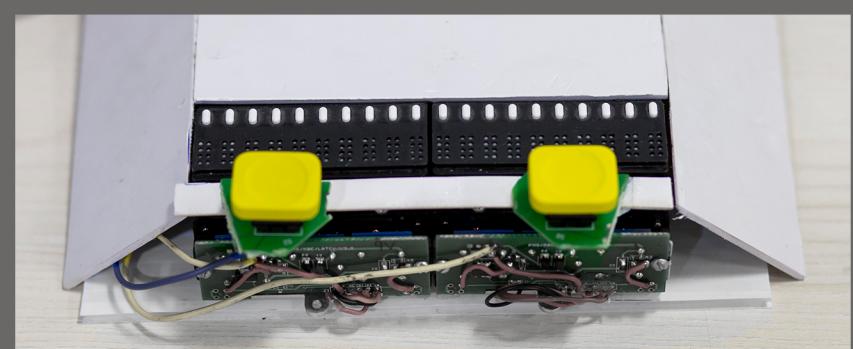


Description

- >Passive Refreshable Braille Display is a device which enables people with visual impairment to read data from a virtual screen in Braille language.
- >A device with a virtual screen such as a computer screen or a smart phone is connected to a Braille display device using USB or Bluetooth.
- >For android phone, a text typed or a pdf file in the phone memory can be read through the application and displayed on the Braille module.
- >To ensure easy usability, there are navigation keys present to allow user to read and access previous or next lines on demand.

Need

- >Approximately 10 million visually impaired people in India,
- >Lack of accessibility to digital content for visually impaired.
- >Braille printing on paper expensive and short-lived. Fraction of some digital material is available on paper.



How does it work?

- >NVDA software runs on the PC, and an android app runs on the phone to read data appearing on the screen. They convert this data into Braille format and sends it to Arduino.
- >Arduino then binds this data into a packet and sends 2 packets to each host Braille modules.
- >The Braille modules receive the packet and match the host id from the packet and the respective host displays the 10 character data from the packet received.

Control Flow

