

















comes out in braille in Braille text popper device. The next button would display next three characters and previous button would display previous three characters from the file. If the user prefers to hear audio, then it would give audio output of the text file through ear phones. Thus the device can be called as multifunctional as it facilitates the user either to read the text in braille as well as to hear the text in audio form. We have constructed this Braille display in Rs 9060. Braille displays available in the market are highly expensive. The braille display available in the market is nearly 800 USD, which is far out of reach for most of the people who need devices like this. Thus this device is not only multifunctional but also cost effective and best suits the title "Multifunctional and low cost Braille display". This device will help the visually impaired to be independent and flourish in this fast- developing world.

## 6. FUTURE ENHANCEMENT

In future works, E-Book reader for blinds can be developed. An application must be developed which takes the voice input of the name of the book specified by the user which the user wants to read. The application is supposed to download the respective book from the internet and the book should then be converted into Braille format. The user can feel the Braille by using Braille text popper. If the user wants audio output then the blind person can hear it through earphones.

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