# A KEYBOARD CONFIGURATION FOR TAMIL UNICODE CHARACTERS

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## ABSTRACT

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. The 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 Tamil or Sinhala using the keyboard is impossible without a proper 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, Tamil is introduced to have 247 Tamil 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.

Tamil language usage in computers dates back a few decades. Many encoding schemes adopted for this purpose most attempts to place the glyphs in the 8 bit space retaining the 7 bit ASCII slots. This required a piece of software to map the characters to keys and there were a number that were freely available. There are many commonly used encoding systems namely TSCII, ISCII, TAB and TAM. None of these schemes endorsed by a standard organization but they provided the opportunity for the exchange of text in Tamil even in legacy Operating Systems.

In this project, we develop a transliteration keyboard configuration Tamil language in English keyboard using unicode character encoding scheme. Unicode is a universal character encoding scheme designed for cover all world languages. In the usage of Unicode encoding scheme, the application become independent of platform, the language and the program. That is used under this application.

This transliteration keyboard configuration is more user friendly and contains additional features such as typing of Tamil numeric digit symbols, word correction itself, some intelligent etc. It is more useful to the people who are neither familiar with Tamil typewriter nor with Tamil scripts but understand spoken Tamil, i.e., Tamil phonetics. In this case, Tamil scripts can be typed using English keyboard as we speak, and it will be automatically transliterated to Tamil script as we type.