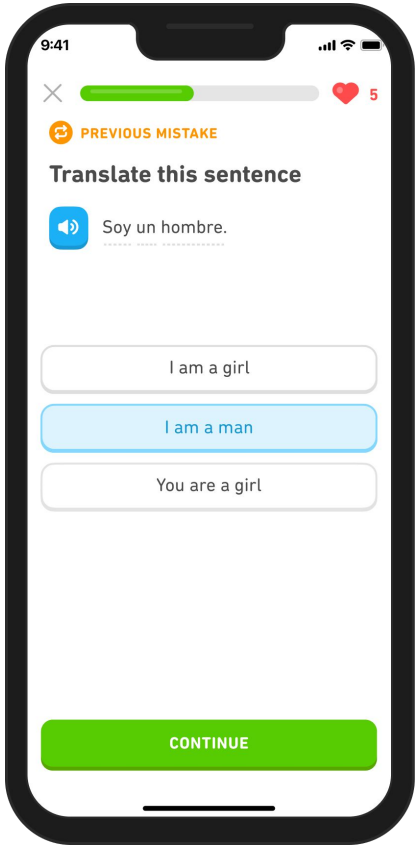
Video Call

how to build a conversational AI the Duolingo way

zan gilani

Duolingo 101


9:41
5
PREVIOUS MISTAKE
Translate this sentence
Soy un hombre.
I am a girl
I am a man
You are a girl
CONTINUE

Wenn du in Berlin nicht
auffallen willst

104M MAU

44 languages courses

+ math and music

english is the most popular course on duolingo

our mission

how to build a conversational AI the Duolingo way?

our approach

our approach

make learning fun and interactive

our approach

make learning fun and interactive

one final missing piece

one final missing piece

real conversation practice

speaking is a muscle

speaking is a muscle

you have to put the reps in

native speakers
are hard to access

native speakers are hard to access

and talking to them is often intimidating and stressful

without access to (infinitely patient) native speakers

without access to (infinitely patient) native speakers

how are you supposed to learn?

introducing Video Call

11:01
Speak with Lily
4 DAYS LEFT
GOOD FRIEND
Friendship leveled up!
27 / 7 · Bonus +5 XP till Sunday
CALL LILY +35 XP
Skill practice
Mistakes

how are you supposed to learn?

by having real conversations with Lily

duolingo
MAX

talk to Lily in English, Spanish, French, German, Italian and Portuguese

conversational AIs demo well

but they usually don’t have staying power

conversational AIs
demo well

how do you build conversational AIs that people want to use?

how do you build conversational AIs the Duolingo way?

4 guiding principles

1. make it authentic

1. make it authentic

2. make it entertaining

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2. make it entertaining

3. don’t break the metaphor

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4. make it stress free

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natural and conversational

no pretending

natural and conversational

real-time and open-ended

lily has memory

lily remembers what you like to talk about
and brings it up

12:27

Repaso de hoy

¿Recuerdas esta sección?

Repasa el contenido de la sección 10.

EMPEZAR +20 EXP

Conversación

Llama a Lily

Hablar

Escuchar

Tu colección

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the hardest part about learning anything is...

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...staying motivated

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you’re most likely to stay motivated if...

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you’re most likely to stay motivated if...

...you’re having fun

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a teaching method cannot be effective

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...staying motivated

you're most likely to stay motivated if...

...you're having fun

a teaching method cannot be effective

...unless it gets you to come back again and again

how do you make an entertaining conversational AI?

create a personality that’s not everyone’s cup of tea

lily is not your virtual assistant

she cannot feel like a smart speaker

super helpful
and super nice =

super bland

lily is here to help you but...

she is sassy, moody, and a bit judgmental

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pick a metaphor

make it easy for the learner to focus

don’t break the metaphor

make it easy for the team to focus

don’t break the metaphor

make it easy for the team to focus

keep getting interrupted?

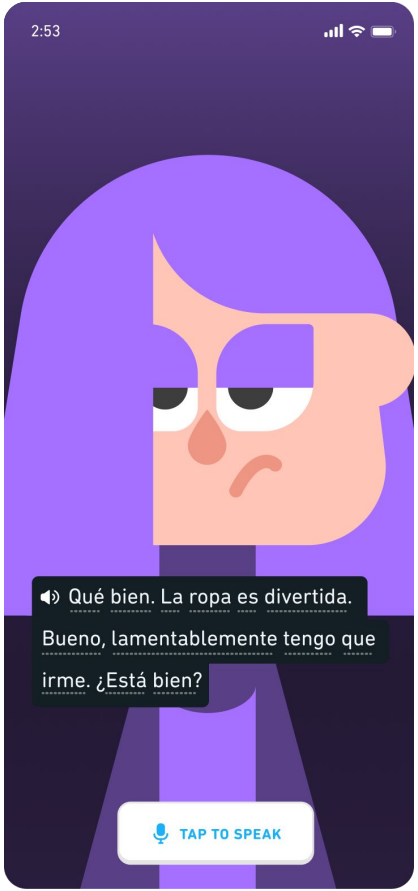
keep getting interrupted?

Make it “tap-to-speak” (like a walkie talkie)

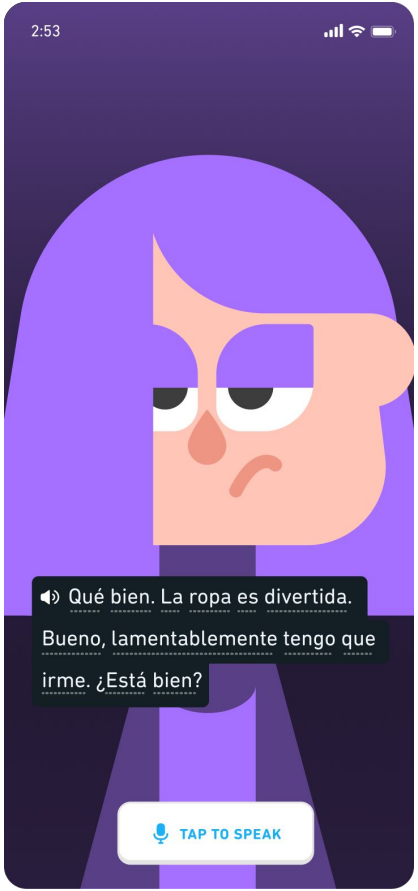
can’t understand lily?

can’t understand lily?

add captions

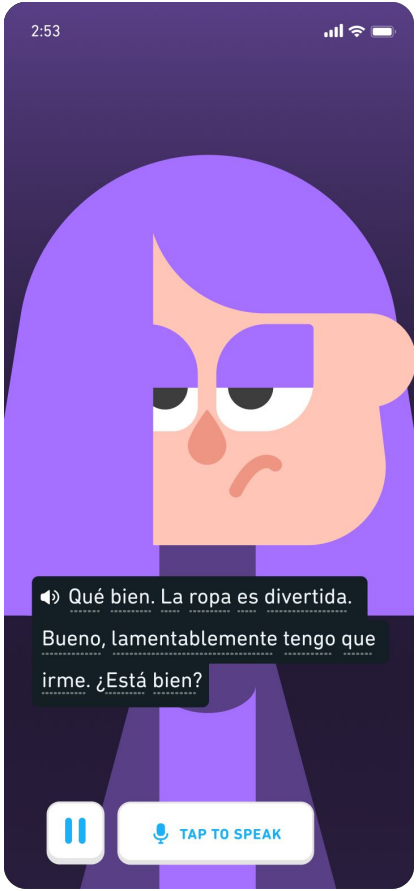


not enough time to think?

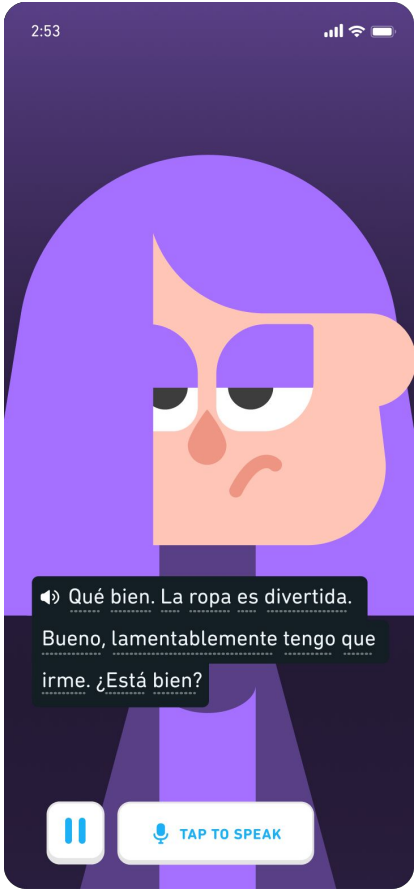


not enough time to think?

add a pause button

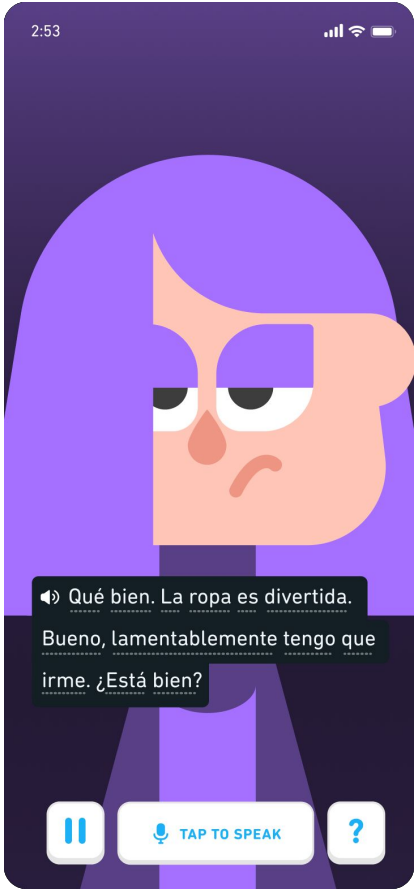


don’t know what to say?

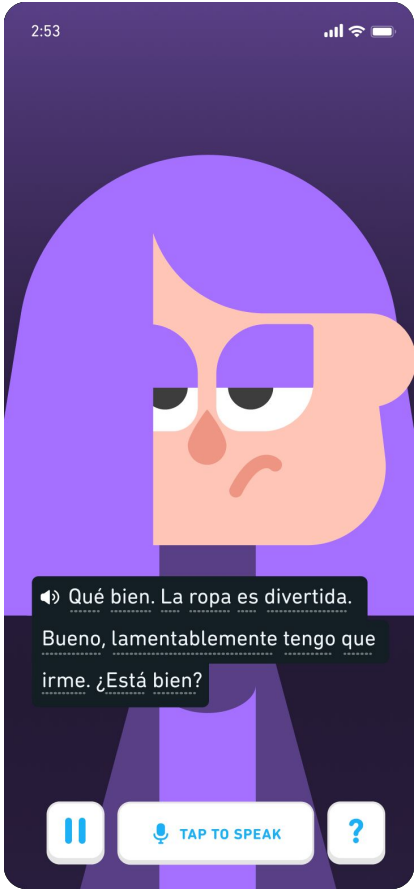


don’t know what to say?

add a help button

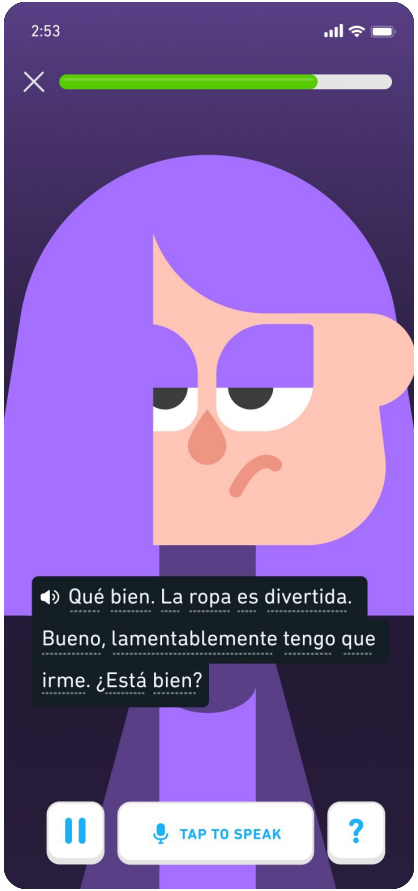


not sure how long calls are?



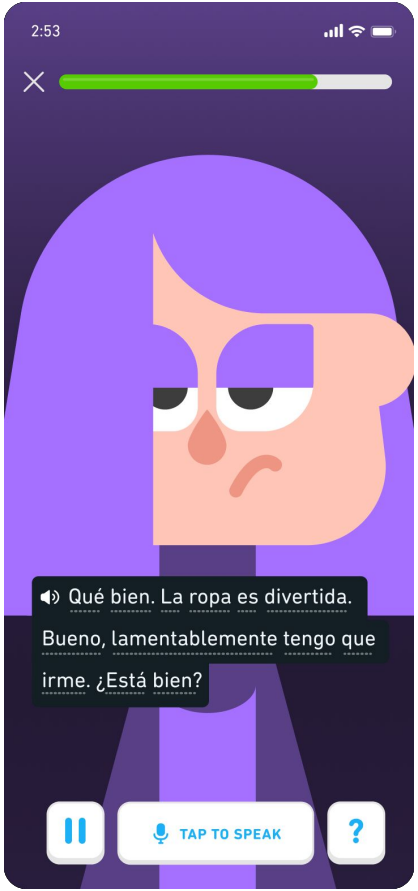
not sure how long calls are?

add a progress bar



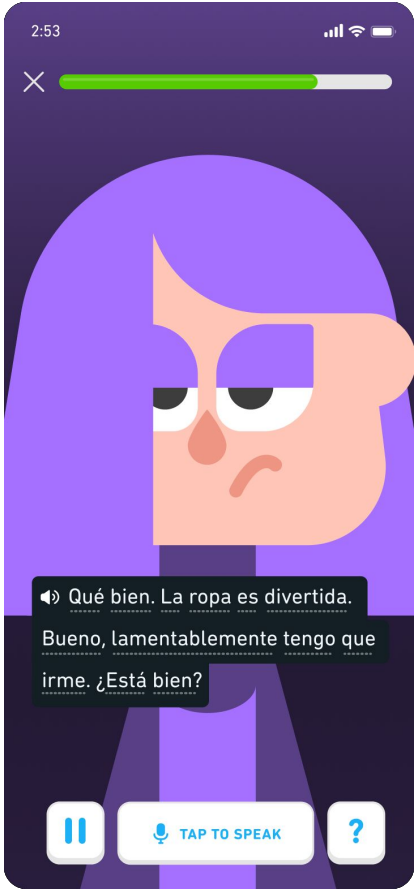
but also:

- no longer real-time
- reading, not listening
- a broken illusion
- and a boiled frog



end result?

real solutions to real problems



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speaking is exhausting

cognitively AND emotionally

tailor difficulty

advanced learners get open-ended, longer, more difficult calls

tailor difficulty

beginners learners get narrower, shorter, easier calls

only give feedback that matters

only give feedback that matters

most learners hate making mistakes

only give feedback that matters

the self-correcting part of your brain is overactive and gets in the way of learning

only give feedback that matters

Video Call is designed to focus on communication, not correction

only give feedback that matters

Lily will only give you one type of feedback

only give feedback that matters

can you understand Lily? and can Lily understand you?

only give feedback that matters

if so, Lily will roll with the punches

10:12

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thanks!

jobs.duolingo.com

@zan_g

pop quiz!!!

pop quiz!!!