DADI INSTITUTE OF ENGINEERING & TECHNOLOGY

An Autonomous Institute

Approved by A.I.C.T.E & Permanently affiliated to SBTET, Vijayawada

Accredited by NAAC with 'A' Grade and Inclusion u/s 2(f) & 12(B) of UGC Act

An ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Institute.

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CRITERIA-7

7.1.7 - The Institution has a disabled- friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website,screen-reading software,mechanized equipment,etc.Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

The Assistive Technology and facilities for persons with disabilities (Divyangjan) are accessible website, screen reading software, mechanised equipment

Details of the Software procured for providing the assistance:

NVDA(NONVISUALDESKTOPACCESS)

Non Visual Desktop Access (**NVDA**) is a free and open-source, portable screen reader for Microsoft Windows. The project wasstartedbyMichaelCurranin2006.NVDAisprogrammed in Python. It currently works exclusively with accessibility APIs such as UI Automation,MicrosoftActiveAccessibility,IAccessible2 and the Java Access Bridge, rather than using specialized video drivers to "intercept" and interpret visual information. It is licensed under the GNU General Public License version 2.

Non Visual Desktop Access
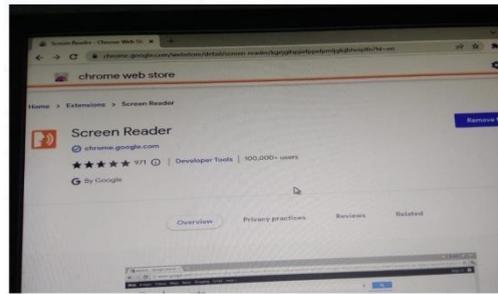
Features and accessibility API support

NVDA uses e Speak as its integrated speech synthesizer. It also supports the Microsoft Speech platform synthesizer, ETIE eloquence and also supports SAPI synthesizers. Output to Braille displays is supported officially from Version 0.6p3 onward.[19] Besides general Windows functionality, NVDA works with software such as Microsoft office applications, WordPad, Notepad, Windows Media Player, web browsers such as Mozilla Firefox,Google Chrome, Internet Explorer, and Microsoft Edge. It supports most email clients such as Outlook, Mozilla Thunderbird, and Outlook Express. NVDA also works with most functions of Microsoft Word, Microsoft PowerPoint and Microsoft Excel.[20] The free office suites Libre Office and OpenOffice.org are supported by way of the Java Access Bridge package. Since early 2009,NVDA supports the WAIARIA standard for Accessible Rich Internet Applications, to facilitate better accessibility of web applications for blind users.[19][21]In2021the screen reader user survey by Web AIM found NVDA to be the second-most popular screen reader worldwide, having previously assumed the number one position in their 2019survey;30.7%of survey participants used it as a primary screen reader, while 58.8%ofparticipantsuseditoften.Screen readers can be used to test the accessibility of software and websites. NVDA is the primary screen reader of choice by accessibility practitioners.

EMACSPEAK

Emacspeak is a speech interface that allows visually impaired users to interact independently and efficiently with the computer. Audio formatting, a technique pioneered by AsTeR and full support for W3C's Aural CSS (ACSS) allows Emacspeak to produce rich aural presentations of electronic information. By seamlessly blending all aspects of the Internet such as Web-surfing and messaging, Emacspeak speech-enables local and remote information via a consistent and well-integrated user interface. Available free of cost on the Internet, Emac speak has dramatically changed how the author and thousands of blind and visually impaired users around the world interact with the personal computer and the Internet. Arichsuite of task-oriented tools provides efficient speech-enabled access to the audio desktop and evolving semantic WWW. When combined with Linux running on low-cost PC hardware, Emacspeak/Linux provides are liable, stable speech-friendly solution that opens up the Internet to visually impaired users around   the   world.

CHROMEVOX

ChromeVox is a screen reader created by Google that allows users to browse the Internet. ChromeVox is built in to any computer running Chrome OS including every Chrome book. It can also be added to both Windows and Mac OS and used with Google Chrome.

Chromevox

Provisions for enquiry and information, Human assistance reader, Scribe, softcopies and reading material screen reading

The institute is having its policy for differently abled persons in line with AICTE.

1.   Provide guidance and counseling to differently abled individuals

2.   Creatingawarenessabouttheneedsofdifferentlyabledpersonsissuesconcerningtogeneral   and learning

3.   To assist them, to gain successful employment opportunities

4.   Facilitate admission in various courses as per the norms of the affiliating university

1.   The Constitution of India ensures equality, freedom, justice and dignity of all individuals and implicitly mandates an inclusive society for all including persons with disabilities. In recent years, there havebeenvastandpositivechangesintheperceptionofthesocietytowardspersons with disabilities. It has been realized that a majority of persons with disabilities can lead a better quality of life if they have equal opportunities and effective access to rehabilitation measures.

2.   According to the Census 2001, there are 2.19 crore persons with disabilities in India who constitute

2.13 percent of the total population. This includes persons with visual, hearing, speech, loco motor and mental disabilities. Seventy- five percent of persons with disabilities live in rural areas, 49 percent of disabledpopulationisliterateandonly34percentareemployed.Theearlier emphasisonmedicalrehabilitationhasnowbeenreplacedbyanemphasisonsocial

rehabilitation. There has been an increasing recognition of abilities of persons with disabilities and emphasis onmainstreamingtheminthesocietybasedontheircapabilities.TheGovernment of India has enacted three legislations for Persons with disabilities viz.

(i) Persons with Disability (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, which provides for education, employment, creation of barrier-free environment, social security, etc.

(ii) National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disability Act, 1999, has provisions for legal guardianship of the four categories and creation of enabling environment for as much independent living as possible.

(iii) Rehabilitation Council of India Act, 1992, deals with the development of man power for providing rehabilitation services.

3. In addition to the legal framework, extensive infrastructure has been developed.

Human assistance reader, Scribe

1. Diet institute provides the facility of scribes to assist differently able and visually impaired students during examination. As per the Government Circular ED5UNE2004, dated5.3.2004andED5UNE 2004, dated 22.3.2004, the following guidelines are to be strictly followed:
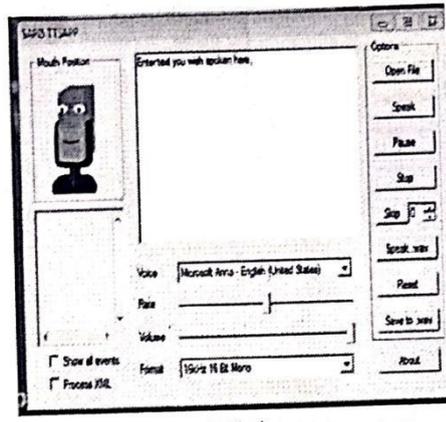
a) The blind student may select the scribe.

b) The scribe need not have a qualification lower than that of the student, provided that the scribe should not have the qualification(with the same optional and languages)pertaining to the examinations, which the student is writing (for ex: a student who has completed Intermediate or Diploma .can be a scribe for the student who is taking B. Tech. Examinations)

c) A physically disabled / blind / hearing impaired candidate and the scribes for such a candidate shall be allowed an extra time of 20 minutes per hour.

d) As thehearing-impairedstudentsarehavinglanguageproblems,possibilitiesofgrammar mistakes, mistakes in building the sentences are there. Hence, the answer papers shall be identified separately and evaluated with additional care.

2. Institute hastheprovisiontoprovideSoftwarefacilityforVisuallyImpairedstudentsand the students who suffer from low vision issues or partial blindness etc. The software can easily convert speech to text and text to speech. The visually impaired students can speak to convert voice into text. The students would be provided with an assistant to read the text and convert as

audio source for their future reference. The text material can also be converted to speech or voice and the recordings can be used by the student to attain the concepts clearly.

Text to Speech