SMART SOFTWARE INSTANT REMINDER FOR INTERPERSONAL COMMUNICATION IN FOREIGN COUNTRY

Dejan Pukšič

Faculty of Arts, Department of Slavic languages and literature,
University of Maribor, Maribor, Slovenia
dejan@hisa-idej.si

Abstract: Traveling to foreign countries is not a privilege of social elite these days and communication is the basic tool for business. Internet and contemporary schools curriculums have enable us to communicate in global language - English. But for those who is going to reside in other country for longer period of time some basic communication in resident country language is necessary. Every year a lot of foreign students come to our university as student exchange and these are not the only ones. For a period of one semester they do not only study but want to see the country and local tradition. Different language courses are offered and a lot of foreigners attend them. Huge amount of information often overwhelm them and some kind of smart instant reminder is much appreciated. We have attended multiple courses and analyse the most needed topics for smart instant reminder and how make it efficient for foreigners. A software program for portable devices is developed and helps as two ways assistant. It provides language and speech reminder since pronunciation is pinnacle of problems in our language.

Keywords: Language learning, m-learning, foreign language communication, software development, software requirements

Introduction

World is not shrinking it just becomes more accessible. In one day journey most destinations are available. People travel not just because of business but even for pleasure. Tourism is a big business. Even inside EU (European Union) we witness migrations. Some are short term others are for longer time. Free flow of labour force and goods is the foundation of the union. Therefore seeing foreigner in your home town is nothing special. But communicating with him is something else. First attempt is made in English but not all people are fluent in it. Basic communication is always possible with young people. Communication with older people is harder. They are the living national history library and in their time foreign language were not thought or it was not English. Therefore knowledge of their language is necessary. Some attempts are made in machine assisted translation (Hargreave, et al., 1998) with various promising results (see Google Translate Conversation Mode on Youtube). But functional translation of voice to voice translation is available in just few languages. Smaller languages are still not supported.

It is an old saying in our country: "How many languages you know that much you worth." Most of our people know more than one language. People older than 40 years are capable to communicate in Croatian or Serbian language. Younger generation has lost this ability but they are quite fluent in English. Foreigners are mostly visitors and their communication with natives is inherently limited. It is fun to see how much two persons not speak the same language manage to communicate with nonverbal (gesture)
means. With the education these abilities diminish. Despite the fact that signs language (used by hearing impaired) shows equality between nonverbal and verbal communication.

Text is universal but sometimes not suitable. We have all encounter the problems where we try to find the right keyword for translation and at the same time we imagine the sign that could do the same. Some sign language is universally adopted and used around the world. Signs for hospital, water closet, information, restaurant and others are in this group. Is it possible to create new signs that could be used as index to more elaborate lower level of communication? Such results would be much more useful than dictionaries.

With this in mind we have decided to prepare a software tool for Slovene language with versatile communication usage. As a reminder or virtual trainer the software would be on user's smartphone instantly accessible. We have decided to use reach media blended learning principle when we develop the software (Rich media presentations in blended learning, 2011). With the help of multimedia materials that needs to address aesthetic issues software should be not just useful but also pleasing for people to use it (Aesthetics and creativity in e-learning material, 2011).

In the business the communication in local language is often demanded and more and more courses for business language is demanded. Even EU projects were funded where businessman could get fundamentals of different language for their successful endeavour (Teržan Kopecky, et al., 2011).

While basic level language courses are mostly intended for learners to get acquainted with language specifics as well as with some words and phrases people usually need for establishing basic communications in a foreign environment (greeting, representation, questions etc.) our m-learning application goes further. Besides the individual sets of contents learners get to know beforehand in the classroom to various exercises for acquisition of grammar and vocabulary as well as reactions in different communication patterns, we are also developing in cooperation with foreigners, who are participating in our language courses, a mobile language assistance, which will help the users handling basic language situations like ordering food and drinks, shopping, small talk, dealing with formalities, emergency situations etc. We are expecting the language assistance, which will include sound patterns for the correct pronunciation, to encourage users in testing their acquired knowledge in real environment and therefore significantly improve their positive learning experience and contribute to effective acquisition of communication skills. The language application for m-learning for Slovenian language will unite three components, which are of crucial importance for language learning: guided language course with learning materials and examples of use, repetition with different exercises at various difficulty levels as well as basic support in language use.
Support in language course

Personal computers enabling the management of multimedia content in the framework of e-learning have been of help to teachers in introducing new possibilities of language learning. Managing this kind of content on portable devices represents a step forward in individualisation and personalisation of the learning process and optimisation of time; learners are not anymore confined only to the classroom or to the part of the day they spent in front of their personal computer, since the learning contents can be managed anywhere and anytime. This “anywhere and anytime” represents a very important place in an adaptive learning model, which includes mobile devices as a mediation tool between the learners, learning contents and teachers or tutors (Peters, 2007). Transaction distance theory, which does not discuss distance only as a geographical division but also as an educational concept (Moore, 1997), combining mobility and classroom, deals with the relations inside the adaptive learning model and with the level of inclusion of respective factors. Mobility is based exclusively on technological communication, which ensures support to the work in the classroom. Although the classroom still represents a very important and the safest learning environment, there we are mostly learning about things, which are usually happening elsewhere. In the classroom we consequently only role play and pretend to e.g. shop or ask for directions; the learners must therefore strengthen and test their skills outside the classroom, which can be enabled by mobile devices with installed learning software (Dörnyei, 2001) (Joseph, et al., 2009).

Program structure and the dialogue between the teacher and the learner are according to transaction distance theory inversely proportional; when the program structure is strengthening, the transaction distance is increasing, with the strengthening of the dialogue the transaction distance is decreasing. The conceptual and educational framework for creating mobile learning applications is defined by the comparison between the high and low level of transaction distance in relation to social activity. Mobile applications for learning languages belong to the group with high level of transaction distance and individualized m-learning. Characteristically, learners, because of their class attendance, have more availability for communication with the teacher and his support. Learners receive a precisely structured and organised content to their mobile devices, which they can control and allocate by themselves (Moore, 2007) (Park, 2011). Until recently, mobile learning systems enabled only two modes of learning material distribution – pull and push mode; the pull mode means downloading from the internet, with the push mode the users receive their materials via e-mails or SMS and MMS. It has to be emphasized, that the above mentioned modes do not support learning in the classroom and do not include the teacher as the basic knowledge broker, as anticipated by the adaptive learning model, but instead represent the teacher as the creator and disseminator of learning materials. Past projects, which tested the efficiency of mobile learning of foreign languages in the two mentioned modes, turned out well only for remembering words,
however did not enable acquiring more demanding language skills. Only the appearance of smartphones, which due to satisfactory capacities and adjustable platforms encouraged programmers to develop different applications, opened new ways of transmitting and testing language skills (Thornton, et al., 2005).

The design for the sloM™ (Slovene mobile) mobile application derives from an organised course of Slovene language as a foreign language for beginners (level A1 according to the European classification of language skills), which ensures a reliable transfer of learning information, with the emphasis on the contents most needed by the course participants or on the content causing them most problems. The working principle is analytical and founded on interchanging instructional slides and exercises in the sequence of explanation-micro exercise-explanation-exercise-explanation-repetition exercise. Although the concept of the application also foresees a separated section with quiz tests (quiz book), this is intended exclusively for individual practice, not prescribed by the learning plan, limited in time and number of accesses as well as defined in advance and for self-evaluation. The learning topics are designed to optimally use smaller screens of the mobile devices. This is possible because the users/participants of the course already took part at the explanation process in the classroom. Micro exercises are intended to test the understanding of the presented learning content; if the user confirms it, the next instructional slide with more complex material occurs, followed by an exercise of a greater volume. The mechanism of exercises tolerates a certain number of wrong answers (depending on the number of demands), while with too many wrong answers it stops the exercise and offers the user to once again look at the theoretical part of the lesson, which proved difficult. Repetition exercises are activated in new content segments as intermediate exercises, brought together from collections of different exercises, connected to the already presented material, which enables a systematic development of language competences.

Learning of words as the main part of language education represents a special challenge for developers of mobile applications for language learning. In the past a couple of innovative ways in acquisition of words were presented, which however remained on the testing level because of their operation in a specific environment on the one side or due to the need for additional technology, which is not yet part of existing mobile devices on the other. Especially interesting is the 3D-system for learning languages (Serious Games for Language Learning: How Much Game, How Much AI?, 2005); users are connected to augmented reality with special glasses, which enables real-time simulation. This in practice means slides in additional layers in the form of graffiti or post-it notes publishing words for the actual reality in foreign languages. Although currently these kinds of language course methods seem somewhat distant, the future will soon catch up with us, since haptic, olfactory and gustatory interfaces for mobile phones are being developed (Joseph, et al., 2009), introducing concepts to the user, which are usually explained with description or special props during the course. In the classroom teachers normally show
pictures with objects or actions, while writing words on the blackboard and clearly articulating them. The mentioned routine is effective, since it has preserved itself through different methods of foreign language learning (Jesenovec, 2004); in the domain of mobile learning with the possibility of multimedia presentation it can easily be integrated into learning games and additionally stimulate the learners in word-learning. The multimedia approach is also used in developing sloM™ application; we are namely designing a game of word-learning, in which users must connect pictures with words. With pressing the finger on the picture or word a soundtrack of a native speaker is played; if the picture and the word are a match they disappear so the user can concentrate on the next problem and continue with connecting pictures and words until there are no more words left and the game ends. In repetition exercises soundtracks are played without inscriptions, the user must among shown pictures choose the right one. Because the listening method of playing soundtracks or the synthesis of speech significantly contributes to successful language learning we are considering a sound support for the whole theoretical part of the application, including explanations and illustration material for examples of use. The users will therefore be able, despite the absence of the teacher or lecturer, to receive examples of correct pronunciation of the Slovenian language, since the objective of the language course is to understand native speakers and try to pronounce words as correctly as possible.

The sloM™ applications’ front side is a selector (fig. 1) from which the user enters the lessons and exercises and partly controls its own mobile learning process, with which we are introducing pre-planned usage of the application. This function activates itself on learners demand, who with its own time parameters draws up a timetable, which can be prepared for a week ahead (each day separately) or enters the wanted time for the next lesson by the end of the anticipated daily segment. At the beginning the user is limited only to the first lesson and segments in it; each subsequent lesson can be entered only after all requirements from the previous lesson are completed, this means checking all instructional slides and solving all expected exercises. Until lessons are not released they are inactive, the exercises in the exercise book connected to the lesson are also disconnected.

Fig. 1. Start page for the sloM™ application
The quiz book

The quiz book includes various types of exercises and tasks for strengthening and testing different language skills; some are based on entering text, some include multimedia as well as elements and possibilities of touch screens. Exercises based on text-entering are typical for language courses on all levels and have been transferred to computer supported educational systems from classical textbooks and exercise books. Although the principle is relatively simple, this sort of exercises, if programmed to save all entrances, is very useful for gathering feedback on most frequent mistakes foreigners make while answering the question. This data can be analysed by the teachers to strengthen the weakest links or to change the learning process. The next group of exercises we intend to include into sloM™ application are so called touch exercises; these are learning games with a strong motivational factor, which is particularly important in high transaction distance. Although learners have the support of teachers, mobile learning mostly emphasizes individual work. Besides games for acquisition of words, which were already presented, we are also anticipating exercises for classifying words into groups (fig. 2), with which we intend to test the understanding of basic language concepts as well as exercises with multiple answers to test reading comprehension in the framework of self-evaluation. Listening comprehension will be tested in exercises with videos, in which the subjects will talk about various themes and the users will have to connect what they have heard and seen with statements that will only slightly differ.

Language assistance BlaBla™

The research on representation of smartphones carried out between students and foreign language teachers by Simon and Fell (Simon, et al., 2012) has shown that 69.6 per cent of students and 31.6 per cent of teachers have smartphones, language applications on smartphones are used by 60 per cent of students and 14 per cent of teachers; among the applications dictionaries and translators are mostly used. This data illustrates that the usefulness of mobile phones has surpassed their basic communication function and that more and more people use phones to optimize their schedules and usefully spent their time on the road. Among the many activities offered by mobile applications falls the language learning; this is what we derive from in developing the mobile language assistance BlaBla™, which we intent to
ensure help to smartphone users in speaking situations with, where they have most difficulties due to misunderstanding Slovenian language or due to non-existent common language with interlocutor. Although participants of language courses learn many grammatical rules and words and at the end pass a test, the only real test for everyone that is learning a foreign language is live communication. We want to encourage this with organised collections of statements (phrases), assembled into comprehensive dialogues of predictable situations, which can be characterized as problematic. Information for statement basis we gather from foreigners, who come to Slovenia without any language knowledge but intent to stay for a longer period of time. Language assistance is therefore crucial for them to help them organize their life in a foreign country and to make contact with its inhabitants. It needs to be emphasised that we are not developing the BlaBla™ assistance with the purpose to be only a sort of linguistic first aid but in order to encourage its users to use the Slovenian language. The basic framework functionality with the starting support to Slovenian language in English language is made in files of statements, which can easily be drawn up to a comprehensive conversation by users to manage linguistic situation. Although even the function in text mode contributes to greater confidence of foreigners in using Slovenian, we developed a module for pronunciation; foreigners of non-Slavic roots have namely great problems with the articulation of some sounds or phrases therefore the hence soundtracks of native speakers for the whole linguistic content will be provided for. A program for the synthesis of Slovenian speech is being prepared, which will unfortunately not be developed so far to be included into computer systems for learning languages. A search mechanism based on names of situations (e.g. library, restaurant, shop) and key words (food, drinks, book etc.) will in testing version provide the fast access to required data. Because we want to ensure even faster responsiveness of personal language assistant and simplify data availability, we plan selection module with graphics. It will use pictograms which estimated that the interlingual-connecting functions are at an early stage of learning the language most appropriate interface between native and foreign languages.

**Conclusion**

In our effort to help foreign students and also all other visitors in Slovenia to learn basic communication we have develop software program for android devices. Since most of migrating students have smartphones we give them useful option to use it as smart language assistant - instant reminder. Software is in the final stage of development – testing phase. It shows its potential and usefulness. In the field testing we have found that some additional modules need to be developed. Pronunciation module with the native speaker word to speech translation is highly desired and the requirements for this module are almost done. Another module is fun module with video situations where appropriate usage of words is explained in funny way. This module is still in the concept creation stage. The quiz module is not
mandatory but it helps for longer retention of knowledge. It stimulate user to take active role in language learning.

In the next year software will be tested on larger population of foreign students and will be also available on mobile market for roaming mobile phone users. Promotions on telecommunication companies are on the way. Bigger users' population will provide additional insight to the needs of foreigner to communicate in Slovene language – one of the smallest languages in the world.

References


