

ABSTRACT

The language may be considered as one of the most important ethno-cultural links between the people belonging to different communities and languages. This leads to the requirement of learning new languages. Dictionaries specially the bilingual and multilingual dictionaries are one of the most important tools that can be used for learning a new language and consequently will facilitate better communication between communities. The research attempts to answer five research questions: a) What is the database model for an electronic dictionary using SQL Server based on trie structure database? b) What are the features of a user-friendly web enabled multilingual dictionary with special feature of indo-WordNet? c) How a dictionary can be implement with mono and parallel corpus? d) How suitable is a multilingual dictionary for target language speakers and source language speakers? and e) Is Multilingual dictionary suitable and easy to use?

Anusaraka tries to overcome the barrier of major languages in India using advantages of relative strengths of the computer and human reader, where the computer takes the language load and leaves the world knowledge load on a reader. It is particularly effective when these languages are close, as in the case of some Indian languages?

Multilingual dictionary is closely related with Bilingual dictionaries and Trilingual Dictionaries. In a multilingual dictionary, we look up a word or phrase in one language and are presented with the translation in several languages. The MMD dictionary structure is inspired by the WordNet basic design. The dictionary's source knowledge base and the software system provide interfaces to producing an on-line dictionary, a printed-paper dictionary, and several electronic resources useful in Natural Language Processing. Multilingual dictionaries can be arranged alphabetically or words can be grouped by topic. When grouped by topic it is common for multilingual dictionaries to be illustrated. It is a specialized dictionary used to translate words or phrase from one language to another. It also indicates the POS, gender, verbs type, declension model and other grammatical clues to help a non-native speaker use the word. A Multilingual Dictionary may have as its function to

help user translate text from one language into another or its function may be to help understand foreign-language text.

The multilingual dictionary system will have to fit in an Organization. Instead of replicating people they will complement them. There can be other fallouts also from the MT effort. At an intellectual level, it can give a big boost to the traditional Sanskrit Vyakaran studies, Linguistics and artificial intelligence disciplines. At the practical level one can imagine a number of computer-based products. The marriage of speech processing has the potential of producing computer system that can listen and talk. If optical character recognition technology is also combined, it may lead to a system that can read out books. The state of Manipur is rich in the field of literature and cultural heritage. It can be said that the people around the globe recognize Manipur for its rich culture and therefore the main aim has been to spread our culture ideas around the globe. Again, as we are in the 21st century, people are living surrounded by the computer media networks and Computer network has become the fastest information linking media.

It is particularly effective when these languages are close, as in the case of some Indian languages, they will be better understood by the people of Manipur when they are translated into Manipuri language. However, in spite of the challenging problems, I have tried my level best to present it in a stage such that further steps can be taken up. The interface is to be written using VB.net languages and SQL 2000 server and using ASP.net technology.

The aim of this thesis is to explore various ways of allowing a user to access the information in a multilingual dictionary for Indian languages like Hindi, English and Manipuri language. This aim for the research has also incorporated the goal to ensure that the system developed will actually be usable by learners of Manipuri. The following statement summarizes the thesis:

“To create a richly structured, Web Enabled Multilingual Manipuri dictionary with a user friendly interface, such that the information in the entries can be visualized in various (innovative) ways that may allow words to be browsed by casual users or referenced efficiently by language users and other non Manipuri speaker”