Different Input Methods for Sinhala (Part I)

Harsha Wijayawardhana B.Sc. (Miami), CITP (UK), FBCS(UK), COO/CTO of Theekshana in collaboration with LK Domain Registry

Introduction

Since the early 1980s, many have labored to develop Sinhala and Tamil input methods for inputting Sinhala to computers and digital devices. With the advent of Sinhala Unicode, CINTEC and ICTA spearheaded the development of standards and implementation of Sinhala Unicode technology. SLS 1134 revision 2 covered the input methods Sinhala by introducing a keyboard layout based upon the earlier Wijesekera Typewriter keyboard layout. ICTA called the keyboard Wijesekera Extended Keyboard. The Local Language Working Group (LLWG) of the ICTA later worked on encoding Sinhala numerals in Unicode and released the SLS 1134 3rd revision. Almost all Sinhala Keyboard layouts comply with the SLS 1134 Third Revision. The following article tries to capture Sinhala Input methods available currently for the Desktops version of Computers as part I of this article, and Part II will cover input methods and layout available for Mobile Devices.

For the seamless use of Sinhala on various devices and applications, such as Facebook and Twitter, it is imperative the development of user-friendly and easy-to-use Sinhala input methods. Some people found it cumbersome to use Wijesekera Keyboard. As a result, some keyboards based on transliteration became popular. Those keyboards came to know as phonetic keyboards, where each English letter corresponding Sinhala letter was displayed or typed. One types the letter K using a phonetic keyboard, and the computer displays or prints the Sinhala letter ∞ . Google Input methods go further. When a Sinhala word is typed in Latin Script using the Input method tool developed by Google, it prints the Sinhala word transliterated. The Local Language Technology Research Lab (LTRL) of the University Of Colombo School Of Computing implemented a similar online application before Google did, which became very popular among Sinhala users.

Google and Android released Voice Input revolutionizing Sinhala Input Methods about two years back. The above tools have increased Sinhala content on the Internet and Social Media. The accuracy of these applications is very high. The following are some of the popular input methods available free.

Some of the Input Methods

1) Wijesekara Keyboard

This is the standard Sinhala computer keyboard layout as defined by Sri Lanka Standard 1134 Revision 2: 2004



Figure 01

2) Google Input Tools (Google ආදාන මෙවලම්)

Google Input Tool is a free tool that can be used both online and offline. Google Input Tools for Windows comes in both a desktop and web version and creates a virtual keyboard interface in various languages. This is an input method editor that allows users to enter text in any of the supported languages. This includes an autocomplete feature that suggests words when you are typing, as in Figure 03.

https://www.google.com/inputtools/try/

• Go to Google Input Tools. Then select the language as Sinhala - Figure 02

	Google I	nput T	ools								
	Home Try it out	On Chrome	On Google Se	ervices							
	Try Google Ir Google Input Tools To try it out, choose English	mput Too makes it easy e your languag	IS online y to type in the Ian ge and input tool b	guage you cho elow and begir	ose, anywhere on tl 1 typing.	he web. Learn more		Ω Special Characters			
Afrikaans Albanian Amharic Arabic Arabic Assmese Azerbaijani Bangia Basque Belarutsan Bosnian Bulgarian	Burmese Cantonese Catalaan Cebuano Central Kurdish Charokae Charokae Charokae Chinese (Simplified, China) Chinese (Simplified, China) Chinese (Fraditional, Talwan) Corsican Corotian	Czech Danish Dutch Dzongkha English Esperanto Estonian Filipino Finnish French Fulah Galician	Georgian German Greek Gujarati Hattian Creole Hawailan Creole Hawailan Hebrew Hindi Hmong Hoocąk Hungarian Icelandic	Indonesian Inuktitut Irish Italian Japanese Javanese Kannada Kazakh Khmer Korean Kurdish Kyrgyz	Lao Latin Latvian Lisu Lithuanian Luxembourgish Macadonian Makah Malagasy Malay Malayaiam Malayaiam	Manipuri (Mettel Mayek) Maori Marathi Menominee Mongolan Multiple Ianguages Multiple Ianguages (Bangla) Multiple Ianguages (Cernile) Multiple Ianguages (Devanagari) Multiple Ianguages (Lethiopic) Multiple Ianguages (Lethiopic) Multiple Ianguages (Latin) Navajo	Nepali Norwegian Norwegian N Nyanja Odia Ojibwa Oneida Osage Pashto Persian Plains Cree Polish	Portuguese (Brazil) Portuguese (Portugal) ynorsk Punjabi Romanian Romany Russian Samsan Samskrit Scottish Gaelic Seneca Serbian	Shona Sindhi Sinhala Slovak Slovenian Somali Southern Uzbek Spanish Surdanese Swahili Tajik	Tamil Tatar Telugu Thai Tibetan Tigrinya Turkish Ukrainian Urdu Uyghur Uzbek Vietnamese	Welsh Western Frisian Xhosa Yildish Yoruba Zulu
	Get Google Inpu	It Tools	1	Fo Get	or Android Devic it on Google Play	es		English 1 2 3 4 5 q w e r ∰ a s d r ∰ z x c r Ctri + Alt	6 7 8 t y u i 9 h j b n m	90- 0p kI;	▼ × =
					Fig	ure 02					

Select Language as Sinhala

• Then you can type and select the relevant word from the list – Figure 03

Try Google Google Input To	Try Google Input Tools online Google Input Tools makes it easy to type in the language you choose, anywhere on the web. Learn more				
To try it out, cho	oose your language and input tool below and begin typing.	Ω Special Characters			
ම් ලංකාවේ	arthikaya 1. ආර්ථිකය 2. අර්ථිකය 3. අර්ථිකය 4. ආර්ථිකය 5. ආර්ථිකය 6. arthikaya				

Figure 03

3) Google Voice Typing

Google Voice Typing is a free tool for Google Docs and Google Slides, Google's online word processor and presentation apps. Voice typing is a speech-to-text feature.

Using Google Voice Typing

- Open Google Docs and select document to use.
- Then go to Tools and select Voice typing– Figure 04



• Then the microphone button will appear. Then select the language as Sinhala from the dropdown list. – *Figure 05 & Figure 06*

Untitled document - Google Doc: X G what is google voice typing mea: X C Learn more about Google Voice X C	E Untitled document - Google Doc × +
← → C 🔒 docs.google.com/document/d/14w_SWtnpU45VI50yAojQdzMyMMD7PEMjs_MvddgPWcs/edit	← → C a docs.google.com/document/d/1UR0qUMzgKR3wUzpXdO29s8x15of1fGVhQlQPujkvU
Elie Edit View Inset Format Tools Extensions Help	E Untitled document ☆ ⊡ ⊘ File Edit View Insert Format Tools Extensions Help Last edit was seconds ago
ト つ 長 人 戸 100% ▼ Normaltext ▼ Arial ▼ - 11 + B I U A メ GD β	$\sim \sim \Rightarrow \land \uparrow \uparrow 100\%$ \sim Normal text \sim Arial ~ -11 + B $I \cup A$
-	-
\leftarrow	$\left\{ \begin{array}{c} \leftarrow \end{array} \right\}$
SUMMARY +	SUMMARY +
OUTLINE	OUTLINE
Headings you add to the document will appear here.	Headings you add to the document will appear here.
···· ×	English (US) -
English (US) 👻	தமிழ் (இலங்கை)
	ு தமிழ் (சிங்கப்பூர்)
V	தமிழ் (மலேஷியா)
	ే తెలుగు
m Click to speak	್ ಕನ್ನಡ
	്
-	ි සිංහල
	ี้ ไทย
	ີ່ລາວ
	ქართულად
	- 0 -

Figure 05

Figure 06

• Next click on the microphone button and start dictating. When you click on the microphone button it will change to red color– Figure 07 & Figure 08

📃 Untitled document - Google 🔘 🗙 🕂	🗐 🖬 U	ntitled document - Google 🔋 🗙 🕂	
← → C	/d/1UR0qUMzgKR3	C docs.google.com/docume	nt/d/1UR0qUMzgKR3wUzpXdO29s8x15of1fGVhQlQPujkvUAM/edit
티 Untitled document ☆ 🖻 👁	ols Extensions	Untitled document 🕁 🗈 File Edit View Insert Format	Oracle Strensions Help Last edit was seconds ago
▶ ~ 🖶 A> 🏲 100% - Normal text	Arial 🍅	~ 륨 Ą ₱ 100% ▼ Normal 1	eet → Arial → - 11 + B I U A / CO D D → E Ξ Ξ Ξ 1Ξ \$
SUMMARY + OUTLINE Headings you add to the document will appear here.	1	MMARY + ITLHE adings you add to the document will even then.	රිතාය කයකිය අනු නිකුත් ක්රීම හෝතර්රාලය මන්ගේ සමනක් සිදු කරන බව මූ ලංකා විතාය දෙපාර්තමේන්තුව වෙතම



Figure 08

- When clicking on an underlined word, it gives an auto-suggested word list to select another word.
- Finally you can download this file, share or save as you expected.
- 4) Helakuru Keyboard හෙළකුරු Keyboard

Helakuru is a mobile app. It comes in a desktop version too. This app is available for free on Android and iOS devices. Using the Helakuru keyboard, Sinhala voice typing can be done as in Figure 09.

https://www.helakuru.lk/keyboard

$\ \ \leftarrow \ \ \rightarrow \ \ {\bf G}$	helakuru.lk/keyboard		• 33	🗞 🕁 🔲 🌧 Incognito 🗄
	8	හෙළකුරු Keyboard		2
•	د میں معرف م			Q
7	UNICODE FONT LEGACY FONT			Select Unicode Font 👻
31	ශී ලංකාවේ චර්තමාන ආර්ථික සහ			
				7
			Convert	Copy Text Clear

Figure 09