

ICT CENTRE FOR THE VISUALLY CHALLENGED

Project Details

Establishing a Model Centre for the Visually Challenged in Thiruvananthapuram in association with SPACE (Society for Promotion of Alternative Computing and Employment).

With this project KSITM is trying to identify and solve these basic issues and trying to build a FOSS based system which can be used by Visually Challenged People effectively and efficiently. Main focus areas are:

1. Computer accessibility for visually challenged people
2. Internet and Email
3. E-Books, Dictionary and other learning resources
4. Cost effective (by using Free Software, Old Hardware etc..)

Technology

It is planning to provide a complete "Free Software" based solution which gives the users complete freedom to adapt the entire solution for their needs. As Free Software gives you freedom to use, modify and redistribute copies of software, the total cost per user is very low compared to the proprietary solutions. Also we use a complete command based interface so it will run on low end computer hardware.

Audio Desktop

The audio desktop is the main interface to the computer. It contains a *screen reader*, which reads what ever the user type in or printed on the screen. It can also use to *create text files, browse internet, read emails, play music, read e-books* or any other task the visually challenged user wants to do with a computer. The software we use is Emacspeak, which is made by T.V. Raman, who is a visually challenged person.

Internet

The audio desktop envisage under this programme will include software tools for browsing the web and sending emails. Emacspeak comes with a auditory browser that would make sense of the visual clutter of the Web, so the visually challenged person can seamlessly browse the web. These facilities will create a new opportunity for the visually challenged people. They will be able to connect with entire globe and that will bring a new world before them.

Learning Recourses

- **EBooks**-Access to books are another problem faced by the visually challenged people. This is for addressing this by setting up a repository of e books. These

- books can be heard through the Emacspeak system. The books include classics, essays, technical books and manuals etc.
- **Dictionary**-An on line talking dictionary can be accessed with in the audio desktop system.
 - **Spell checker**-Talking spellchecker is also available in this system
 - **Wikipedia**-This system contains a collection of selected Wikipedia articles for reference.

Training and Community Building

This Centre will help the resource center to provide training to visually challenged people to use the system we are proposing. Also we will conduct training programmes jointly with Kudumbashree to build resource persons to support the project. Using the network of Kudumbashree, we can extend the activities of the resource center throughout the state. A web portal for visually challenged can be made as a second phase of this project.

Awareness Campaigns

This resource centre will initiate awareness campaigns and training programmes among the website developers and programmers to make them understand the importance of making the websites/software accessible to visually challenged people.

R & D and further Developments

There will be Research and Development activities to ensure access to Physically Challenged persons to the world of information and Communication through this Centre. As the part of this initiative, resources will also be digitized to meet the requirements of the targeted persons.