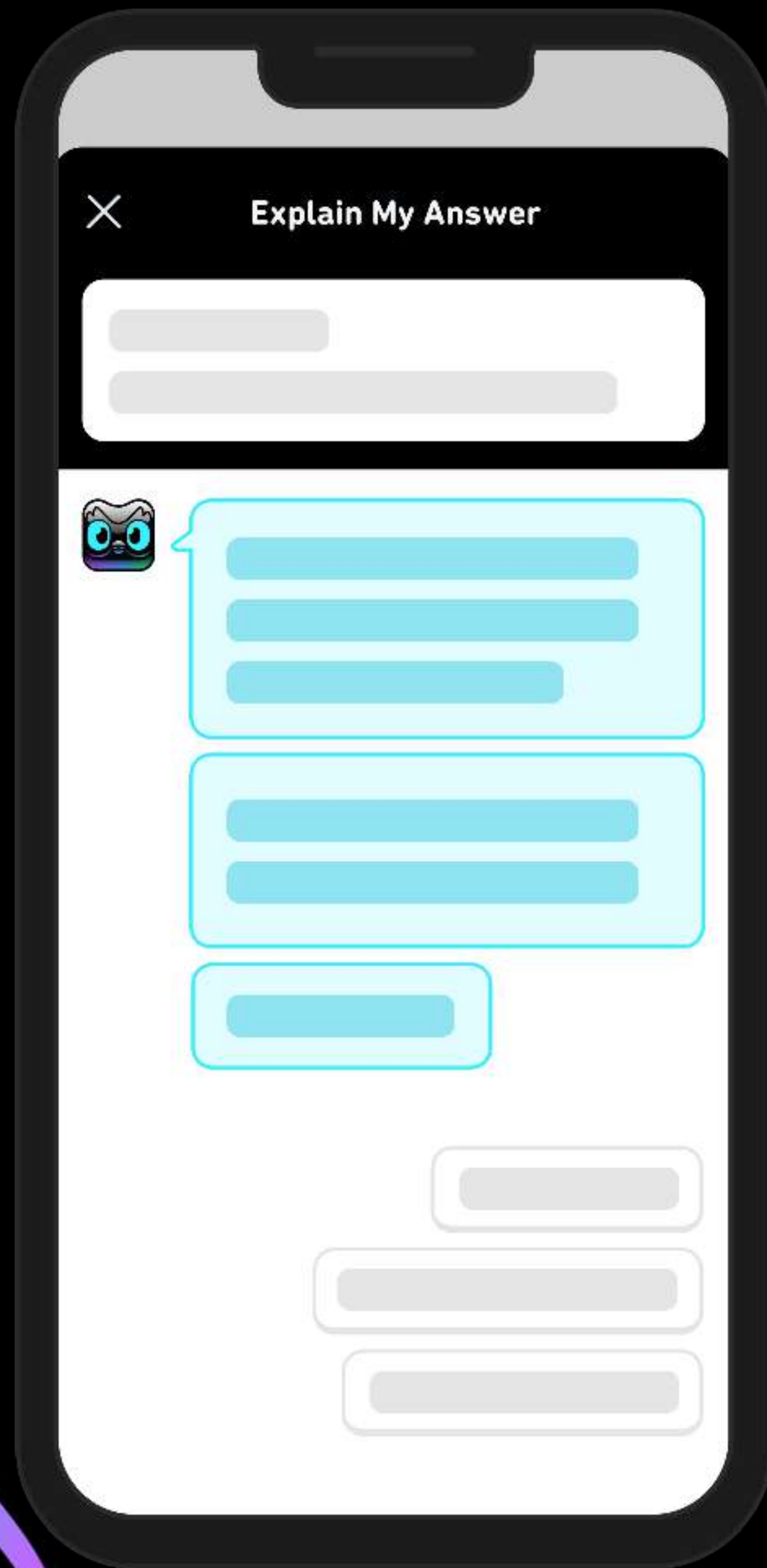
generate learning
exercises

be a conversation
partner

explain language
concepts

provide learning
insights







PRODUCT LESSON 2

**Marry technical
possibility with core
user needs**



9:41



duolingo
MAX



Help a lost tourist

Practice conversing in French
with Eddy to earn 3 stars.

START +40 XP

- 01 **define learner needs**
- 02 **outline learning objectives**
- 03 **explore possible directions**


9:41

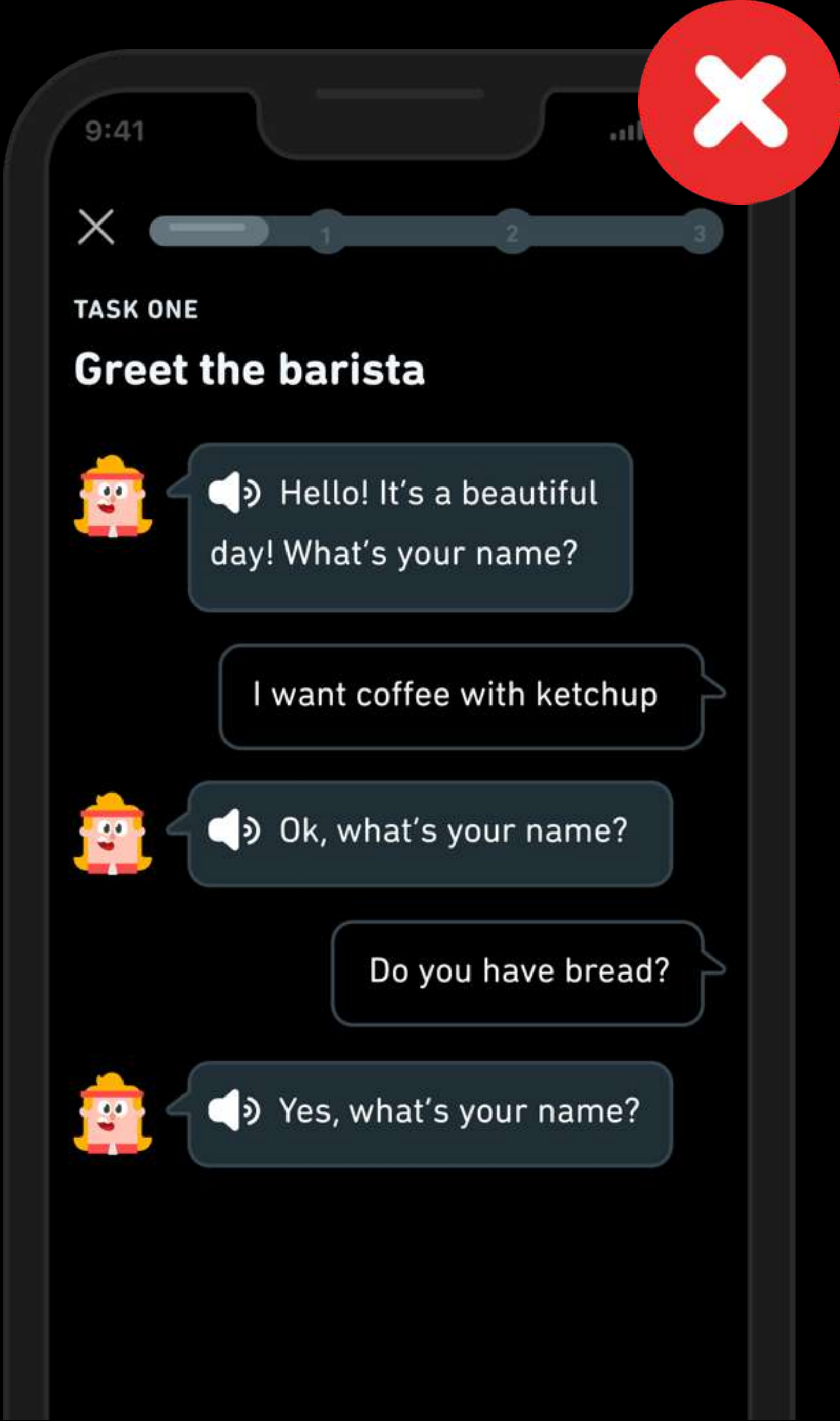


TASK ONE

Greet the barista



 Hello! It's a beautiful day! What's your name?



9:41



1

2

3

TASK ONE

Greet the barista



🔊 Hello! It's a beautiful day! What's your name?

I want coffee with ketchup




🔊 Ok, what's your name?

Do you have bread?




🔊 Yes, what's your name?



 I hope you enjoy Paris!
How are you spending your
first night here?



 I hope you enjoy Paris!
How are you spending your
first night here?

I think I'll get a McDonald's
cheeseburger!



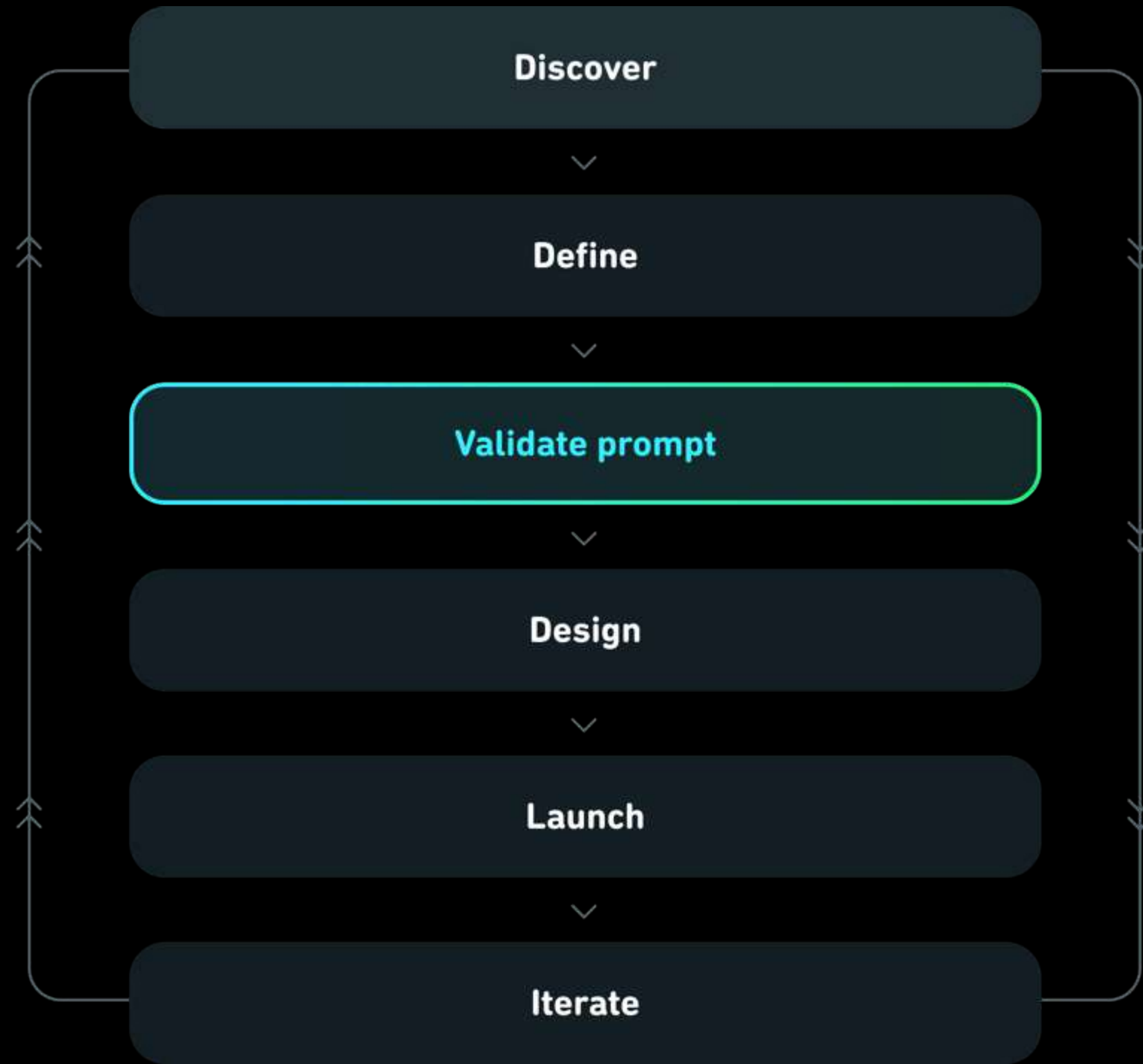


🔊 I hope you enjoy Paris!
How are you spending your
first night here?

I think I'll get a McDonald's
cheeseburger!



🔊 McDonald's!? In Paris!?
Mon Dieu! Try a bistro
instead. Bon appétit.

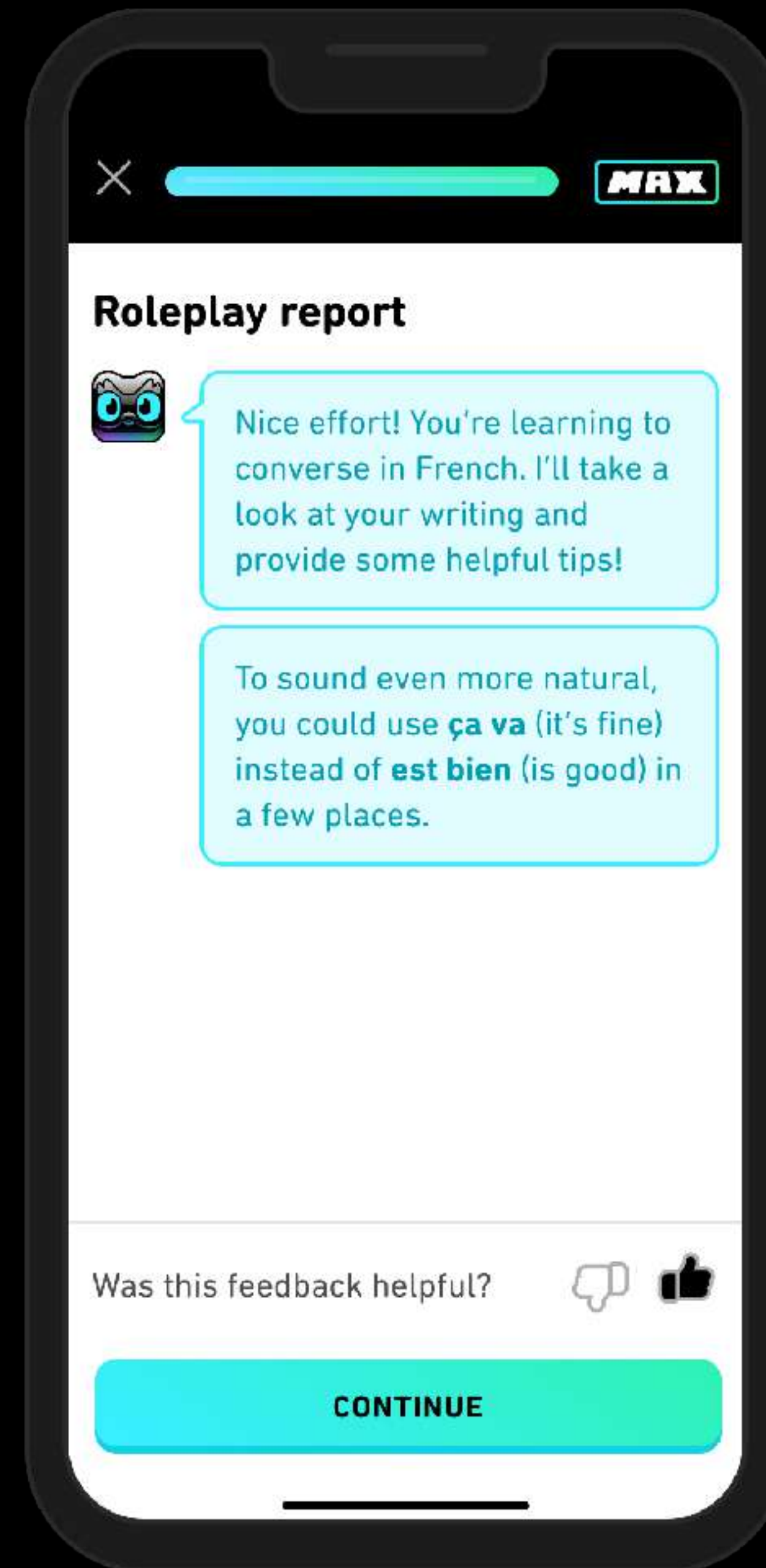
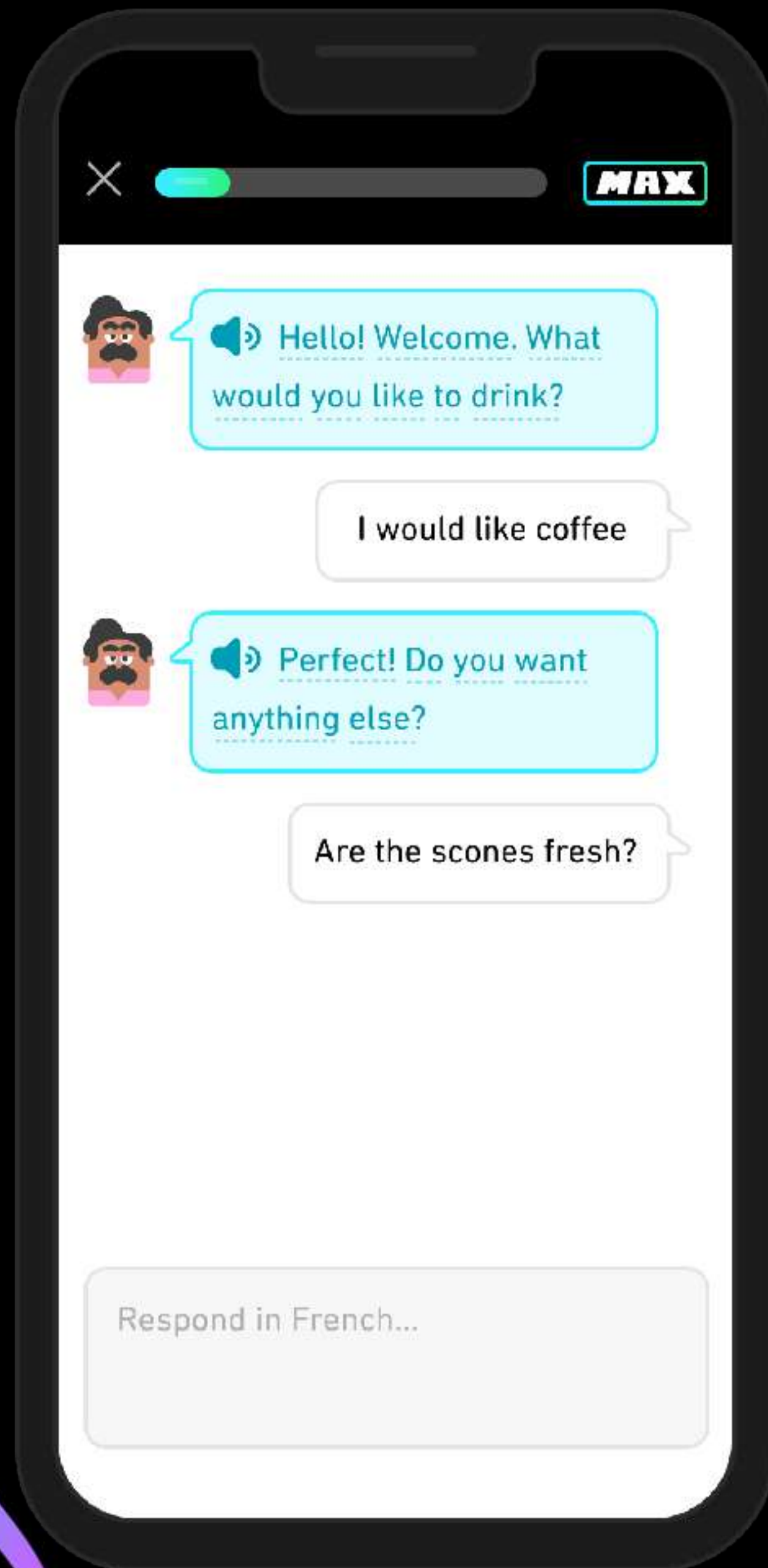




PRODUCT LESSON 3

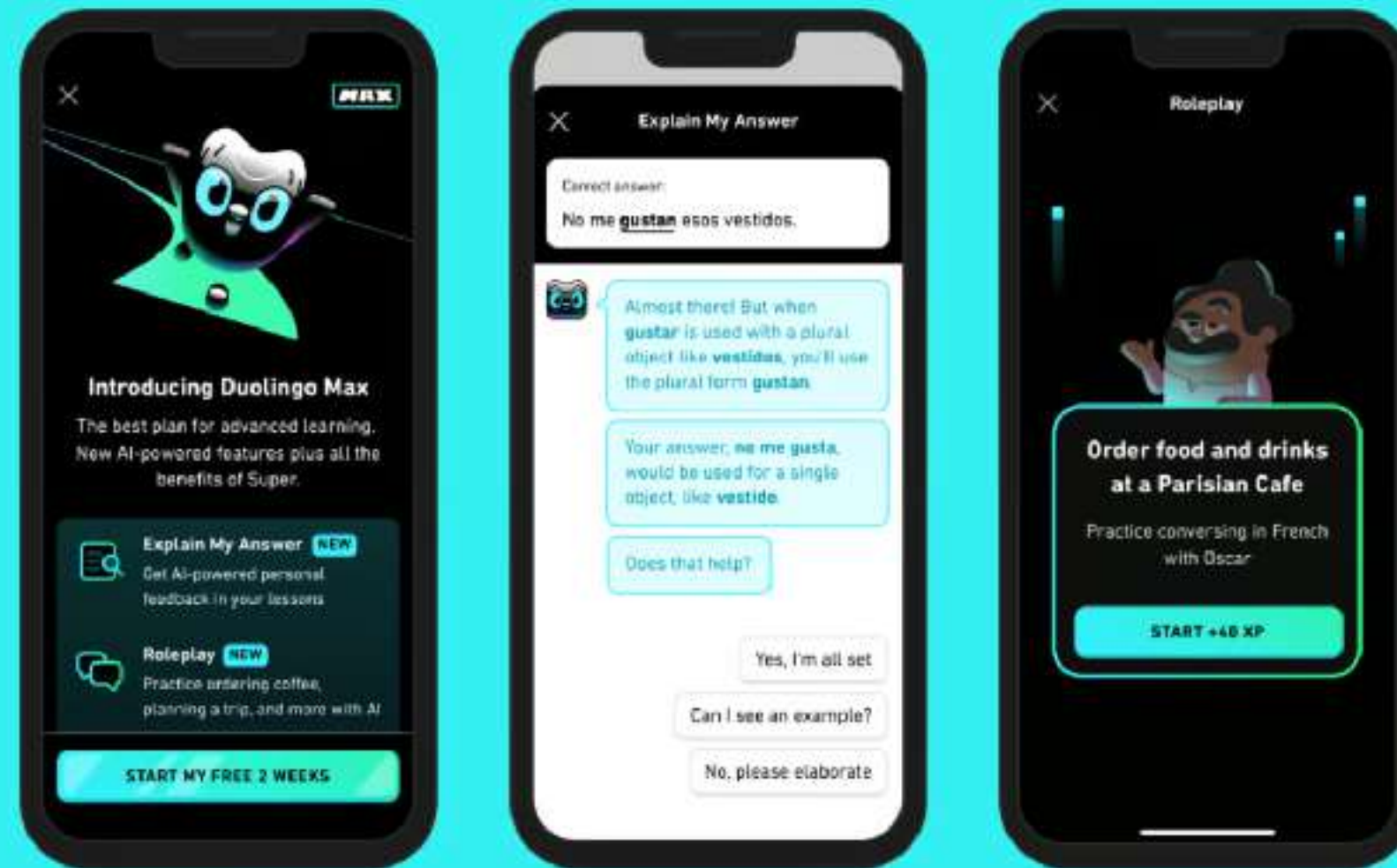
**Start with the
prompt**





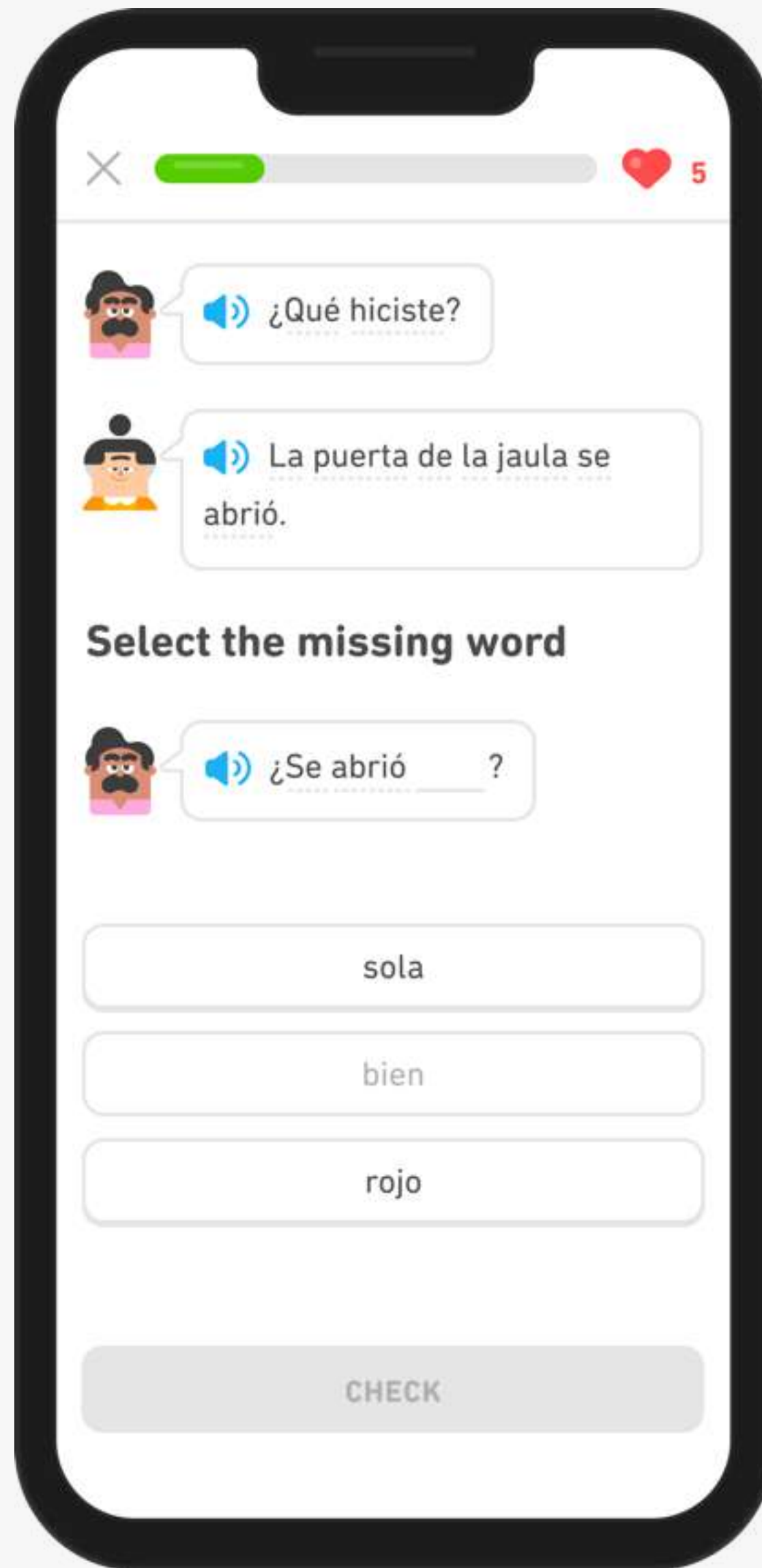
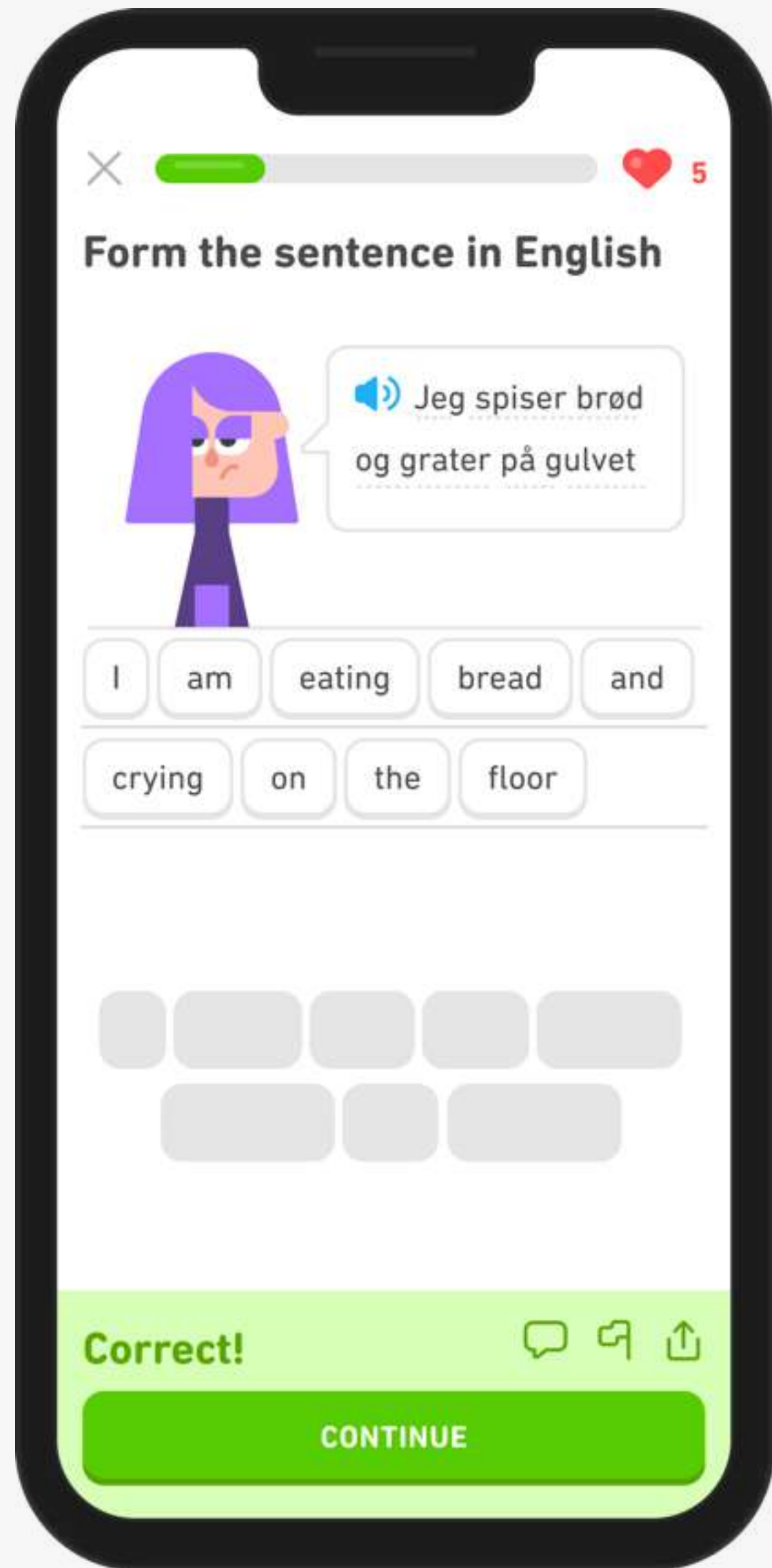
Duolingo

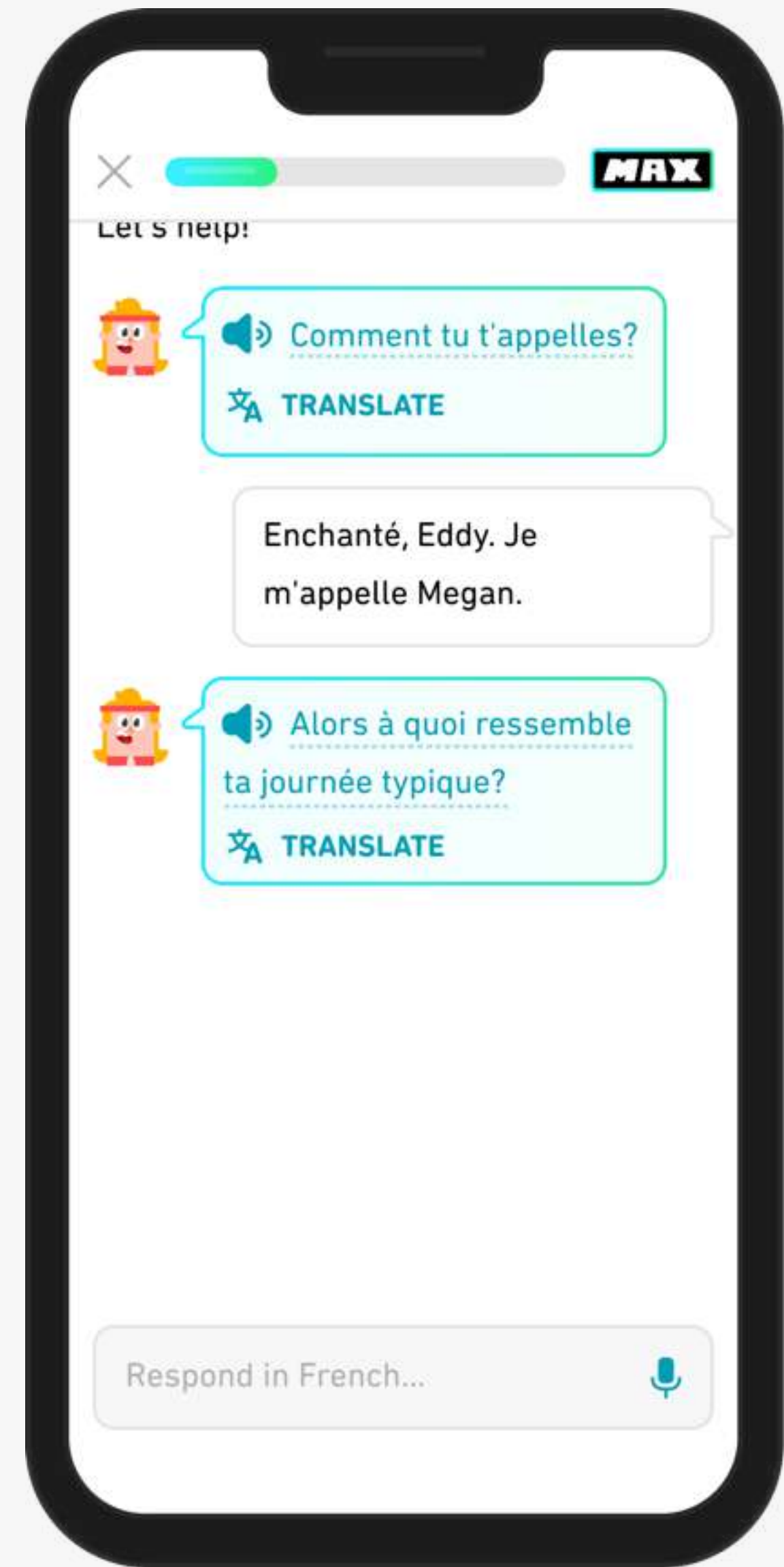
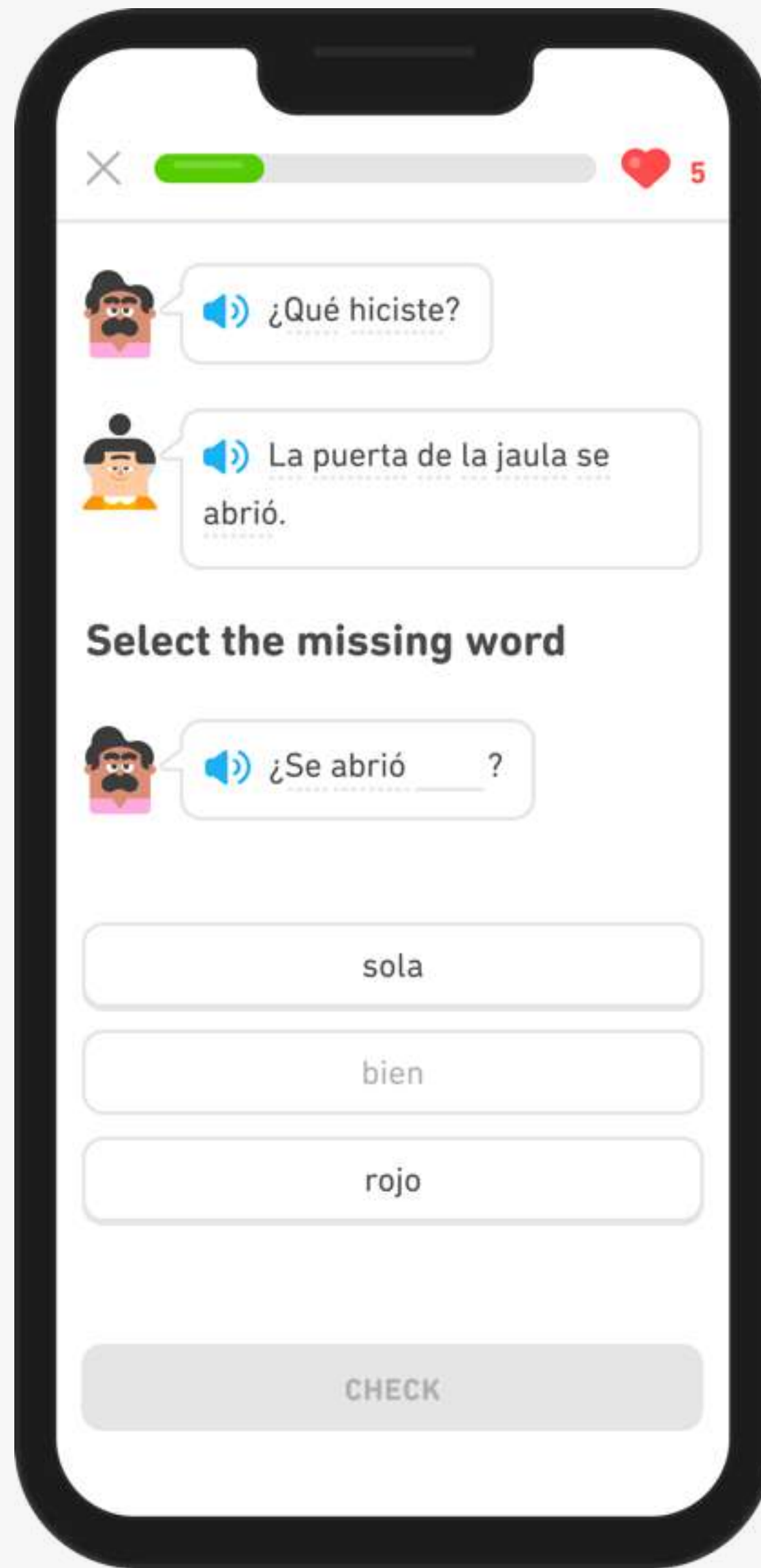
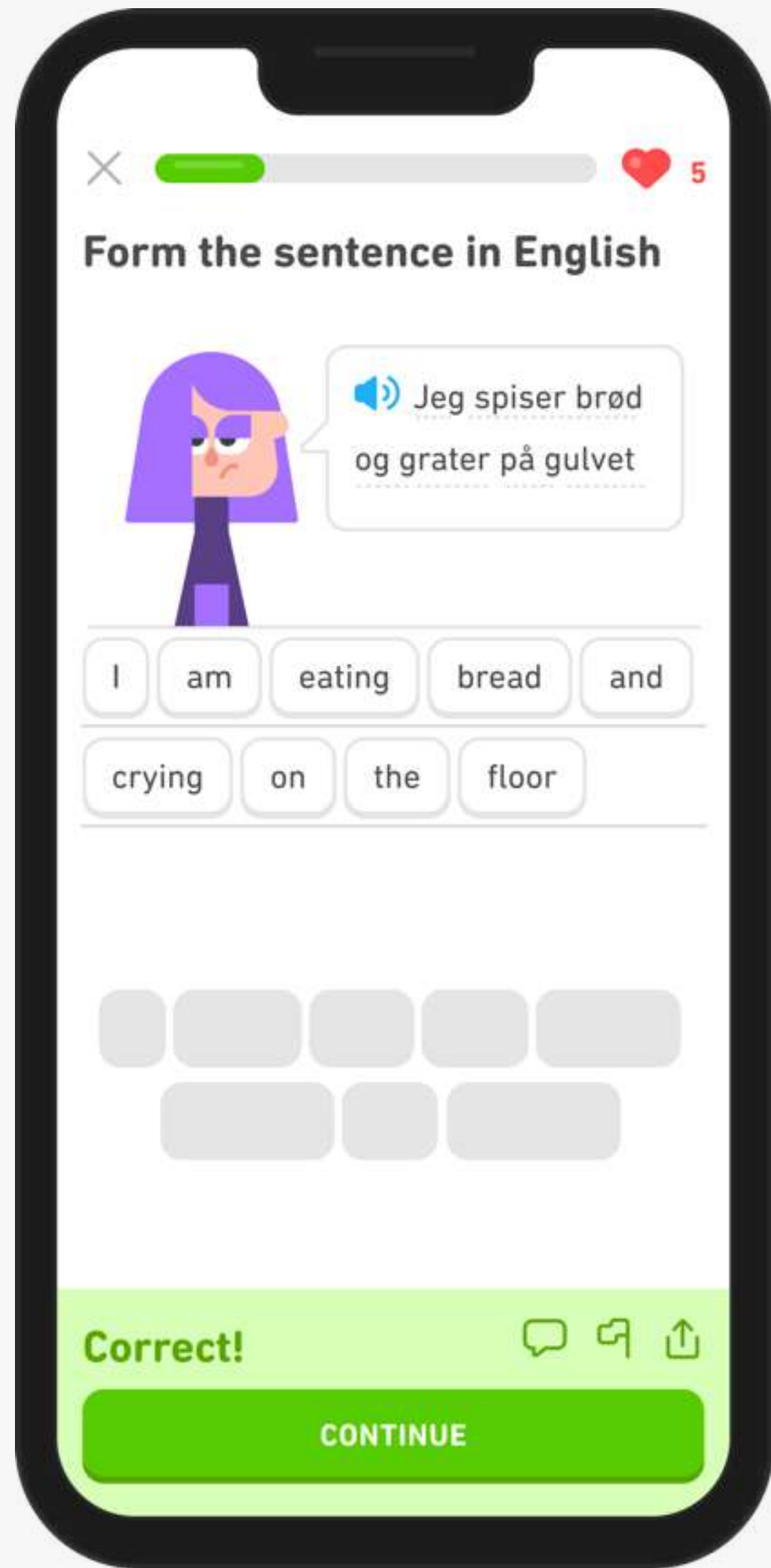
GPT-4 deepens the conversation on Duolingo.





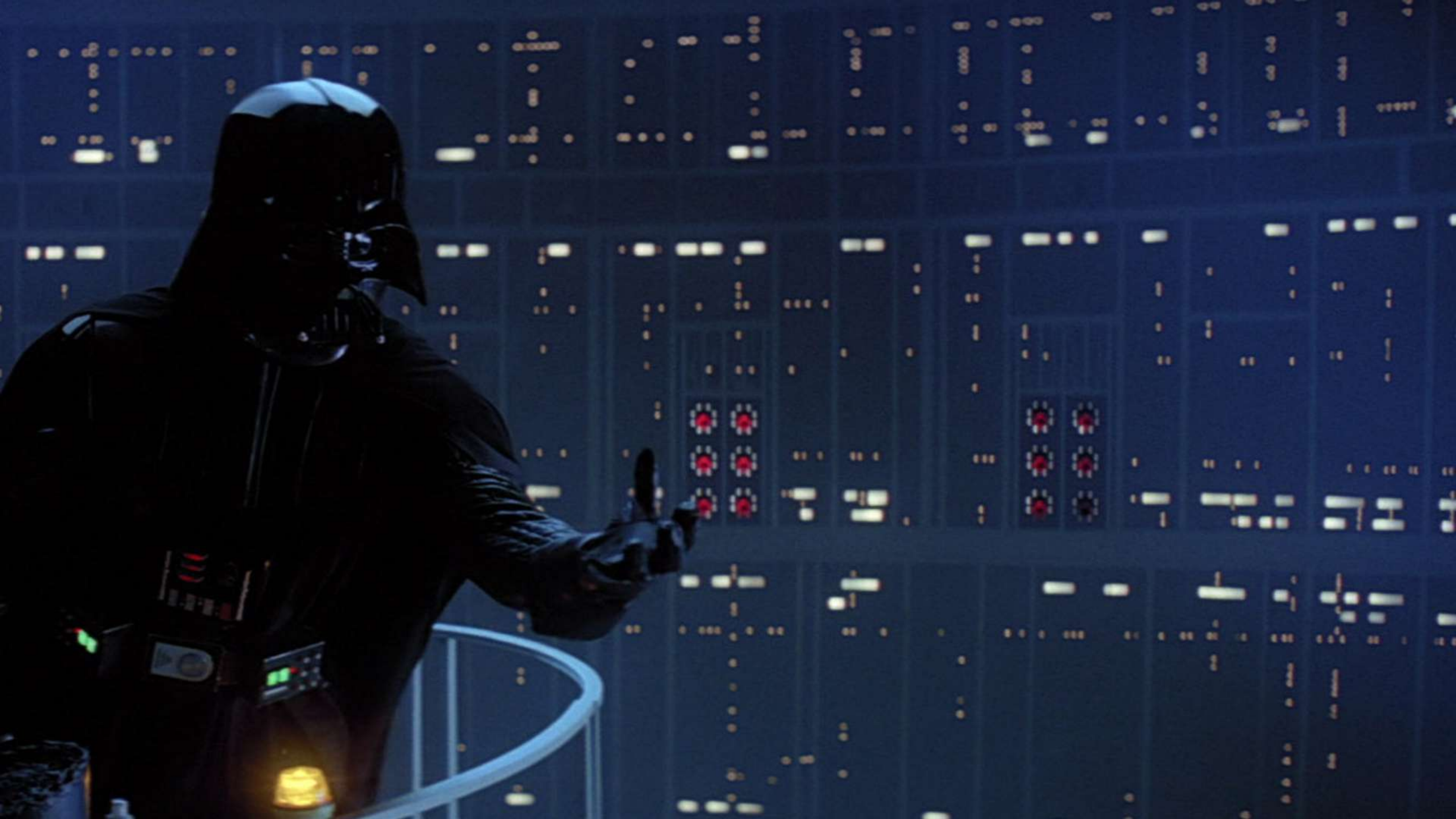






**A rewarding conversation feels
relatable, engaging, and just a
little bit unpredictable.**







Luke, I am your father



9:41



MAX

TRANSLATE

I like cheese too! We have so much in common.



I'm so glad we finally met in person!

TRANSLATE

9:41



I like cheese too! We have so much in common.



I'm so glad we finally met in person!

TRANSLATE

Your choice

You see 5 missed calls on your phone and realize you've been talking to the wrong blind date this entire time.

Reveal your identity

Lie to your date

CONTINUE

2:53




MAX

 TRANSLATE

Yeah, I'll have three large pizzas please.



 I'm beginning to question my life choices.

 TRANSLATE

2:53



MAX

TRANSLATE

Yeah, I'll have three large pizzas please.



I'm beginning to question my life choices.

TRANSLATE

Your choice

Your server Lily announces she's quitting this job to focus on her band.

Ask for a different server

Ask about her band

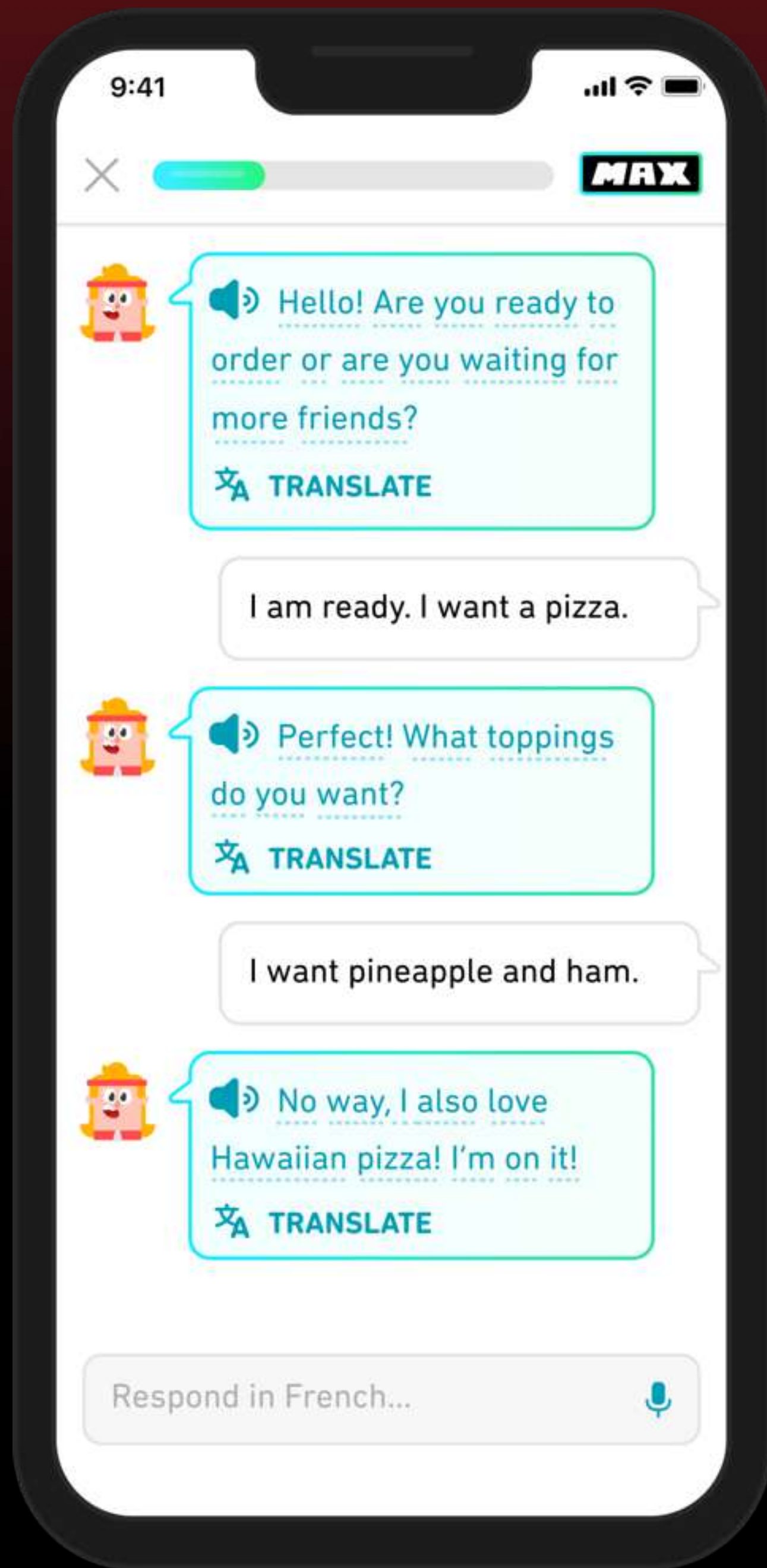
CONTINUE



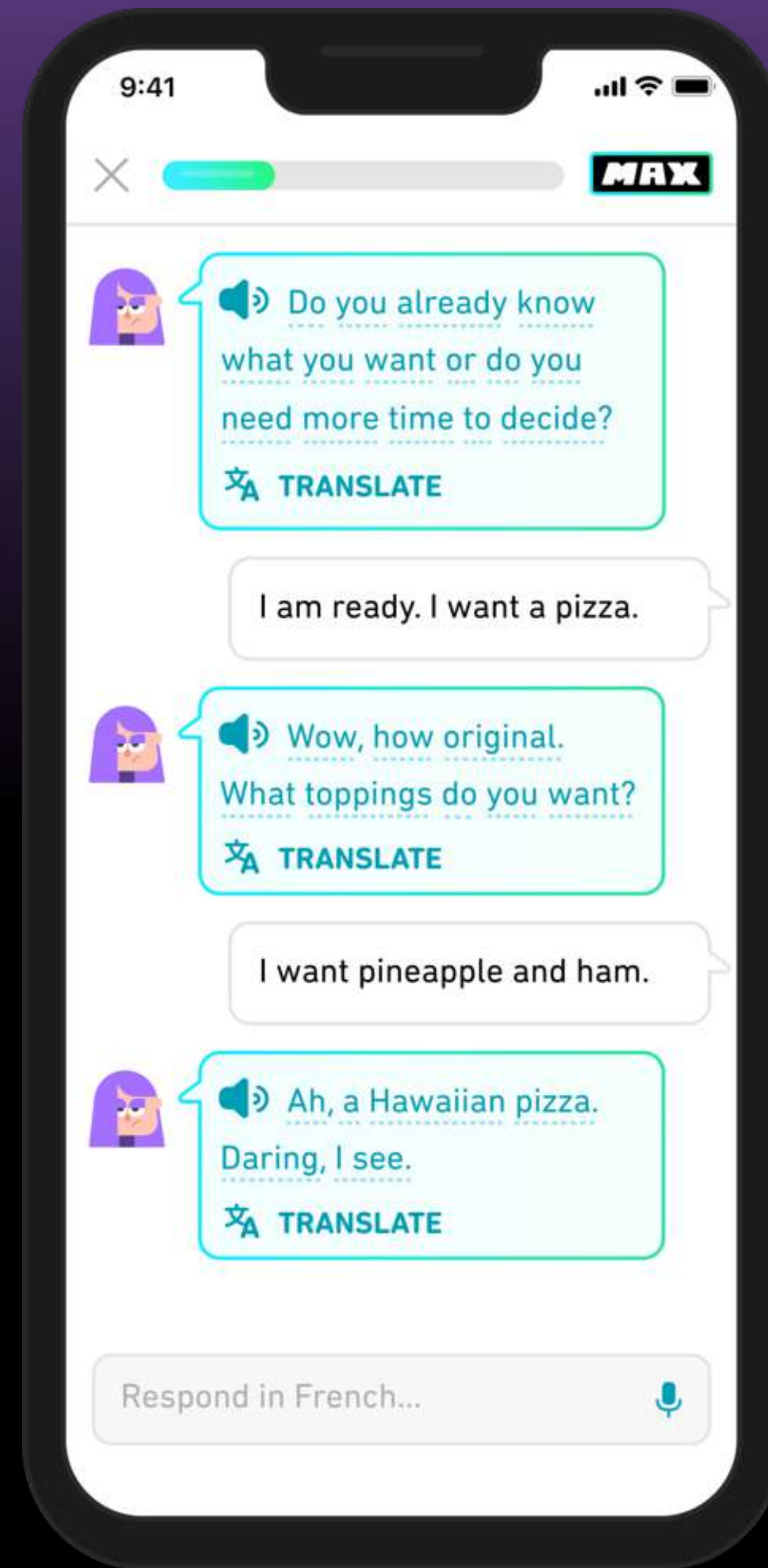


vs





vs



~~hackathon~~

prompt-a-thon

Roleplay

=

Learning Objective

+

Scenario

+

Setting

+

Context

+

Relationship

+

Motivation

Buy a concert ticket

=

Make a request

+

Buy a concert ticket

+

Box office at a concert venue

+

The user is at the box office to buy tickets

+

The character works at the box office

+

The character wants to sell the user a ticket





PRODUCT LESSON 4

**Gen-AI is a tool for
subject matter
experts, not a
replacement**





9:41



MAX

Visit a fortune teller

At a carnival in Paris, you enter a tent with a sign that says, "Learn about your future—for a fee."

CONTINUE

duolingo

MAX



PRODUCT LESSONS

- 1. You haven't won yet**



PRODUCT LESSONS

- 1. You haven't won yet**
- 2. Marry technical possibility with core user needs**



PRODUCT LESSONS

- 1. You haven't won yet**
- 2. Marry technical possibility with core user needs**
- 3. Start with the prompt**



PRODUCT LESSONS

- 1. You haven't won yet**
- 2. Marry technical possibility with core user needs**
- 3. Start with the prompt**
- 4. Gen-AI is a tool for subject matter experts, not a replacement**

thank you