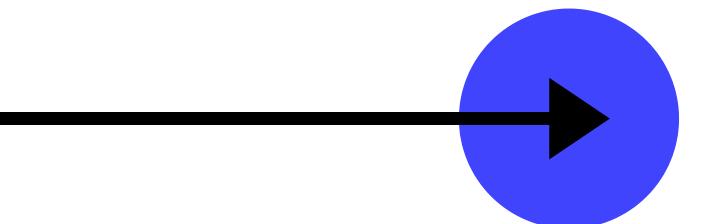


# BraileBro

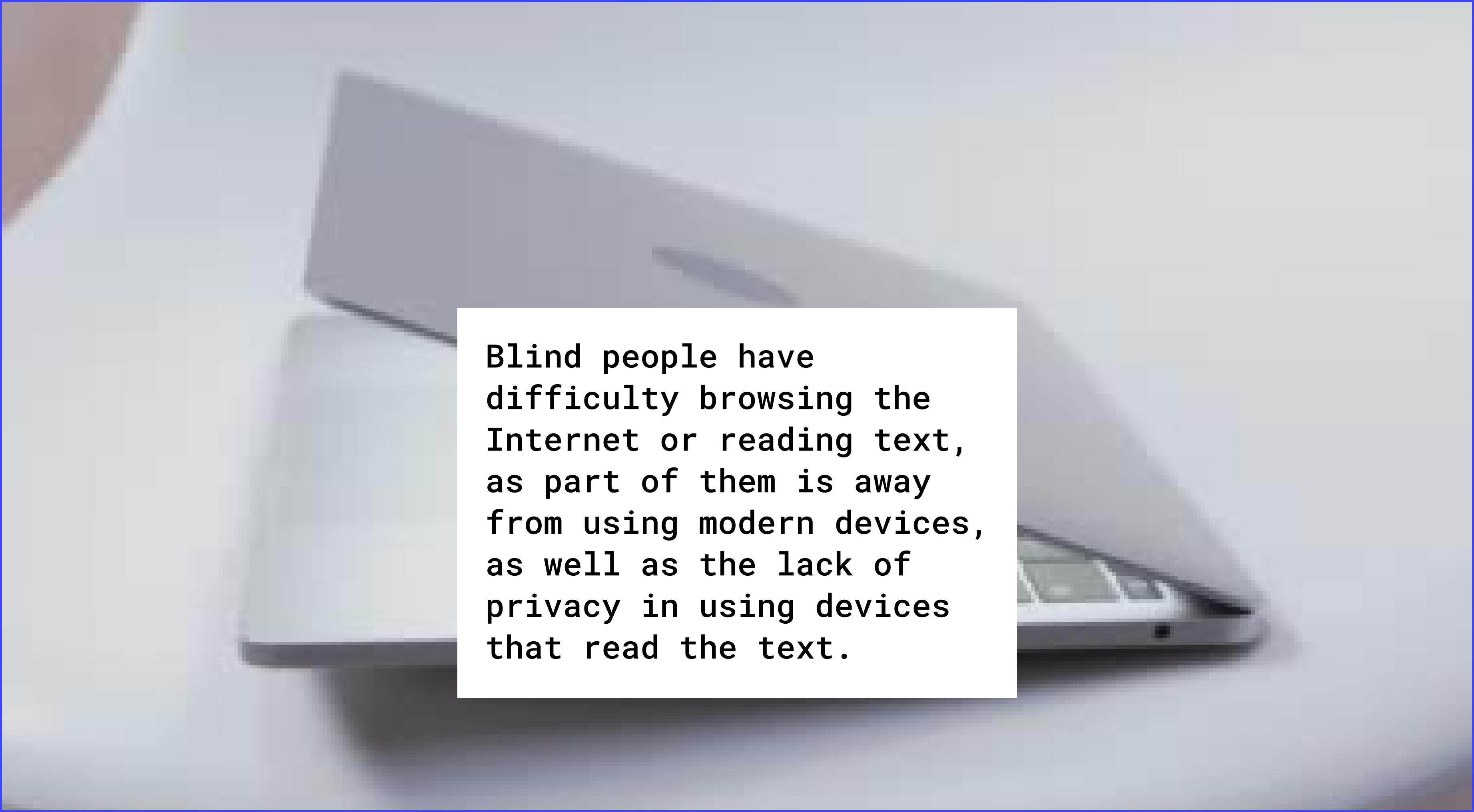
An Experience they lost, An opportunity they gain





# Story/Problem





A grayscale photograph of a person's profile, facing right. They are holding a smartphone in their left hand and looking down at its screen. The background is a plain, light-colored wall.

Blind people have difficulty browsing the Internet or reading text, as part of them is away from using modern devices, as well as the lack of privacy in using devices that read the text.



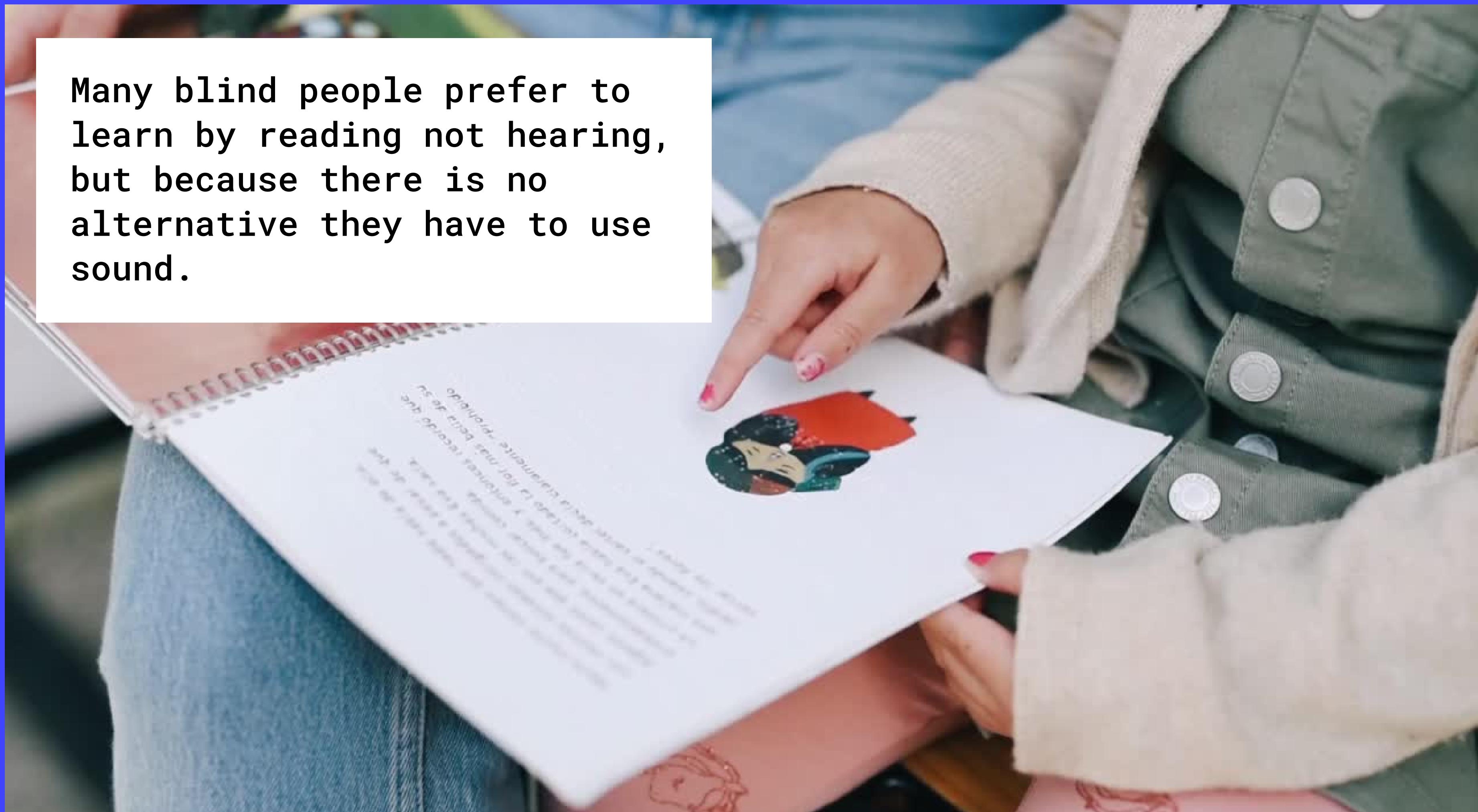
# Facts

After meeting blind people, we found out that there were some important facts.

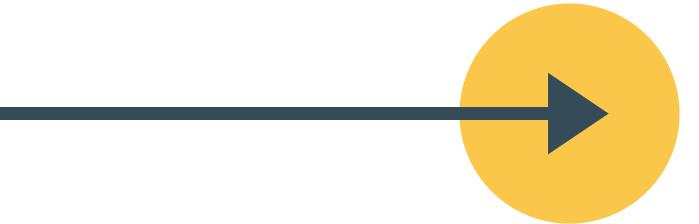
Talking devices lack privacy where a person can be seated and heard by anyone around them.

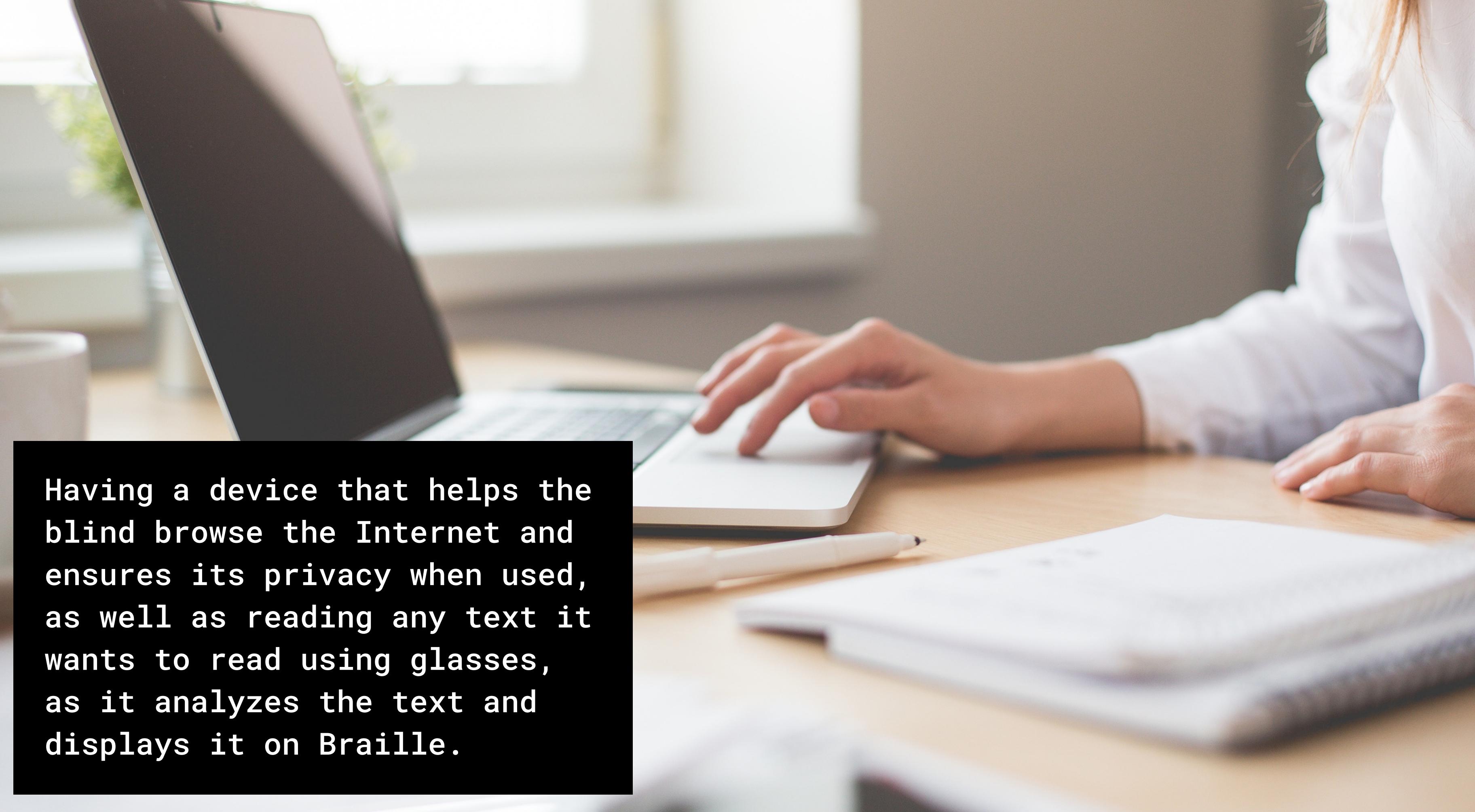


Many blind people prefer to learn by reading not hearing, but because there is no alternative they have to use sound.



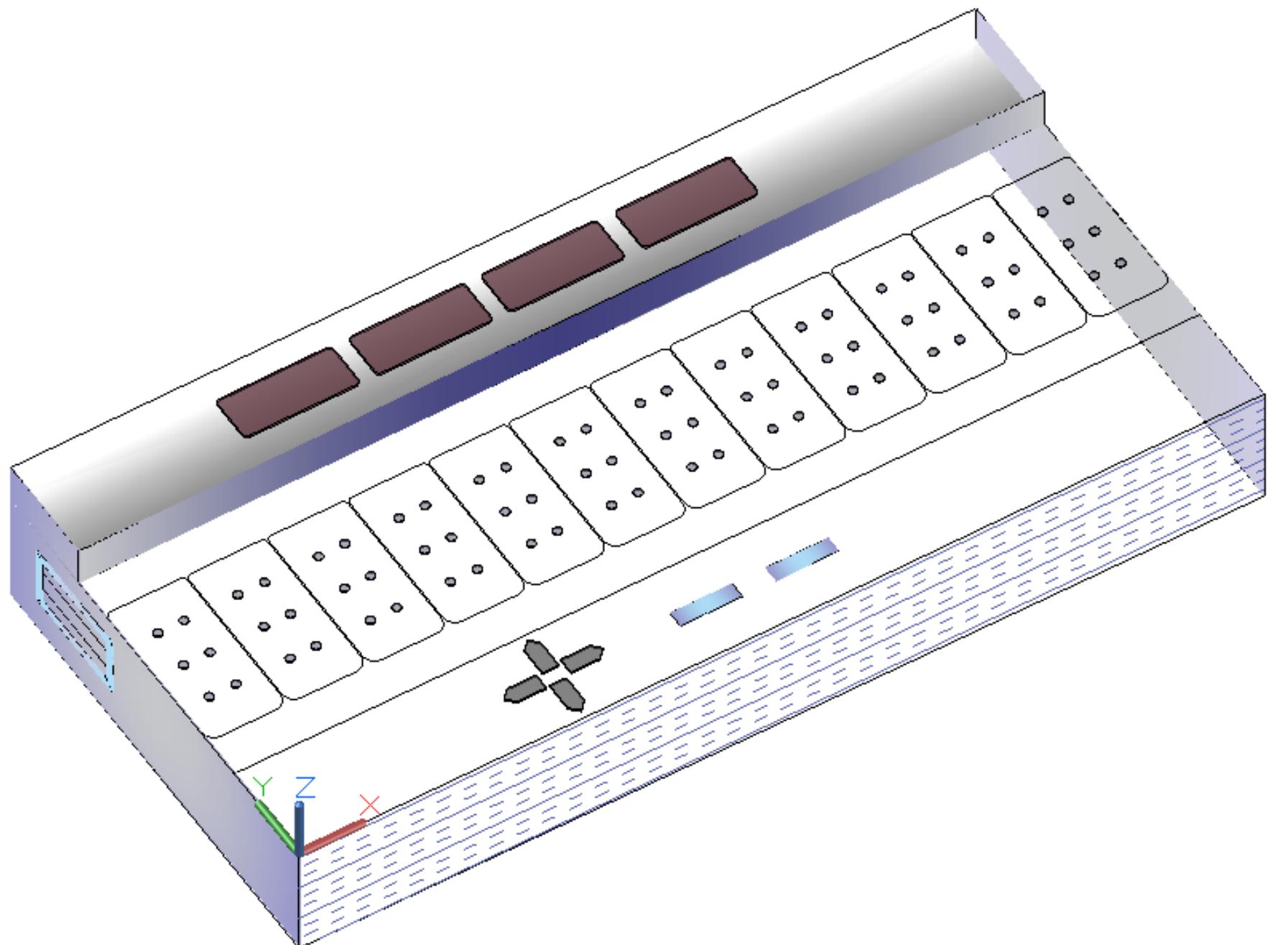
# Solution



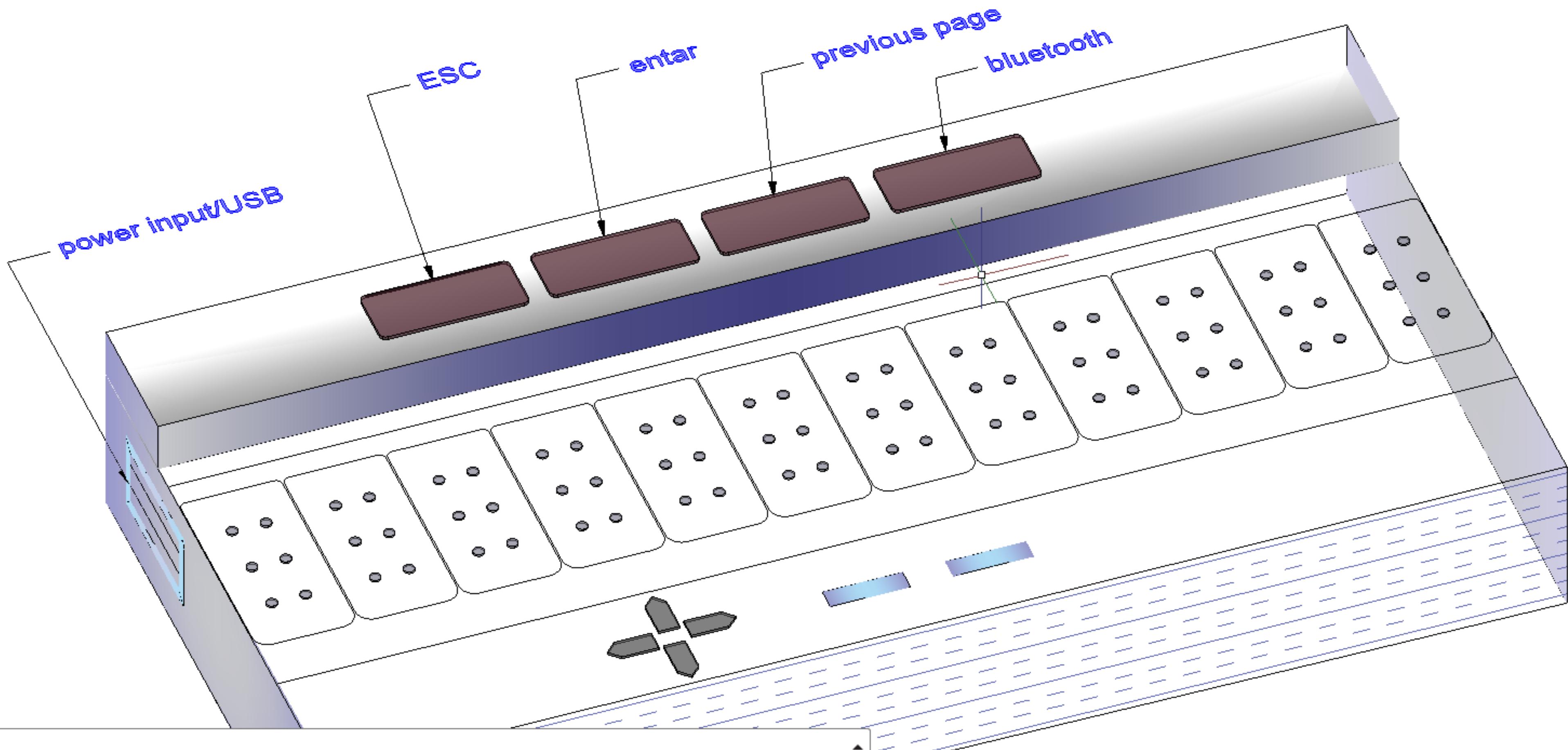
A photograph showing a person from the side, wearing a white shirt, sitting at a wooden desk. They are using a laptop computer. A small, rectangular device with a screen and buttons is attached to the side of the laptop's keyboard. The person's hands are resting on the laptop's trackpad. On the desk in front of them is a stack of papers and a white pen. The background is slightly blurred, showing what appears to be a window and some greenery.

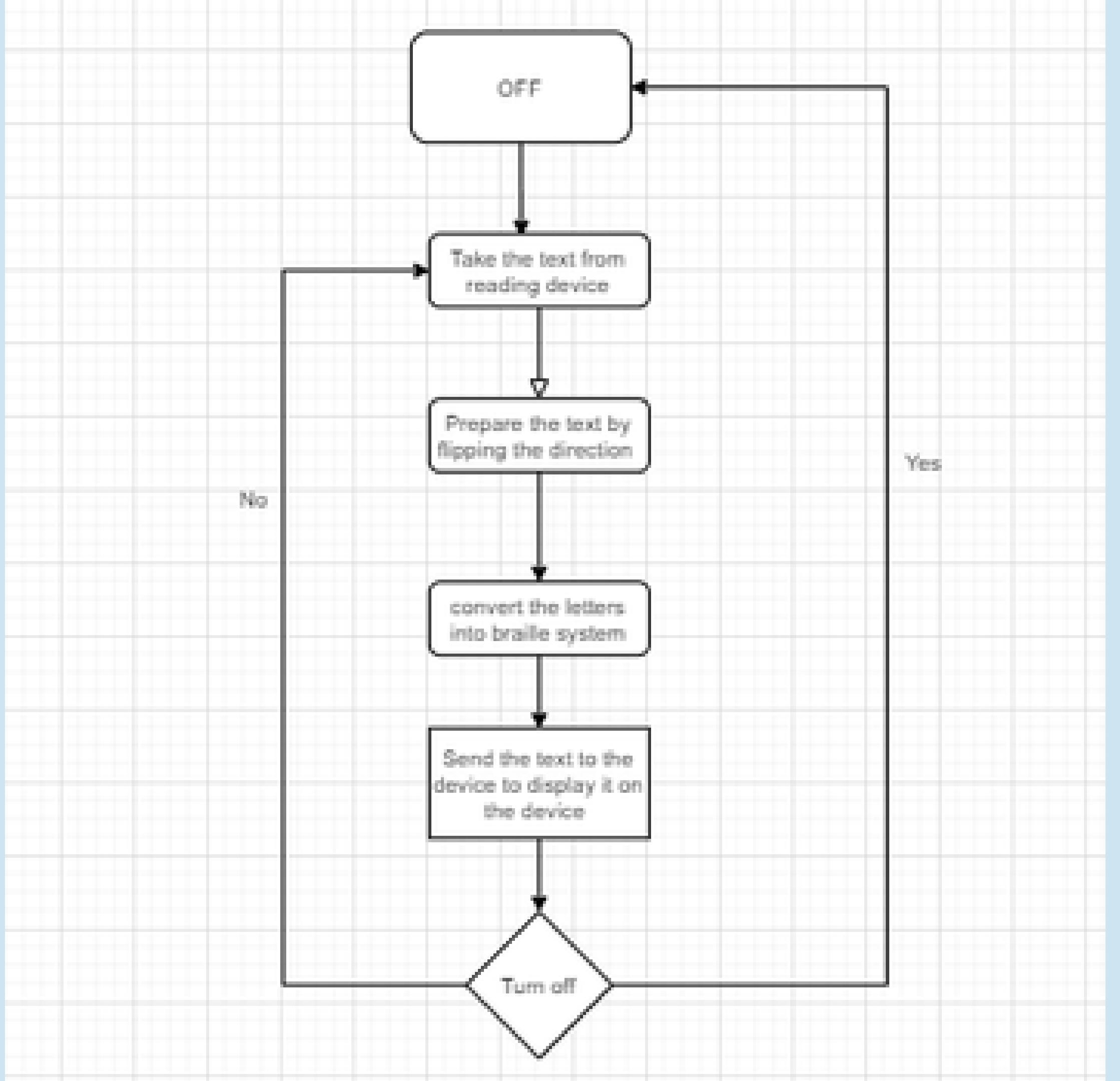
Having a device that helps the blind browse the Internet and ensures its privacy when used, as well as reading any text it wants to read using glasses, as it analyzes the text and displays it on Braille.

# Our Prototype

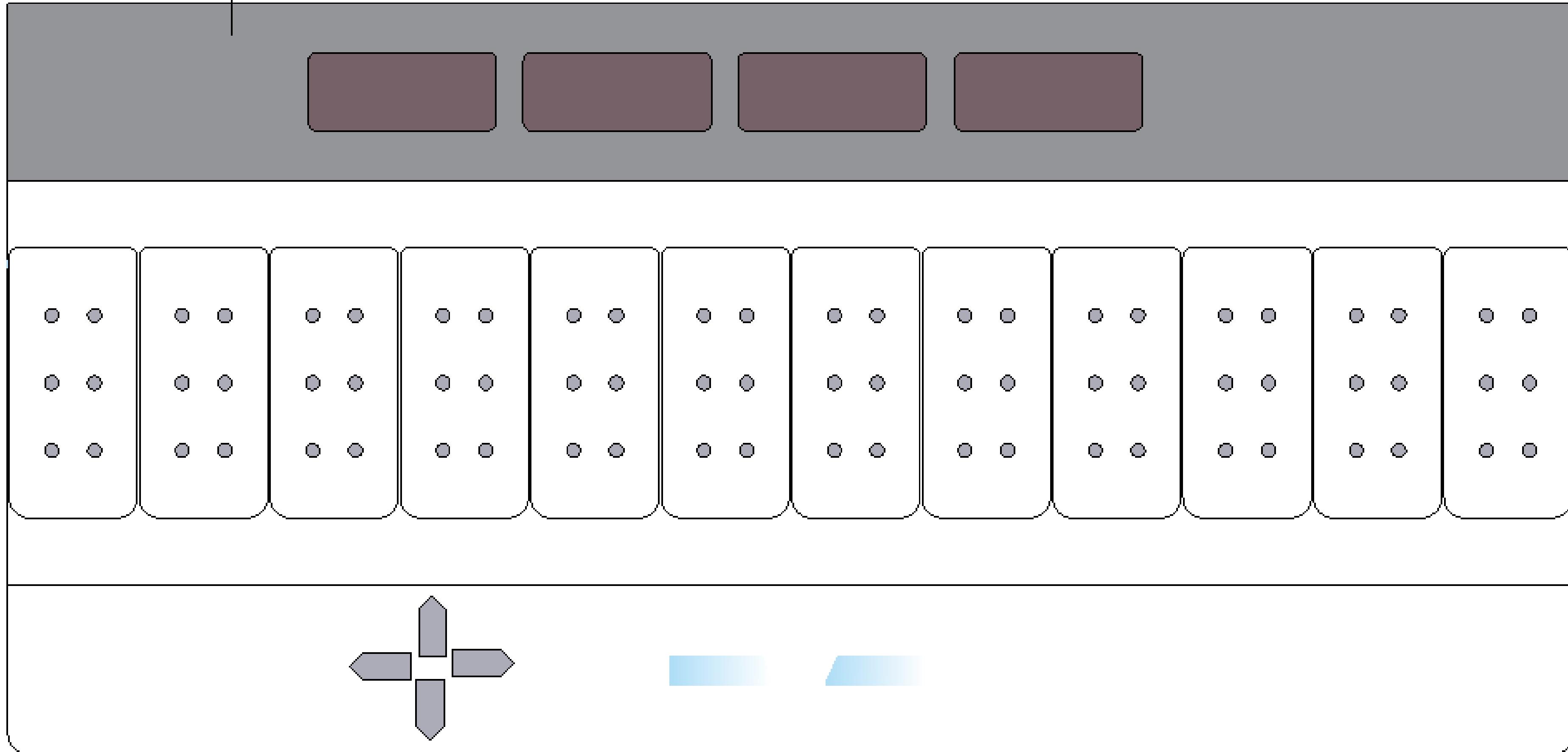


**This is the first prototype of the device, which will be used to convert the Arabic text into Braille and allow the user to read from the device.**



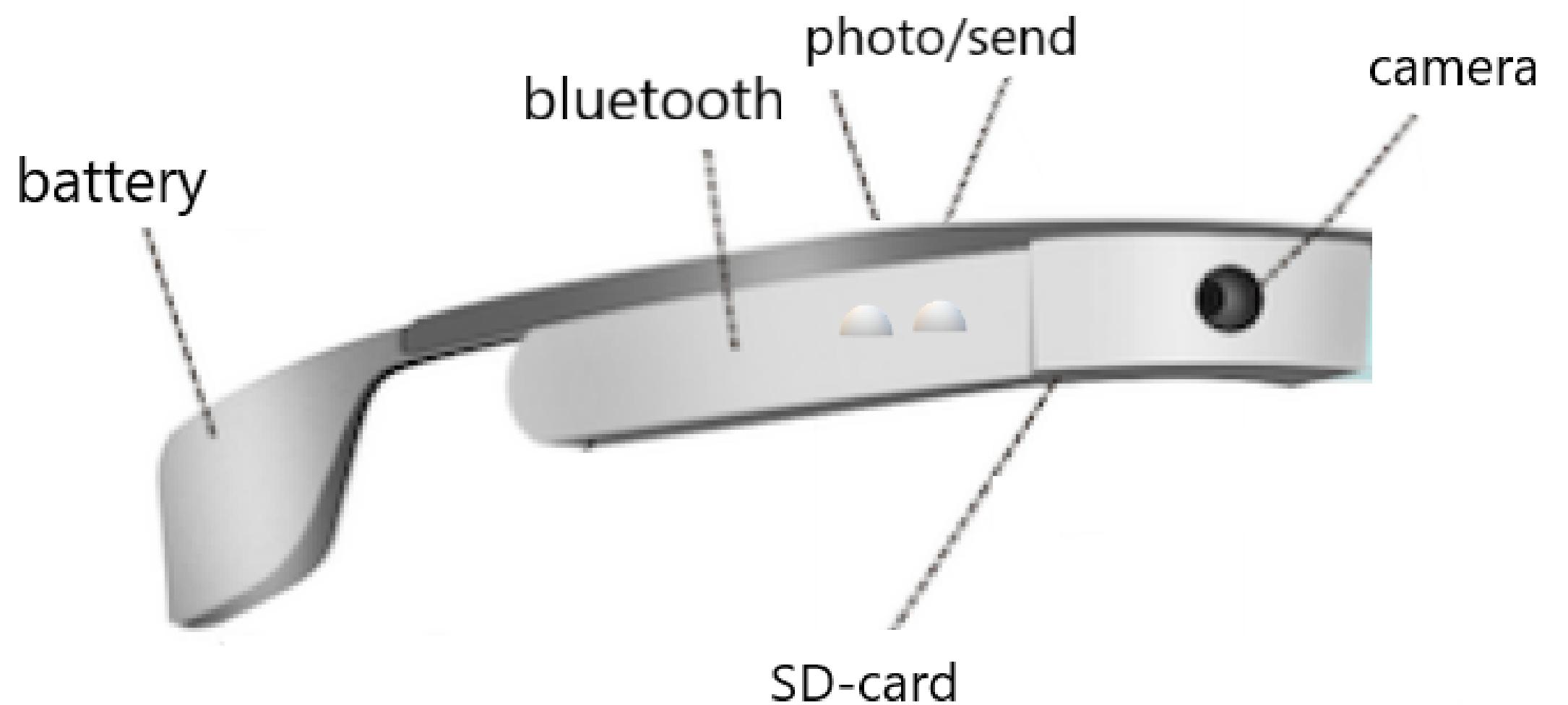


# Top View

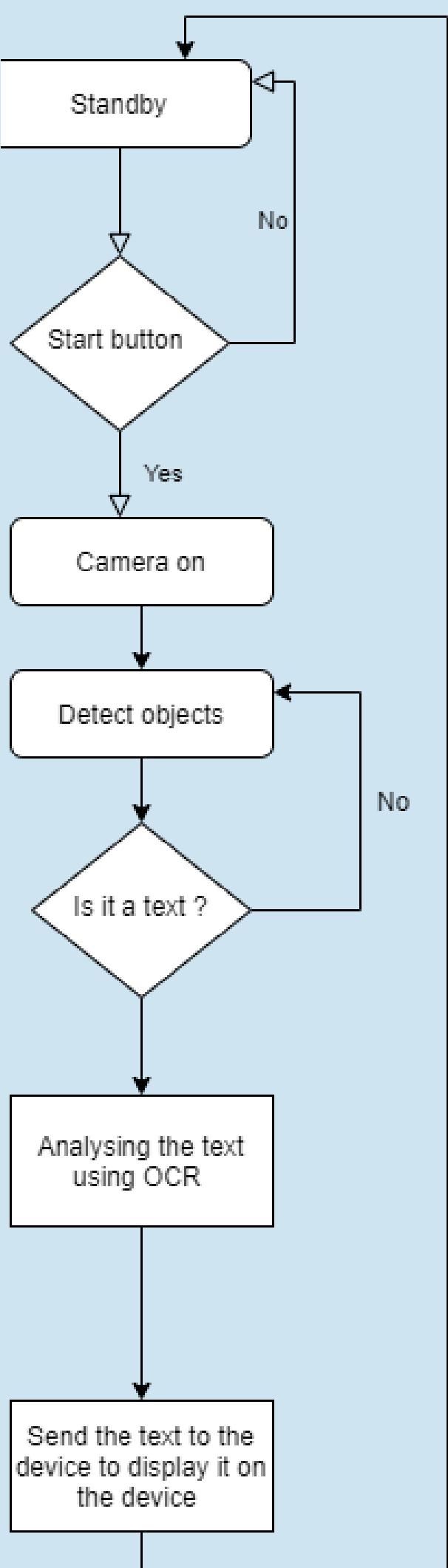


**But what if the user don't  
want to explore internet  
and want to read from a  
book ?**





## Smart Glass Hardware



# VALUE PROPOSITION



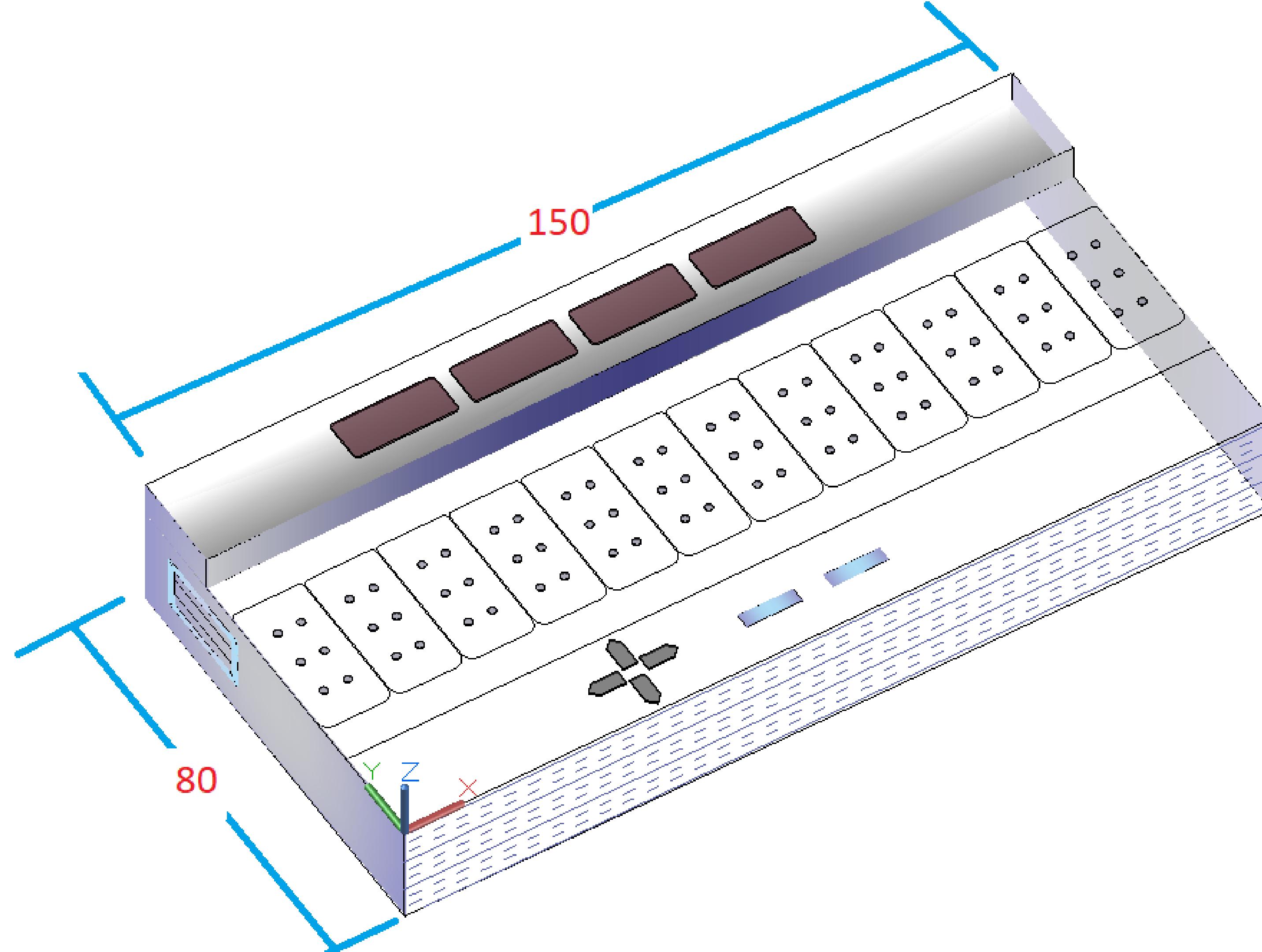


The main problem of any device is the price, most of the devices are expensive and it can be difficult to afford it by most people.

# **Portable, Easy to use & Wireless**

Most helping devices are big in size, need professionals to use it, and need for special courses to teach people how to use it.





# Translate from Arabic to Braille



Through our online research and our visit to the University's Laboratory for the Blind, we have noticed that existing devices support English and do not support Arabic. In order to support Arabic, a special software must be downloaded, which increases the cost.

# Privacy

**Devices used by the blind read the text, which enables anyone to listen, threatening the user's privacy.**



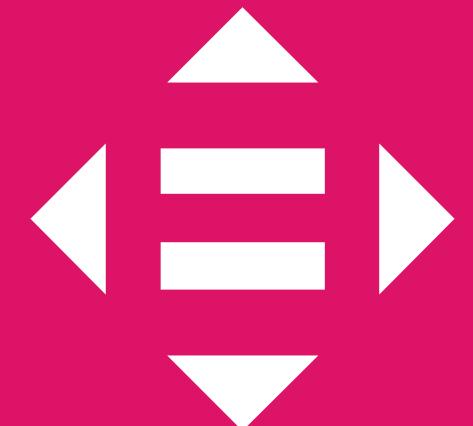


**Our project achieves the 4th and 10th  
goals of the SDG, quality education  
and reduced inequalities.**

**4** QUALITY  
EDUCATION



**10** REDUCED  
INEQUALITIES



# Our Competitors



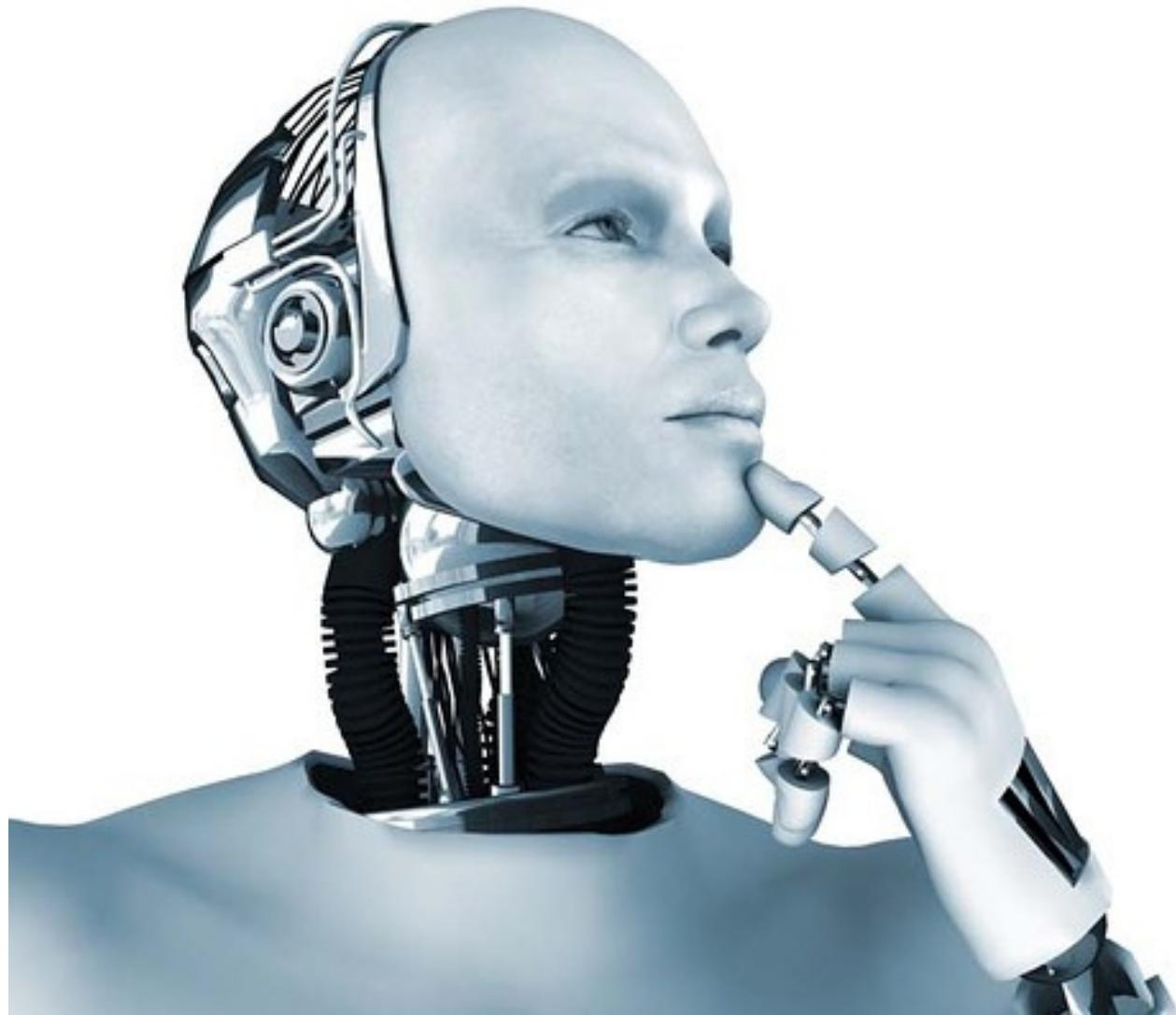
**Device with**

- Better prices
- More than 12 characters
- Read and write features

An illustration of a person's face from the nose up, wearing a pair of futuristic-looking glasses. The lenses of the glasses are circular and display two different types of data visualizations. The left lens shows a bar chart with several vertical bars in shades of blue, red, yellow, and orange, all pointing upwards, set against a light blue background with a faint city skyline. The right lens shows a line graph with three lines: a blue line with square markers, an orange line with circle markers, and a pink line with diamond markers. The lines fluctuate between upward and downward trends. The background behind the person's head is a teal color with a subtle grid pattern.

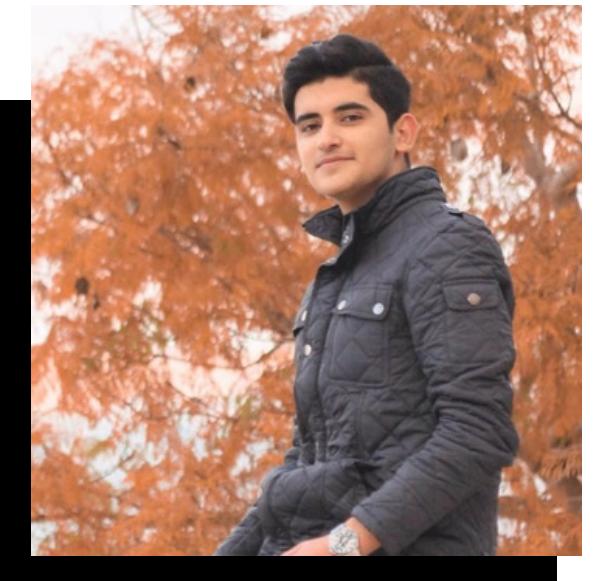
# Future Work

- Make different sizes of our device
- Support read and write features
- Translate and support different languages
- Use more efficient, accurate and cheaper technology

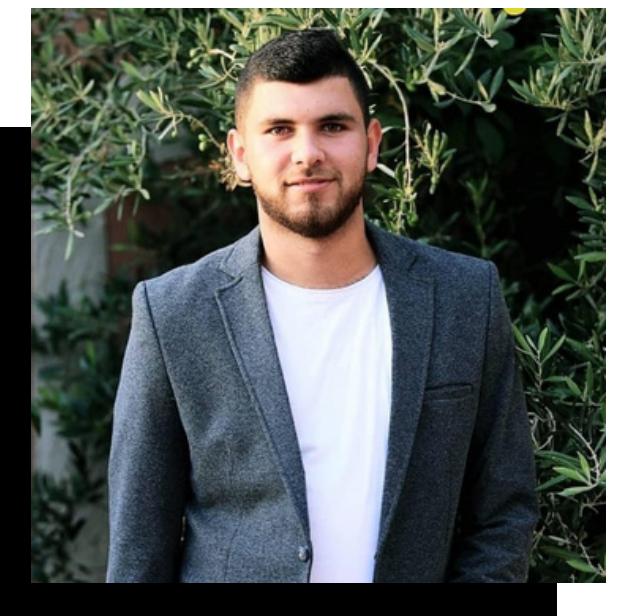


# The Team

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**Zaid Jabr**



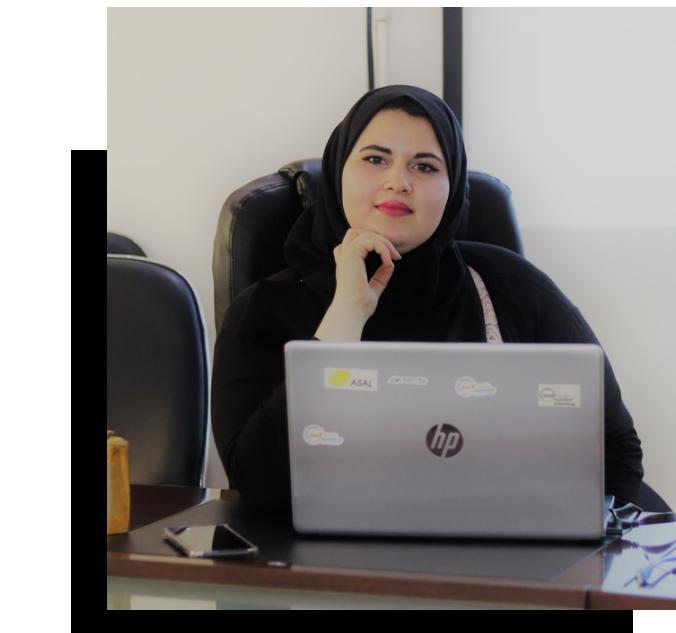
**Yazan Jawabreh**



**Mohammad Kukhun**



**Marah Sha'bello**



**Leen Sharaf**