



whatsit

AI COMMUNICATION ASSISTANT TOOL

Our Inspiration



Strokes and Aphasia

1/4

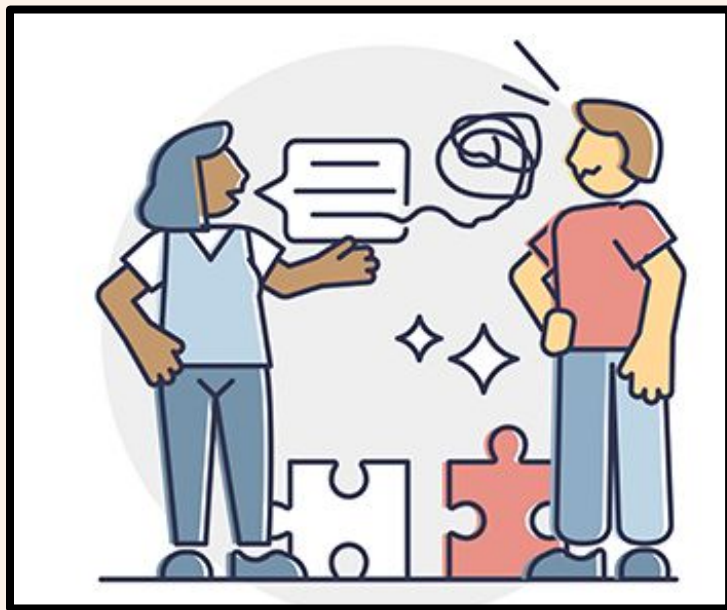
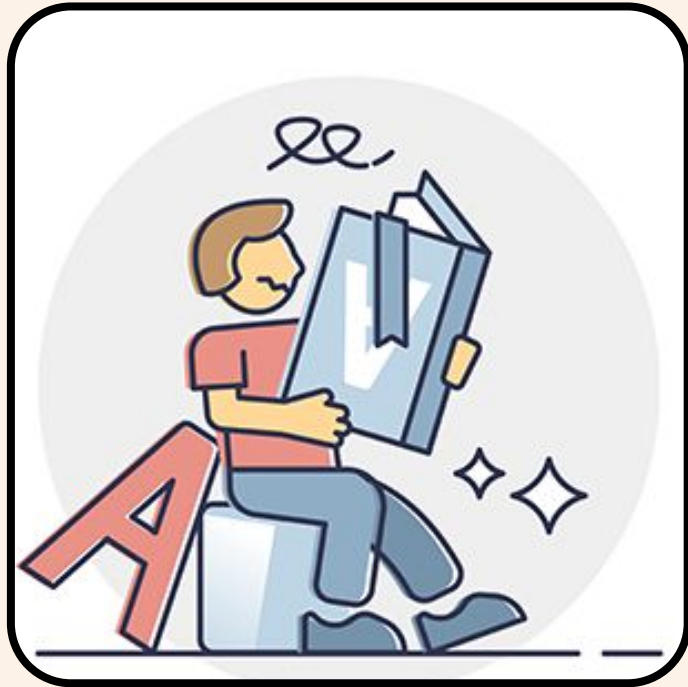
PEOPLE WILL HAVE A
STROKE WITHIN THEIR
LIFETIME [1]

1/3

PEOPLE WHO HAVE A
STROKE WILL SUFFER FROM
SOME FORM OF APHASIA [2]

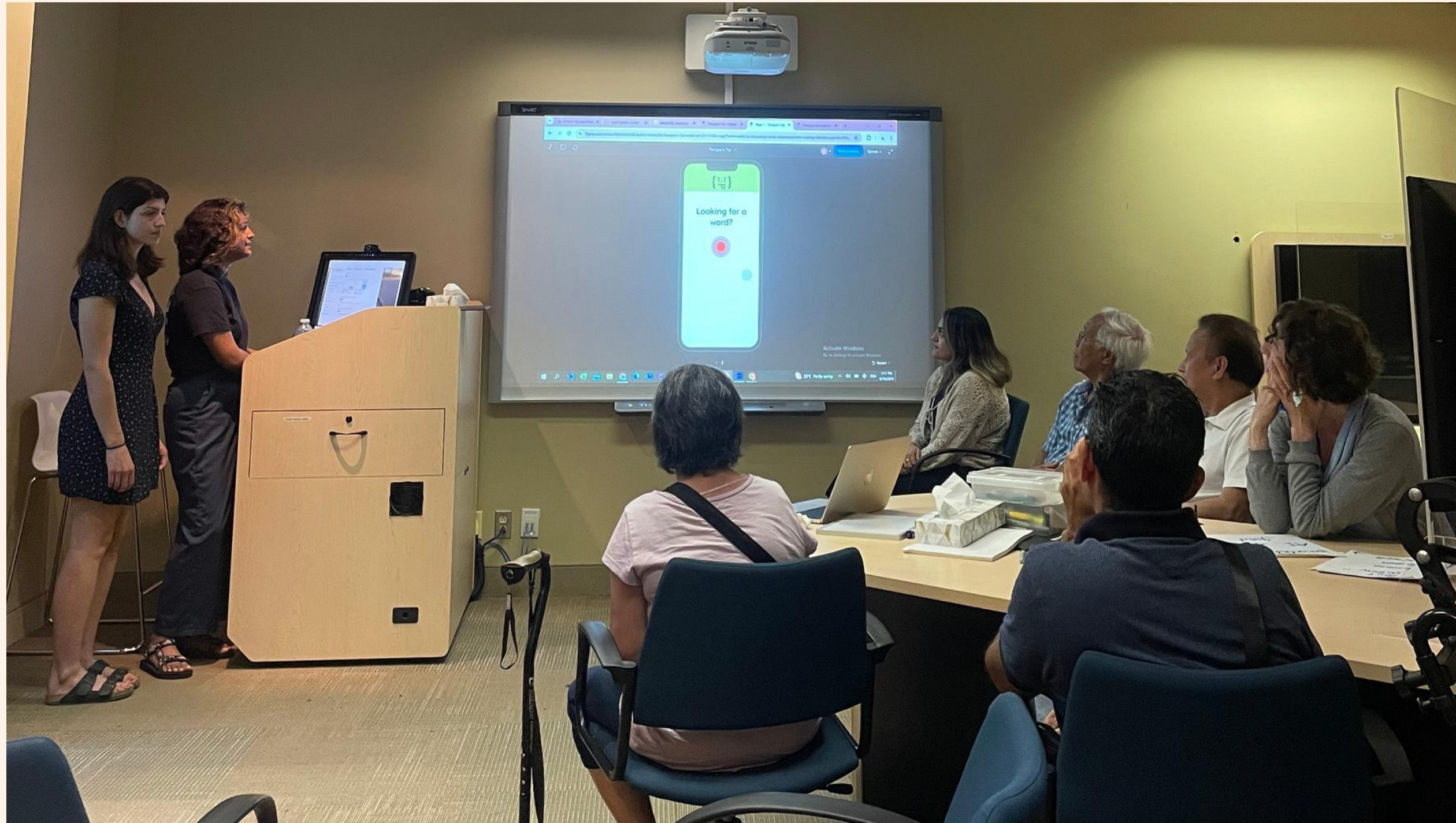


Communication Challenges for Individuals with Aphasia



- 🍃 Read or write
- 🍃 Understand spoken language fully
- 🍃 Communicate verbally

Stakeholder Consultation



McGill Outpatient Teaching Clinic, Chronic Aphasia Group

Key Takeaways



CLEAN UI

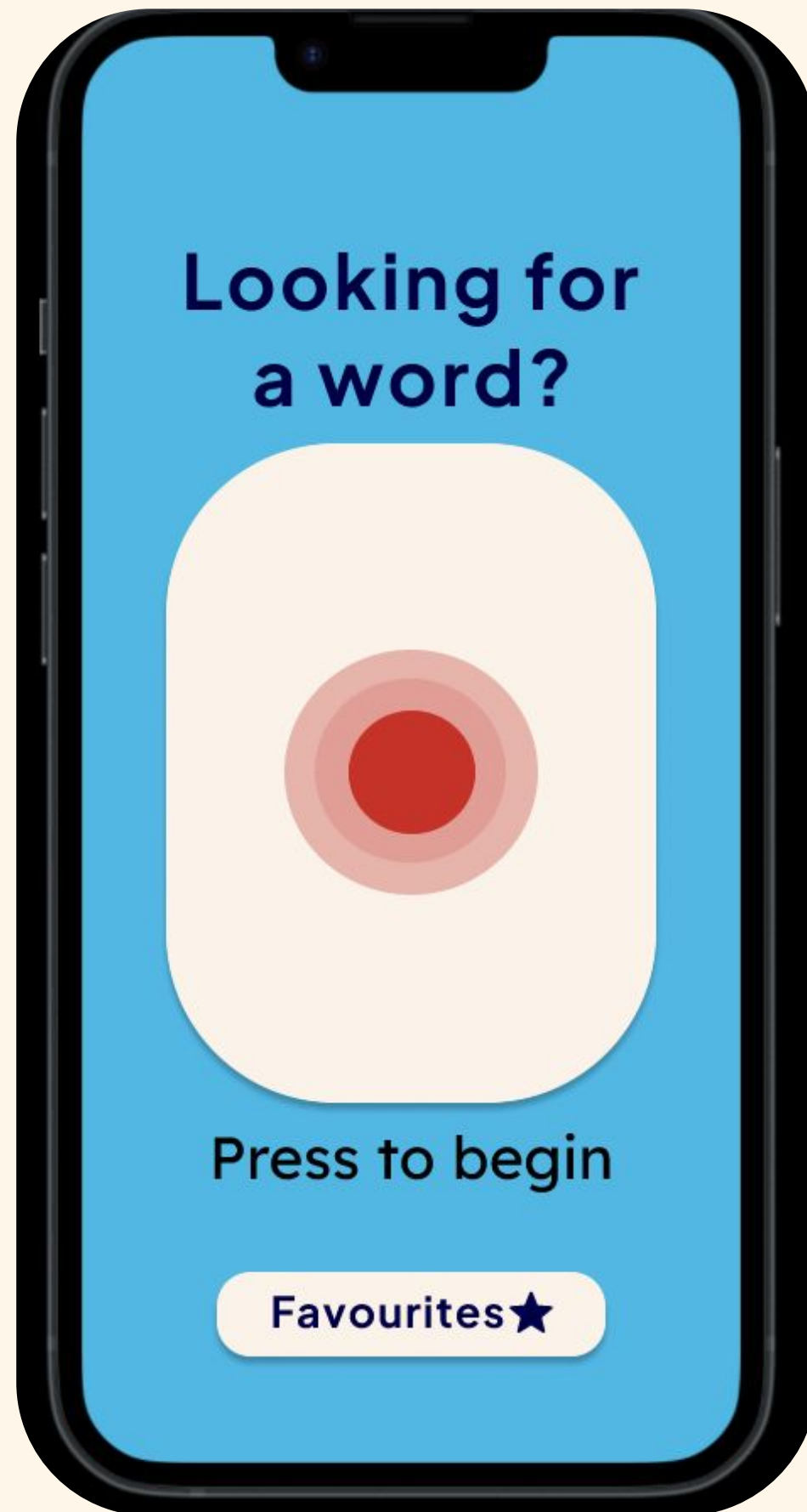


MULTIPLE LANGUAGE
INPUT



USER FRIENDLY

Our Proposition



Voice Recognition and LLM

- Whisper
- Llama3
- Image database: mmid

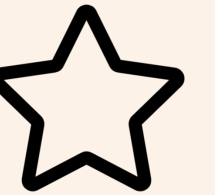


Future Directions



Audio of the
found word

Ability to have
favourite words



1

2

3

4

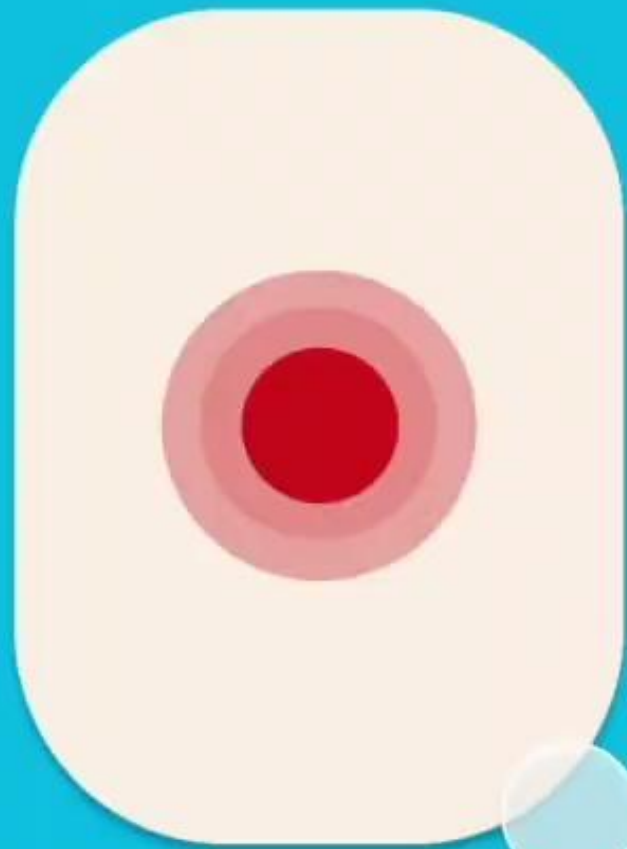
Image
generation of
the found word



Results in
several
languages



Looking for
a word?



Press to begin

Favourites★

whatsit vs Existing Applications



Speechify [3]



Google Images [4]



Tip-of-my-tongue [5]



GPT-4 [6]

TEXT TO SPEECH

IMAGE SEARCH

REVERSE DICTIONARY

SPEECH TO TEXT

FREE

✓	✓	✗	✗	✓
✓	✗	✓	✗	✗
✓	✗	✗	✓	✓
✓	✗	✗	✗	✓
✓	✓	✓	✓	✗

whatsit vs Existing Applications



Speechify [3]



Google Images [4]



Tip-of-my-tongue [5]



GPT-4 [6]

TEXT TO SPEECH
IMAGE SEARCH
REVERSE DICTIONARY
SPEECH TO TEXT
FREE

APHASIA TARGETED



Email

AI4Goodm5@gmail.com





Email

AI4Goodm5@gmail.com



Thanks Maneesha and Owen!

As well as Lauren Tittley and Aphasia conversation group

REFERENCES

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Email

AI4Goodm5@gmail.com





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Ethical Considerations



**BIAS IN RESULTS BASED
ON LANGUAGE OR ACCENT**



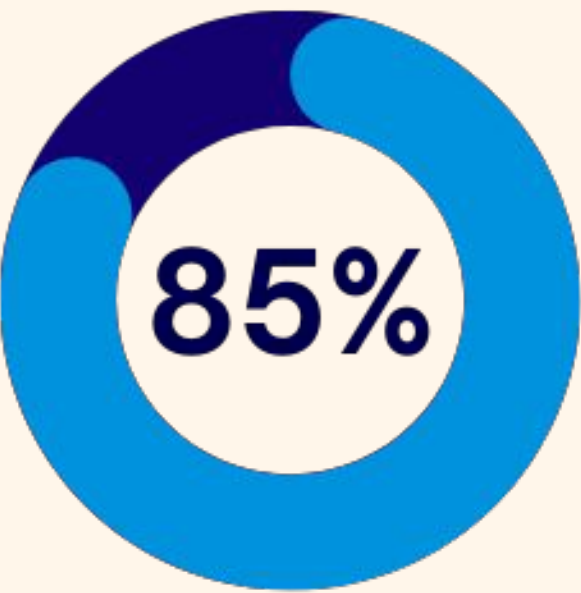
PRIVACY AND CONSENT

Our Solutions

We know that our app may have some disparities with accents but we are working to fine tune the model on a dataset that includes individuals with speech challenges to mitigate this issue

We will not collect any audio data/ voice recordings will only be used to generate the transcript, which will be discarded after the most likely words are generated

Our Results



Accuracy
Tested on a dataset of 20 prompts



Llama3 Model

Transcription

Prediction

Transcription

This hard thing that you make with dough and it's kind of, you put it in an oven and sometimes it's sweet.

Words Suggestion

bread
pastry
cake
cookie
muffin

Next 5 words

Go to previous page

Transcription

Prediction

Example of prompt

🎵 Audio

×



0:00

0:16



1x



Clear

Submit

Transcription

This hard thing that you make with dough and it's kind of, you put it in an oven and sometimes it's sweet.

Generate Words

Transcription

Prediction

Transcription

This hard thing that you make with dough and it's kind of, you put it in an oven and sometimes it's sweet.

Words Suggestion

bread
pastry
cake
cookie
muffin

Next 5 words

Go to previous page