1 Summary

Tiki'labs sas think that it is of great importance to provide a touch typing solution on web enabled Mobile Phones, and proposes a new HMI that makes it possible for every person on a small device. The Tiki® 6 keys solution delivers many features like flexibility, power and comfort. Tiki® is a big improvement of current chord keyboards because is has been conceived to be usable within minutes and to provide a fast progressive path towards full touch typing via useful usage. The small size of Tiki® keyboard renders possible a new small accessory combining keyboard and mouse and which can be used blindly with only one hand while standing, walking, listening, monitoring. Tiki® is an enabling technology for Mobiles which can now compete with Laptops and lessen the digital divide.

2 Introduction

A Mobile Web will be a strong path to solve the digital divide between rich Terrians and most of those who live in developing countries. But, there are many problems to assess and solve in order to give Mobiles a good enough Web capability.

One of the main difference between PC (either desktop or laptop) and Mobiles lies in the currently impossible fast touch typing on Mobiles. Being able to concentrate on what is on the screen and to type above 40 words per minute is a big advantage provided by PC.

Until Tiki'labs sas recent work, the problem was seen as an unsolvable dead-lock, and was on no agenda.

3 Tiki'labs proposition

- As of 2007, Tiki'labs sas announces that any person can now, within a few hours of useful usage, learn to touch (blind) type above 30 words per minute (wpm) on small devices like mobile phones (provided some engineering evolutions). One of the main Tiki® innovation is to give every person access to the advantages of chord keyboards via an interactive Guide and a progressive usage path.
- Moreover, the small size of a Tiki® keyboard allows to combine it, under one hand, with a pointer and provide full current desktop capabilities on the move and in social contexts.
- Tiki® can be seen as an enabling technology for mobiles and users.

4 Mockups and details

1. Tiki® can be fully showcased on an UMPC,
2. 2 Tiki® software mockups and their mementos can be lent to workshop members for analysis and evaluation: one works within MS Windows XP-Tablet PC , the other is a Java MIDP2 stand alone for Mobiles, with which you can send Sms and Mails.
3. Tiki® is a proprietary process of Tiki'labs sas Paris, France, currently patent pending via www.bredema.com patent office, starting with a first deposit in November 2004. Royalties for minimal commercial implementation could be in the same range as disambiguation software like T9.
4. see illustrations at the end of document.

5 What is Tiki® ? What can it do ?

Basically, Tiki® Human Man Interface is a new process, mixing several existing concepts (visual-soft keyboards, real keys chord keyboards, graphical user interface and HMI state of the art…), which deliver several amazing features :

1) Tiki® is a **software keyboard process** working both with 6 main visual keys on a screen and with 6 real keys.
2) every body can start using it within minutes (as any standard visual keyboard), thanks to the interactive Guide built with the visual keys on the screen, and a very simple rule for beginners : two press-release on 2 keys among 6 can emulate any keyboard.
3) flexible : the same HMI can be used concurrently with a pointer, a stylus, a finger, 1 thumb, 2 thumbs, 3 fingers, whole hand 5 fingers, two hands (as with a full qwerty), according to hardware available, context and user preferences.
4) visual keyboard small size : With 6 visual keys only you get a visual keyboard which consumes less screen area when operated with a finger on a touchscreen or with a distant pointer and much less with a stylus. Less area means also shorter travels and higher speed.
5) real keyboard small size : it can be used with 6 real keys only, which themselves can be adapted to the fingertips of user or to a wristwatch ; 6 keys can also be inscribed in a standard Num Pad.
6) 6 real keys can easily be operated without looking at them = touch (blind) typing. Tiki® touch typing can be practiced with one finger, one thumb, two thumbs, three fingers, provided that "keys" are well tactilely and haptically designed, (which is no longer true, "design oblige").
7) real keys can be implemented in the mobile phone or as an external accessory or, better, as a detachable input and command tool, (clamshell or pen-box wise), which can be attached to the person and allows touch typing with really only one hand.
8) good chord keyboards, as proved, notably by Thad Starner, are learnt quickly by mere usage within a few hours of useful usage : nearly every person will type above 20 words per minute (12-18 as an average with multitap) and will reach his personal asymptotic speed, between 30 to 80, within less than 100 hours of useful usage.
9) as a software keyboard, Tiki® can be adapted to context and the interactive Guide can display signs and commands for a given context with messages (Copy, Cut, Close…) in clear words,
10) Interactive Guide is provided for the beginner but trained users will close it within a few hours, just recalling it for the less known sign and commands, or leaving it pop up for certain categories of input like frequent words, predefined phrases, orthographic or semantic suggestions, completion after first key-in, macros-instructions, applications launch or switch… Within a few hours Main Tiki® usage is done without the Guide but it is always available and waiting smartly in the background according to user parameters and preferences.
11) Tiki® software can be implemented in a given device (software and keys design) but can also be implemented as an external keyboard with its own screen and interactive Guide. That solution is advantageous for Mobiles which cannot receive the software or have a small screen, either already bought or not.

12) Tiki® can be mixed with a pointer under one hand. (currently there already exist several mouse + keypad : Scorpius from Ione for instance,). With a distant pointer and keyboard, Mobile web surfing can become rather comfortable, both physically and intellectually. With adequate existing technologies, a multitouch pad or a multitouch screen could be built on the same smart surface and provide, under one hand, without looking at them, powerful keying, navigation and pointing.
13) Tiki® has been mainly tested with the roman alphabet but some exploration has been made for other languages and writing systems. It seems possible that Tiki® concepts can work, sometimes with 8 keys (= little finger usage in the simultaneous chord method), for big syllabic systems. For them and for ideograms systems the mere intrinsic capability of the interactive guidance provides a quick solution to disambiguate between several options (from 36 to 64). Remains to be explored.
14) Tiki® is flexible enough to adapt to remaining actuators and sensors of disabled :
    a. For blinds, Tiki® is a much improved one hand Braille keyboard,
    b. For deaf, Tiki® can become a fast vocal synthesis generator from phonetic syllables,
    c. For physically handicapped, Tiki® can put "keys" where person has his remaining moving actuators (fingers, hands, elbows, feet …) and can be operated with eye-trackers and 6 simple voice commands.
    d. For mind handicaps and young children, Tiki® can be used with icons, predefined phrases and frequent words.

6 USERS BENEFITS

1) Physical and posture freedom : standing, walking, listening, monitoring : you no longer need to sit nor a table to touch type quickly,
2) Much more occasions in a day to connect and access or communicate quickly via the web,

Conclusion : Tiki® is an enabling technology for mobile phones for which it opens several paths to compete successfully with desktops and laptops, thereby solving many problems in the underdeveloped countries.

Thank you very much for your time, attention and comprehension.

For any question or feedback, please
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http://www.tikilabs.com


21/152
gold under your finge_
[abc]
Options
Ok
Effacer


Ce module de tchat grâce à ses 6 touches émule tout système d'entrée. Il s'utilise avec le nombre de doigts souhaité, et la molette latérale garantie une navigation aisée par défilement vertical.
MODOLABS