

CleverTexting™

“Thumbs Up to a new way of Texting”

Cover Story, Ergonomist Society, UK, Mar 2009

“Powerful”... “Promising”..... “full of new possibilities”

General

CleverTexting is a new way of typing on the mobile phone in any language of the world (for example to send SMS) with your existing phone, with your existing keypad, that offers the convenience of typing with single keypresses and is comfortable to your thumb. CleverTexting does not use the printed characters on the keypad, instead characters are shown on the screen from which you choose using your numeric keypad.

CleverTexting uses statistical predictions mined from the nature of the language to make predictions about what you are likely to type next based on what you have typed just before. CleverTexting is dictionaryless and hence makes it equally easy to type dictionary words as well names of people and places.

All of this leads to a seamless typing experience that is overall faster, easy to learn and operate for all age groups.

Languages supported

As of Sep 2009, CleverTexting has been developed and released for **Hindi, English, Spanish, Arabic, Bengali, Portuguese, French, Swahili and Hebrew**. Statistical nature of every language is different and each of these are a separate application. You can download these from our website or from the NOKIA OVI Store.

Work is ongoing for all the other languages of the world that include Malay, Bahasa Indonesia, Tagalog, Russian, German and all the other Indian languages. Many of these should be ready within 2009.



CleverTexting anticipating characters most likely to be entered next and placing them on positions most comfortable for your texting thumb from which you can type using single key tap. See the Ergonomic ranks and contours shown on the right.



CleverTexting being used on a Touchscreen phone in Nearest Key Mode.

Instructions for Installation

Downloadable are two files : A jad file and a jar file, both of which are to be transferred to the phone - either to the phone memory or to the memory card, both are fine. The size of the java application is roughly 500Kb.

The application will run on a Java phone - preferably a NOKIA with 240x320 screen resolution and above.

One may download directly to the phone from a download site or from the NOKIA OVI Store. If downloaded to the PC, to transfer - one may either use the Bluetooth of the laptop/PC to transfer to phone, or one can use a USB cable which will permit transfer of file from PC to phone. Or you may remove the SD card of your phone and write into it from your laptop's card reader or use an external card reader.

After placing the files on phone, one can execute any of the two files. The application will then install itself on the phone.

To start the application

Always start the *Send Message* Midlet only.

The *Receive Message* Midlet is started automatically when a message is received on the phone. The user is not expected to start it.

How to use the software.

Fundamental

CleverTexting uses a new approach to usability of typing on phone in which the phone makes statistical predictions on what characters you are likely to type and places them on positions most convenient for your thumb. An ergonomic technology. Character assignments are changing dynamically so you need to look for the character on the screen and press the indicated numeric key on the keypad. But this allows you to type in any language without having additional printed characters on the keypad.

CleverTexting is automatically supported on **Touchscreen phones** where it offers you to type directly via the screen and soft navigator keys are drawn on the screen for other functions.

Usability

Only two rules

1. Look for the character you want on the screen and press the indicated key on the keypad.

2. If the character you want is not on the screen, press the **Next List** button - which is the Select Key of your phone. {Select Key is in the middle of the Navigator Button}

After every character is entered, the phone makes a fresh prediction of characters you are likely to enter and you can use Rule 1.

The predictions are based on the statistical nature of the language which has been mined from analysing large text corpuses of the language.

It is hoped that you will find it very easy to write most words and sentences very quickly as you learn how to operate it.

This is a dictionaryless technology - meaning there are no dictionary words hardcoded in the system, only statistical tables. And hence it makes it equally easy to write dictionary and non dictionary words - a major drawback with the dictionary based systems of the past.

Other shortcuts

1. The space is always on key 0.
2. If you enter space twice, it will give you a full stop (period) and will automatically go to Uppercase to start your new sentence.
3. Use the Up key to force Uppercase characters, and Down key for Lower case characters.
4. Use the Up Key to get more options like Symbols, numbers etc.
5. For accents, like **a ã á à â ä æ** , use the Right and Left Key for more options.

Say to write **Ç**, enter c and then use the Right Key to choose the accent.

Hint: While looking for characters, start looking from the Top left corner towards the Bottom Right corner. Because characters are arranged according to their probabilities starting from the Top Left corner, you are most often likely to find them there.

For Left hand use, the opposite applies, so you would find the most likely characters, beginning from the Top Right corner.

You can choose **Right hand use** or **Left Hand use** from the Options.

Several Modes are offered.

Ergonomic: Where characters are placed in most ergonomic positions for the thumb depending on their probabilities.

Ergopersistent: Where characters are placed ergonomically but they try to retain their positions between two transitions. This may make it easier to look for the keys.

Nearest key: In this mode, the characters are assigned nearest to your last used key. This mode is particularly useful for Touch Screen phones.

SMS Compression : Worlds first on phone SMS compression.

The technology also allows you to compress your message before sending - which increases the payload of your standard SMS.

For English, Spanish, Portuguese, French, Swahili etc (languages that use the Roman script) the current compression is from 160 characters raised to about 200+ characters per SMS. Varies from message to message.

In Unicode languages like Arabic, Indian languages, Hebrew etc – the compression can increase the payload per SMS from 70 characters to over 200 characters or more.

Compressed messages can only be decoded by another phone if they have CleverTexting on it. The application however does not have to be running, it is automatically woken up when a compressed CleverTexting message is received. Uncompressed messages can however be sent to any phone. Compression is only an option.

Mail Box

CleverTexting offers a Mailbox of its own where it stores compressed message received as well as Sent Items. The Mailbox offers many features and is unlimited in size.

Luna Ergonomics Pvt Ltd

All of this is called **CleverTexting** and it has been developed in India by a startup called Luna Ergonomics - who have developed this technology for most major languages of the world and are now developing this for all significant languages of the world.

Panini Keypad, also developed by Luna Ergonomics is an integrated platform that supports 11 major languages of India, transliteration between them and other features.

www.CleverTexting.com

Video

<http://www.youtube.com/watch?v=VJgR2nKggEI>

Detailed Whitepaper

http://www.clevertexting.com/downloads/CleverTexting_Whitepaper.pdf