

Language Translator as System Software

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ABSTRACT:

The world as a whole comprises of about 7 billion people, 100 and above languages is spoken. In today's world when the connectivity between people living in two corners of the earth has increased to such an extent that we, as observers are giving our opinion for considering the need to have a software platform which could focus on better and easier interaction between people worldwide. Our key focus is in having a system software, which would be by default installed in our computer systems; for that we need not worry about translating the text from one language to the other by any number of steps. Any information coming to us; may it be in any language should reach us in the default language which we prefer. The files for this software would be installed as in the way the other necessary files and documents, like the operating system are installed.

Keywords: system software, language, language translator, communication

INTRODUCTION:

The basic means of communication for all humans or even computers is language which is very diverse. Therefore we use language translators in the form of software's or through professionals. When talking about translators the first software that strikes our mind is the "Google translator". Unlike the other translators which use a process called "statistical machine translation" Google uses its own technique in which billions of documents and patterns are analysed. This software is efficient for people who have some experience in computers but when we consider laymen who do not have such knowledge it becomes inefficient. So there is a need for default software that would be embedded in our systems and there will be no need of any such software. Everything that is displayed on screen would appear in the language selected by the user.

Research Background:

Considering the evolution of translation in technical terms, earlier there were no means of translation i.e two people could not communicate if they didn't know a common language. After some time considering the need humans were appointed as professionals for language translation. With the advancement in computer technology language translator was introduced as application software. Updating and amendments in the application software are led to the emergence of Google translator which is frequently used.

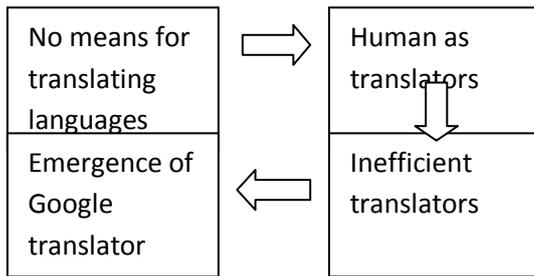


Figure 1: Evolution of translation

Further amendments in this field could be software which will be installed by default in our system. Having such software the user need not follow steps to convert a text to his preferred language. For instance, as in the case of mobile phones which we use nowadays; it asks the user about the language when it switched on for the very first time. Similarly we are focussing on the development of such system software in computers and laptops.

General Survey:

No	Questions	Yes	No	Total
1	Do you know more than two languages?	100	20	120
2	Is English your first language?	25	95	120
3	Do you need translation?	82	38	120
4	Do you face problems in translation?	73	67	120
5	Are you using any translation software ?	59	71	120
6	Are you comfortable in providing subsequent inputs in the Google translator ?	11	109	120
7	Do you want a default software for translation?	94	26	120

Table 1: Survey

From the survey conducted, the statistics for the primary language which is preferred worldwide is English, but we cannot overlook other national languages. The survey depicts that most people are facing problems

during translations. Even in the case of Google translator the subsequent input (cut, copy and paste procedure) is an issue. Hence, it is sure to have a translator that overcomes these problems.

Research Approach:

Focussing on the scenario of language translator, it gives the impression of having more memory consumption and booting time than in normal cases. The solution to this is to restrict the language in accordance to the area of the system where it is expected to use. For instance, if a system is to be sold and used in China the primary language being Chinese, the language input would be Chinese or maybe in extreme cases it would be English. So we can restrict the memory by storing expected language. Taking the rare case we could think of a situation where the person belonging to France may be working in China; he may require his native language in the system he would use in china. So another approach could be a third party involvement in which he would install according to the users interest. This would in turn lower down the memory utilized and the booting time required.

Future Work:

Further advancement in this field can be the introduction of a key in the keyboards for translation like the Ctrl key as shown in the figure below.



Figure 2: Translate Key

If needed at an instance, if we need to translate a particular language apart from that we preferred we can use the key.

CONCLUSION:

Summing up the entire research work done, we can now conclude that this approach of developing such a software would lead to a more advanced and user friendly system for interaction and communication. Having done a vivid study on this topic, emphasis must be given on the development and implementation of such system software. With the increase in population, in the near future necessity would be the development of such a software. So why not to focus on this now. Hence, after considering the necessity of the present and the need for the future generations, we can now look towards the implementation of such system software.

REFERENCES:

1. www.techopedia.com
2. www.translationzone.com
3. googlesystem.blogspot.in
4. Search Engine: www.google.com
5. http://en.wikipedia.org/wiki/System_software
6. Abraham Silberschatz, Peter Baer Galvin and Greg Gagne - Operating System
7. <http://www.statmt.org/>
8. <http://www.telegraph.co.uk/education/educationopinion/10252684/How-much-can-we-rely-on-translation-software.html>
9. <http://electronics.howstuffworks.com/gadgets/travel/electronic-language-translators.htm>