# Greenstone tutorial exercise

By Ms. K.T. Anuradha, NCSI, India

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Sample files: multi-sort

Worked out for Greenstone version: 2.80

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## Lab session 1: Multilingual collection

### This exercise explores

- 1. Installation of IME on Windows XP system
- 2. Configuring web browser to view different Charsets
- 3. Interface Language Customization in GSDL
- 4. Building a Hindi collection with different file formats
- 5. Building a Hindi Unicode collection through GLI using sort option enabled
- 6. Searching and Browsing Unicode content in GSDL

## 1. Installation of IME on Windows XP system

Start → Settings → Control Panel → Regional & Language Options → Languages → Supplement Language Support → Check (Install Complex Scripts and right-to-left languages including Thai)

#### Adding language Keyboard layouts:

Start → Settings → Control Panel → Regional & Language Options → Languages → Details → Installed Services → Add → Select your Language & Say OK

**2.** Configuring web browser to view different Charsets (most of the cases browser will detect Charset of an Web pages, if it fails you have to make the following settings)

#### For Internet Explorer

For Unicode Pages – utf-8 Charset: View → Encoding → utf-8
For other charset: View → Encoding → Respective charset
For Netscape
View → Character Encoding → Respective Charset

## 3. Interface Language Customization in GSDL

- Make a copy of *english.dm* and rename it as *yourlanguage.dm* (In the name of required language ex. *hindi.dm*)
- Pass ISO 639 two letter language standard in front of each macro with in [] bracket, ex.

#### [l=hi] for Hindi

- Translate Macros value into your language (you have to copy encoding of your translation { } bracket)
- Copy translated Macro file in to *macros* folder of Greenstone
- Include your translated macro file name in macro files list of etc/main.cfg
- Configure your language in *etc/main.cfg* i.e. *Language shortname=hi longname=Hindi default\_encoding=utf-8 for Hindi*
- Know you can see your language interface by changes interface language option to your language in preference page

## 4. Building a Hindi collection with different file formats

- Start a new collection called **hindi1**. Fill out the fields with appropriate information.
- □ In the **Gather** panel, on the workshop CD locate the folder  $sample\_files \rightarrow Unicode\text{-}collection$  for  $lab \rightarrow xxx$ . Drag this folder into the collection and drop it there.

### 5. Building a Hindi (UTF-8) collection with sort option enabled:

- Copy allkeys.txt from /resources/allkeys.txt to %Greenstone% \bin\windows\perl\lib\Unicode\Collate directory, where %Greenstone% is the directory where Greenstone is installed. The allkeys.txt file is available at: <a href="http://www.unicode.org/Public/UCA/latest/allkeys.txt">http://www.unicode.org/Public/UCA/latest/allkeys.txt</a>. This file essentially defines how to sort Unicode data. For your convenience the file is kept in the /software/resources directory of the workshop CD.
- Start a new collection called **hindi2**. Fill out the fields with appropriate information.
- □ In the **Gather** panel, on the workshop CD locate the folder *sample\_files*  $\rightarrow$  *hindi-unicode-sort*  $\rightarrow xxx$ . Drag this folder into the collection and drop it there.
- Create a collection with metadata details entered in the language of the original file. Give only title that is enough i.e. 'Indhan' as title entered in Hindi. Enter the title in UTF-8 format using any editor which supports this facility and cut and paste it to GLI panel.
- Use GenericList classifier with -sort\_using\_unicode\_collation option. In the collect.cfg an entry will look like: classify GenericList -metadata title -sort\_using\_unicode\_collation

#### 6. Searching and Browsing Unicode content files in GSDL

- · Change interface to your language through preference page
- For Searching: Require IME or Virtual Key board (Unicode supported)
- · Browser Settings: As said above
- Enter search terms and try different combination

For Non-Unicode mapped content follow the same procedure by enabling the required encoding in main.cfg