

DICTIONARY SOFTWARE DEVELOPMENT OF ENGLISH TO MYANMAR AND MYANMAR TO ENGLISH

Sai Sie Thu Kyaw¹, Daw Moh Moh Khaing²

Information Technology, Technological University, Taunggyi, Myanmar

Abstract

The proposed dictionary system is computerized dictionary software which is organized two versions into one. Users can search easily the meanings English to Myanmar and Myanmar to English. This system will help the user's search work quickly and effectively. This system presents a computerized bilingual dictionary (CBDs) for their relative effectiveness in helping university students at language proficiency levels to access new English target vocabulary. This system intends to promote vocabulary knowledge skill concerned with computer technology has now made it possible, with the benefits of interactive processing and immediate feedback, to scan, pronounce, and translate vocabulary items. This paper facilitates college students' use of CBDs for more rapid accessing and archiving of meanings integration of their use into a systematic taxonomy of vocabulary learning strategies for effective learning. The user can search into two modes: English to Myanmar, and Myanmar to English words. The system is implemented with VB.net programming language. Type of database used is XML database. Type of using font for this dictionary software is Pyi Htaung Su font.

Keyword: Database, Dictionary, Font

1. INTRODUCTION

The word "dictionary" was invented by an Englishman called John of Garland in 1220. He had written Dictionarius to help with Latin "diction". An early non-alphabetical list of 8000 English words was the Elementarie, created by Richard Mulcaster in 1582. A dictionary is a very important tool for anyone who is learning a new language. A good dictionary can help the user look up the meaning of an English word see or hear.

The dictionary can translate of a word in user native language. A dictionary, sometimes known as a wordbook, is a collection of words in one or more specific languages, often arranged alphabetically (or by radical and stroke for ideographic languages), which may include information on definitions, usage, pronunciations, translation, etc. When user find a new word while reading, finish the sentence. If user has not guessed the meaning and it still seems important, then look it up. User should find its meaning in user own language using a dictionary.

2. DATABASE

A database is a data structure that stores organized information. Most databases contain many tables, which may each include multiple different fields. Database system can store data and provide facilities of searching specific record in given data. Databases store special information used to manage the data. An electronic database management system (DBMS) is a dynamic way to define, create and maintain a database with multiple access control points. It does without compromising on the security of the data. DBMS has much higher data storage capacity. DBMS also makes the process of sharing data easier. Databases allow users to share common information. All information in a database prevents duplication of existing information which usually presents a common problem. Information will be structured without any duplication and allowing to work better. Information is digitized so it takes less space than when stored on paper. As the information is digitized it is easier and economical to carry out any maintenance.

3. XML (EXTENSIBLE MARKUP LANGUAGE)

XML is a file extension for an Extensible Markup Language (XML) file format used to create common information formats and share the data on World Wide Web (WWW). Extensible Markup Language (XML) is a

markup language that defines a set of rules for encoding documents in a format that is both human readable and machine readable. It is a textual data format with support Unicode for different human languages. XML database is used to store very huge amount of information in the XML format. In this dictionary use XML database for dictionary database. The data stored in the database can be queried, transformed, exported and returned to a calling system.

4.VISUAL BASIC PROGRAMMING LANGUAGE

Visual Basic is a programming language designed by Microsoft, used primarily in a Windows environment for writing system specific applications. Microsoft implemented Visual Basic within its .NET framework. Visual Basic is a good language for the computer programmer to begin with. Windows programs are written in all types of languages, Visual Basic is still a good language because it is still a part of .NET along with C#, C++ and Python.

5.DESIGN AND IMPLEMENTATION OF THE PROPOSED SYSTEM

Along with the development of computer technology, the various electronic dictionaries are developed and put into the actual application such as English-Myanmar, Myanmar-English dictionary. The learners may be who want to know the meanings from English to Myanmar and Myanmar to English language. This electronic dictionary can also achieve to add a new word and its meaning anytime.

5.1. System design

This system can provide to select the type of dictionary (English to Myanmar, and Myanmar to English). At the main form, the user can choose the type of dictionary among two. "Pyi Htuang Su" Font is used for English to Myanmar and Myanmar to English dictionary.

This system uses XML (Extensible Markup Language) document to store data of the dictionary. XML can be encoded using almost any character set including UTF-16 (Unicode). In order to support bilingual characters, this system selects UTF-16 for English to Myanmar and Myanmar to English dictionary as character encoding. XML documents can be edited using any text editor such as notepad. Figure 1 shows the overall system design of the dictionary.

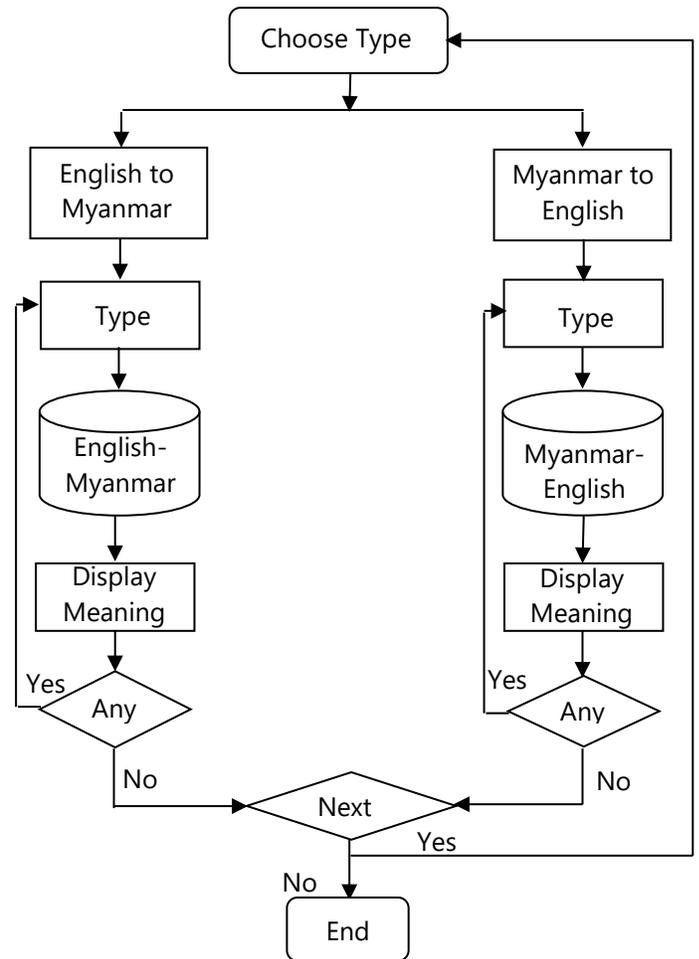


Figure 1 Overall System Design

5.2. English to Myanmar dictionary

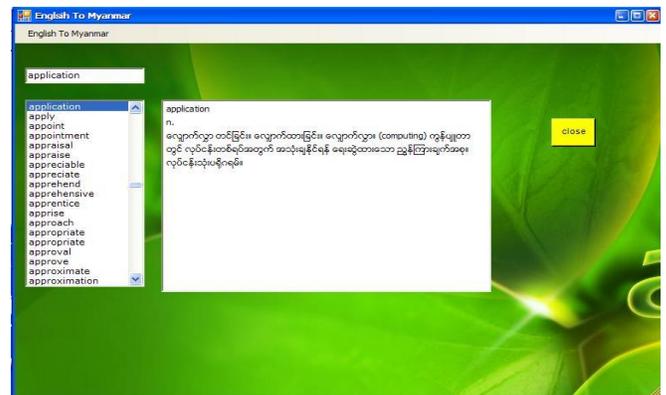


Figure 2 English to Myanmar dictionary

Software implementation of English to Myanmar dictionary is shown in figure 2. The three meanings for user searching word will be display. The part of speech, plural form of noun, derivatives and origin of it and phrases (as example sentence) of the word 'application' displayed when the user typed the word 'application' in the text search box.

5.3. Myanmar to English dictionary

In figure 3, the meaning, pronunciations and synonyms of the word 'classmate' in Myanmar are shown. Myanmar Alphabetical order of this version is referenced by 'Myanmar English Dictionary' published by Myanmar Language Commission.

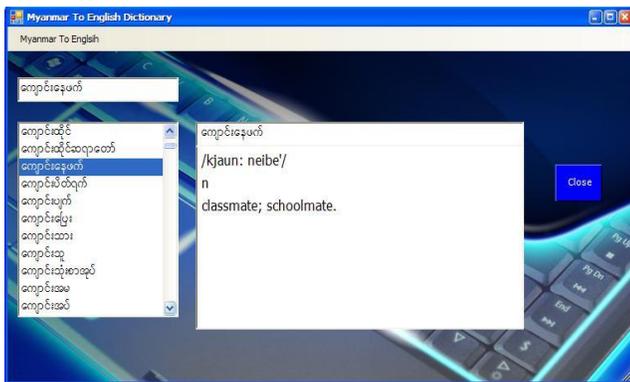


Figure 3 Myanmar to English dictionary

6. CONCLUSIONS

No one can deny that English is a common language for the world. So, English is essential not only for the students but also for the adults. To catch up the emerging technologies, we need English Language skill to read the technological books written in English. To fulfill this intension, we have developed this dictionary software. By using this dictionary, it gives a student a head start in language requirements for college. The young students have a positive effect on intellectual growth, enrich and enhance a child's mental development, improve a child's understanding of his/her native language. Moreover, it leaves students with more flexibility in thinking, greater sensitivity to language, and a better ear for listening. For the adults, it increases job opportunities in many careers where knowing another language is a real asset. As the conclusion, it will open the door to other cultures and

helps a child understand and appreciate people from other countries. This dictionary software will be help for the learners and Myanmar people to get more knowledge about English.

7. ACKNOWLEDGEMENT

The author wishes to express his truthfully thanks to Daw Moh Moh Khine, Lecture , department of Information Technology , Technological University (Taunggyi), for her invaluable attitude, suggestions and encouragement for the completion of this paper. Finally, the author would like to acknowledge the very considerable contribution of his parents and all teachers from Information Technology department, Technological University Taunggyi and all those who gave up most effort on his way of living and to all of his friends and sisters, very helpful persons for his progression.

REFERENCES

- [1] Wilson, M.D. The MRC Psycholinguistic Database: Machine Readable Dictionary. Version 2. Behavioural Research Methods, Instruments and Computers , 1988.
- [2] Phillips, L. The Double Metaphone Search Algorithm. C/C++ Users Journal, Volume 18, Issue 6 (June 2000).
- [3] Barri`ere, C; St-Jacques,, "Semantic Context Visualization to Promote Vocabulary Learning. Association Computers in the Humanities & Association for Literary and Linguistic Computing Conference", 2005.