

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

Details of the Software procured for providing the assistance to Visually Challenged

CHARUSAT is facilitating for visually challenged users at central library. This helps them to access the required resources at ease through combinations of software and instruments.

1. Abye Finereader

FineReader PDF empowers visually challenged users to maximize efficiency in the digital workplace. Featuring ABBYY's latest AI-based OCR technology, FineReader PDF makes it easier to digitize all kinds of documents in the same workflow which further can be used directly to speech synthesiser software. ABBYY FineReader precisely and automatically converts paper documents into editable digital files – making it easy for people with disabilities to use adaptive technologies to read correspondence and complete documents.

2. NonVisual Desktop Access (NVDA)

NonVisual Desktop Access (NVDA) is a free and open-source screen reader for the Microsoft Windows operating system. Providing feedback via synthetic speech and Braille, it enables visually challenged people to access computers running Windows with the same ease as a normal person.

3. Kibo Desk

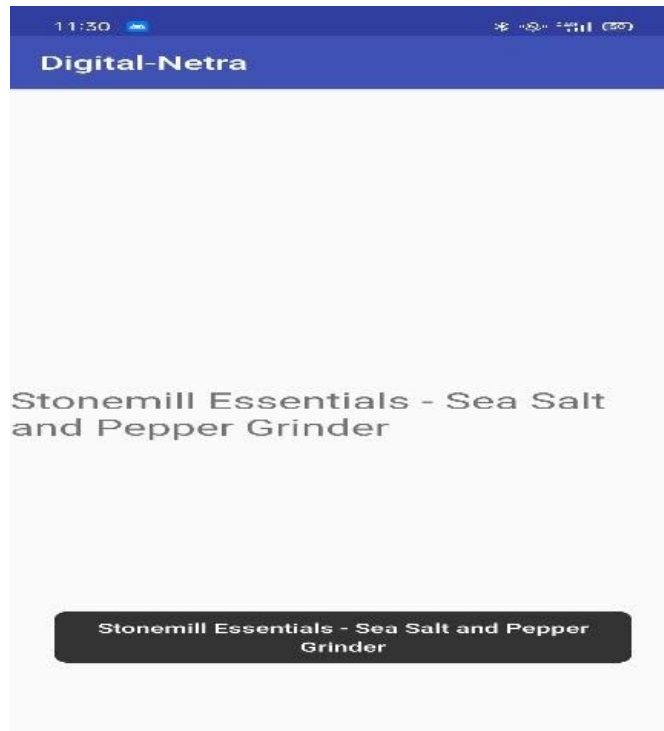
Kibo Desk allows users to access all PDFs in real time and get them read out through audio which ultimately helps visually challenged users of library. It also helps in Capture or Open images and get them read out through audio.

4. Digital Netra: An Android Barcode Scanner Application by CHARUSAT Specially Designed For Visually Challenged

The students of CSPIT-Computer Engineering, CHARUSAT *Hitanshu Kalpesh Munshi* and *Daksh Siddhartha Patel* have developed an android application '*DIGITAL-NETRA*' under the guidance of *Prof. Ronak Patel, Dr. Ritesh Patel* and *Prof. Dhaval Bhoi*. DIGITAL-NETRA is a barcode scanner android application that scans the barcode, fetches the product data and speaks out the product details. This application features full voice control starting from launching application itself. This application has a support of massive product database. The size of Digital-Eyes is less than 3 MB with minimum required android version 4.2 Jellybeans. By using this application while buying any product from any shop the blind people can easily verify that they are buying the right product and the shopkeeper cannot cheat. The application is very simple to use which can open by a voice command and scan the barcode.



A



B

Fig: A-B: Mobile App: DIGITAL-NETRA designed by CSPIT-CE Students