TRANSLITERATION KEYBOARD CONFIGURATIONS FOR SINHALA AND ARABIC

A PROJECT REPORT PRESENTED BY

MOHAMED MUBARAK KIDHUMATHULLAH (PGIS/SC/M.Sc./CSC/05/37)

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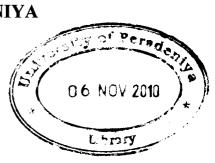
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M. M. Kidhumathullah

Postgraduate Institute of Science
University of Peradeniya

Peradeniya

Sri Lanka

Input devices are used in computing environment to feed data and commands to perform data processing tasks. One of the commonly used input devices is the keyboard. The keyboard is designed for the input of texts and characters and also to control the operation of computer. Computers and other typing devices offer many different keyboard layouts for inputting data in different languages. The standard English keyboard layout is known as QWERTY keyboard.

This QWERTY keyboard is specially designed to input English language characters and numerals. Input or typeset of Asian language characters such as Sinhala using the keyboard is impossible without a proper and convenient configuration mapping between the English keys in the keyboard and the characters of the particular language. Even with the configuration mapping, typing the letters of the language is difficult, because one has to memorize or be familiar with the keyboard mapping in the configuration.

Unlike English, Sinhala is a language with lots of letters in the Alphabet. The typing of whole characters by using the keystrokes of the QWERTY keyboard is a difficult task. To solve this problem, one of the methods considered is transliteration. Transliteration is a method by which one could read a text of a language in the writing method of another language, word to word. In another school of thought, it is the transcription of a text in a language using the script of another language.

Arabic is more difficult as it is a language of right - to - left characters. I have tried to include all Arabic characters in an English transliteration scheme to enable the common users to type Arabic without an Arabic keyboard.

In this project, we develop a transliteration keyboard configuration for Sinhala language in English keyboard using ANSI encoding scheme. I have used a specific Sinhala true type font called Anuradha-PC and a keyboard configuration for Arabic Unicode encoding system.

These transliteration keyboard configurations are more user-friendly and contain additional features such word correction itself, some intelligence and so on. It is more useful to the people who are not familiar with Sinhala / Arabic typewriters. In this case, Sinhala and Arabic scripts can be typed using English keyboard as we speak, and it will be automatically transliterated to the language we use.