

TEXT 2 TOUCH

DEVELOPED BY JAKT & GGG

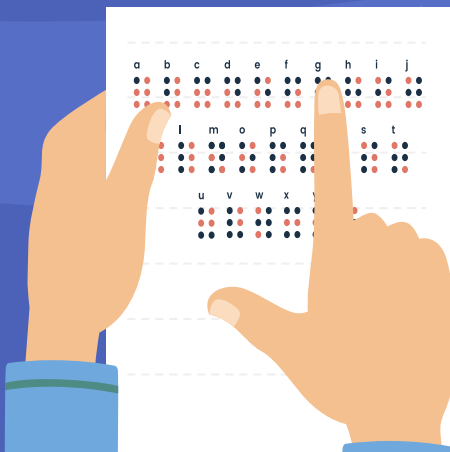


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You can describe the topic
of the section here

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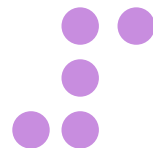


CLOSING

You can describe the topic
of the section here



01



TACKLING THE PROBLEM

MAJOR ISSUES

1

Cost Barrier

- Braille displays can be prohibitively expensive
- An avg. braille display can cost from \$3,500 - \$15,000 [2]

2

Size & Portability

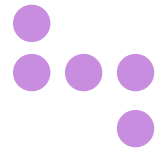
- Traditional Braille displays are bulkier & less portable



FACTS

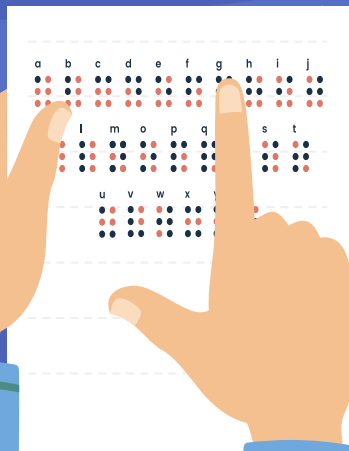
Globally, approximately 2.2 billion people face vision impairment [1]

02



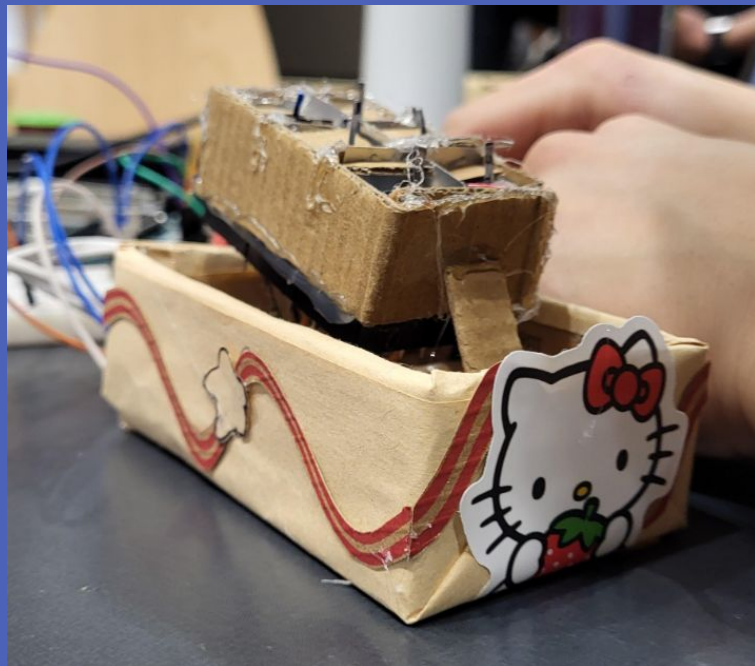
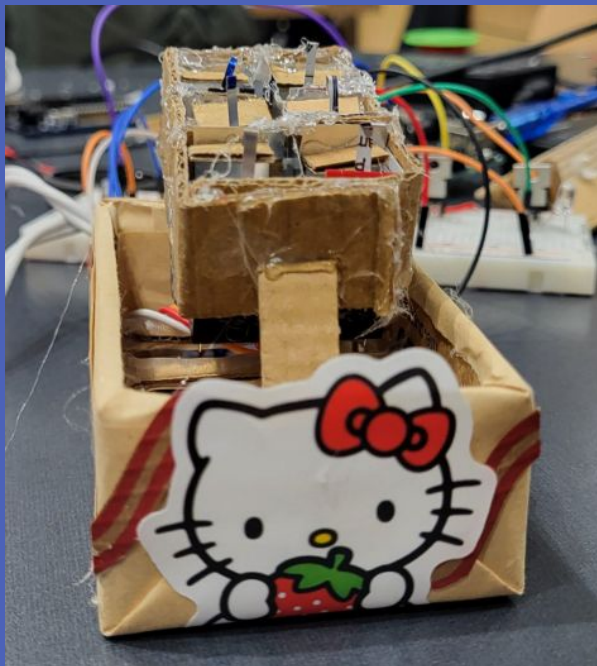
SOLUTION

TEXT 2 TOUCH

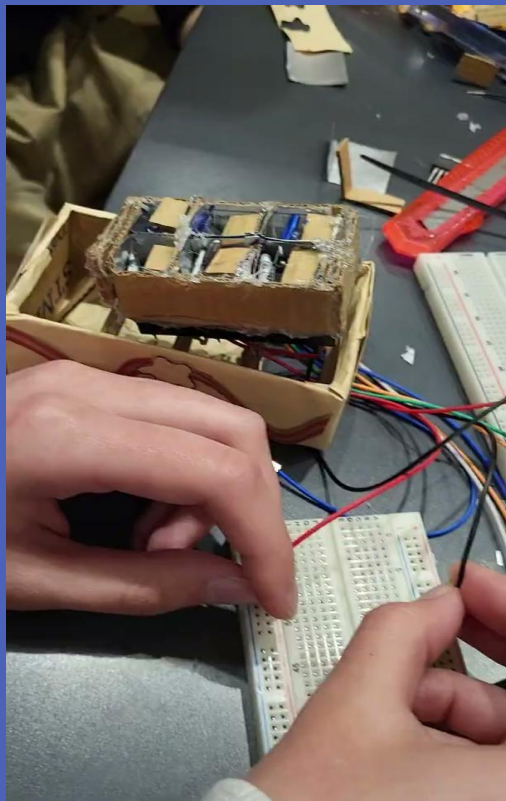


a b c d e f g h i j
k l m n o p q r s t
u v w x y z

DESIGN



VIDEO EXAMPLE



CONVERSION PROCESS



TEXT

Screen read text on computer screen and compile it to a txt file



CONVERT




























Compile the txt file and transferring it into serial data into the Arduino



TOUCH

Output Arduino data to braille display

THE BRAILLE ALPHABET

 A	 B	 C	 D	 E	 F	 G	 H	 I
 J	 K	 L	 M	 N	 Ñ	 O	 P	 Q
 R	 S	 T	 U	 V	 W	 X	 Y	 Z

Braille characters are comprised of 6 tiny rectangular bumps/cells [3].

REFERENCES

[1] “Vision Impairment and blindness,” World Health Organization, <https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment> (accessed Feb. 18, 2024).

[2] “Refreshable Braille displays,” The American Foundation for the Blind, <https://www.afb.org/node/16207/refreshable-braille-displays#:~:text=The%20price%20of%200braille%20displays,the%20number%20of%20characters%20displayed>. (accessed Feb. 18, 2024).

[3] “Braille Literacy Canada: Learn about Braille,” Braille Literacy Canada | Learn About Braille, <https://www.brailleliteracycanada.ca/en/braille#:~:text=Braille%20characters%20are%20compri%20of,letter%20or%20symbol%20they%20represent>. (accessed Feb. 18, 2024).

THANKS FOR LISTENING!

DO YOU HAVE ANY QUESTIONS?

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