

Minangkabau Language Learning Based on Android Application

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Abstract: Introducing Minangkabau language is very necessary to be done as an effort to preserve Indonesian culture to be forwarded to the next generation in order to understand Minangkabau language. To introduce Minangkabau Language, it can be through learning applications, namely media that can be used to convey material content that involves mobile devices such as Android-based phones. Minangkabau Language Learning in Indonesia through Android can be an interactive learning tool that can increase the learning interest of the Indonesia people, especially the Minangkabau community, to better understand the Minangkabau language. The method used is observation, interview, library study to create a data base for the design of the Minangkabau language learning application based on Android. The result of this research is the application of Minangkabau language learning based on Android which is useful for Indonesian society especial the Minangkabau community. The appearance for this application consists of some main menus such as Vocabulary Menu, Dialogues Menu, Folklore menu, Minangkabau language material menu and verse & Proverb menu which makes it easy to learn the Minangkabau language efficiently and effectively.

Keywords: application, Android, Minangkabau language

Introduction

Nowadays, science and technology is easier in the process of presenting information. Meanwhile, its implementation in ancient times still used in one direction by using a limited media. But today, it can be done in two ways with a variety of media. One of the most commonly used media devices is mobile phone. This device is quite a favorite among the community because of its flexible function which is easy to carry everywhere and the price which is affordable.

In principle, mobile phones are developed to satisfy the human needs for long distance communication to be more efficient. In its development, the main function of mobile phone is not only limited as communication tools, but also includes other functions such as information storage media, practical scheduling media, education, entertainment, and others. Utilization of mobile phone capabilities for purposes in some areas is developed with applications that can support for educative learning media in which this application designed to learn the procedures and understand a specific language (Maita et. Al, 2018).

According to Saedah Siraj and Vijay (in Astra, 2015), they stated that *m-learning* is the use of a mobile device to have possibility which can organize learning anywhere and anytime. According to Mohammad Osman, M.El-Hussein, and Johannes C.Cronje (2010), *m-learning* is one of models in learning environment which is considering mobile-technology device, student mobility, and learning mobility. Android is one of the Smartphone technologies that has grown rapidly with a variety of operating systems. It is an operating system based on open source and it is a new generation mobile platform that provides an opportunity for developers to develop as they expected. Android has the main objective to promote innovation of mobile devices in which the user is able to explore the capabilities and add more experience compared to other mobile devices (Hartono et. al.2014). The concept *m-learning* is the transformation of conventional

education into digital form, both in content and system in which *m-learning* that uses Smartphone having the advantages in providing a comprehensive learning environment, promoting the understanding of content, and facilitating the interaction for the learners (Nan Zhao, Minghu Wu and Jingjing Chen (2017) in Zatulifal et. al). In addition (Said et. al 2018) in his research stated that learning media has the benefits as follows 1). Delivering learning in accordance with the standards; 2). Make learning more interesting; 3). Learning is more interactive; 4). The length of time the lesson can be shortened; 5) The quality of learning outcomes can be improved; 6). Teaching can be given anywhere and anytime; 7). Improving learners' positive attitude towards the learning process. So, android functions as a mean of communication as well as educational media, along with current technological developments, it becomes more practical and interesting, especially in android-based Smartphone.

Indonesia is a country that has a lot of diversity of local languages which is a wealth that must be preserved (Ernawati & Saifudin, 2018). One of the local languages that still exist in Indonesia is Minangkabau language. In past times, Minangkabau language is a native speaker's pride that characterizes the uniqueness of that area as well as a tool of unifying its speakers. So, it is necessary to introduce and preserve the Minangkabau language through learning media. Minangkabau language learning by using books makes the community feel bored. Therefore it takes applications to help the community to learn Minangkabau language. This facilitates the learning by using the Smartphone that can be used anywhere and anytime, but also easy to use with attractive picture. Referring to these conditions, the researchers made an android-based application of Minangkabau language learning that can be useful for the community who want to learn Minangkabau language. This application is expected to help Indonesia people especial for the Minang young generation to improve their ability of Minangkabau language. Regarding the importance of this local language functions, Minangkabau language needs to be nurtured and preserved.

Method

The method used is as follows 1). Observation Method i.e. observing directly the forms of learning application design, to get an idea in designing this Android-based Minangkabau language learning application; 2). Interview Method, this technique is related to direct interview with the Minang community regarding the content and features needed; 3). Library Study Method, the writer collects data through articles, books, and journals related to the design of this Android-based learning application. An overview of the system that will be created is the Minangkabau language learning application based on Android and it has the expected goals as follows a). Providing language learning such as numbers, vocabulary, Minangkabau Language material, greetings, conversations, Folklore, expressions such as proverbs; b). Creating learning media that are interesting to people who want to learn the Minangkabau language, especially the Minang young generation; c). Providing other material sources besides books that can be distributed to the Minang young generation; d). Utilizing Android smartphone technology as a learning medium. Then the next stage is Application Design, at this stage the design of System Architecture, Database design and interface design with Object Oriented Analysis Design (OOAD) by using Use Case Diagrams. Use Case Diagrams are a description of the relationship between actors and systems. This diagram gives an overview of the whole system and actors, so the components used are very few (Mulyani, 2016). Use Case Diagrams are made to provide an overview of how users interact with the system, and what functions within the system can be used by users.

Results and Discussion

Language learning is a learning skill to communicate in the language both orally and in writing, as well as in formal or informal situations. Related to the linguistic fields, it can improve the ability of language learning such as mastery in pronunciation of letters, mastery of morpheme types, the use of the word affixes in the sentence, the ability to use phrases, composing sentences, stringing paragraphs, composing essays, etc. Through learning and mastery of language, we can have language skills that refer to the ability in using the language in communicating. By language skills, people can express his thoughts and content to the others, which is the ultimate goal of using language as a form of communication.

People who have language skills can communicate with the others. It is based on whether the knowledge of the theory and the subtleties of the language used to communicate or not. Language skills can be done by using structural linguistic approach. With the mastery of language components such as structural linguistics, language is considered to consist of distinguishable parts of one another that are known as language components consisting of sounds of language, vocabulary, and grammar. In language learning, there can be one or several types of language skills, of which the mastery needs to be improved. Learning system is one system that allows the process of teaching and learning. The learning system has four branches, namely conventional learning, instructional learning, electronic learning, and mobile learning (Singh, D & Zaitun, 2006).

Learning is a complex activity, which is not only defined by activities done in the classroom conventionally. In connection with the development of technology, learning can be done in front of computer. In addition, with the existence of wireless technology, learning is not fixated by sitting somewhere but can be done anywhere and anytime. This leads to the term of mobile learning, which is the use of mobile and mobile devices such as PDAs, mobile phones, tablets in teaching and learning.

Learning Minangkabau language will not be separated from learning vocabulary. Vocabulary mastery is the most important in Minangkabau language skills. Without adequate vocabulary mastery, language skills are difficult to achieve and understanding of Minangkabau language vocabulary cannot developed because vocabulary is the basis of learning Minangkabau language. So, in this Minangkabau language learning, we discuss basic material that is short story with the additional of *versa*, proverb expression, conversation, and grammar. All sources can be a media of Minangkabau language learning especially in Minangkabau Proverbs in which the values of Minangkabau cultural expression as a local wisdom social culture of Minangkabau society can be found (Hastuti.,et al, 2013). The design of Minangkabau language learning application is made with bright colors and images so that the application looks interesting. The role of Minangkabau language as a means of science, literature and other cultural expressions is limited in the scope of Minangkabau culture and customs (Ayub et al, 1993). Therefore, Minangkabau language as a local language serves as a symbol of nationality of West Sumatra region and support the development of Minangkabau culture; As a symbol of identity of West Sumatra and Minangkabau communities as one of the ethnic groups in Indonesia; as a mean of communication within the Minangkabau family and society in oral communication; as well as intercultural oral communication in West Sumatra. In connection with it, therefore culture, language and literature of Minangkabau can carve the history of civilization on the world nations. This expected belief will not be only psychologically provide pride, but also the loyalty to nurture and continue loving the noble values in this great Minangkabau culture and literature.

Nowadays, learning activities are possible done through *m-learning* powered by advances in mobile technology operations, especially android platform (Hanafi&Samsudin,2012). Android has several advantages including the availability of applications. Android based Linux makes it easy for the programmers to create new applications freely distributed with Open Source licenses, Shareware, freeware. Android is an open platform or unrelated to any of the hardware manufacturers or any of the operators. Android is Cross-Compatibility which means it can run with screen size and resolution. In addition, Android has tools that help the users to build cross-compatible applications. Android is an operating system that is open source. It is called open source because the source code of the Android operating system can be viewed, downloaded, and modified freely (Satyaputra & Maulina, 2014). Android is an operating system for Linux-based mobile devices that includes operating systems, *middleware* and applications. Android provides an open *platform* for the developers to create their application. From this explanation, to start developing android apps, it requires android Software Development Kit (Safaat, 2012). Android SDK provides the equipment while Application Programming Interface (API) is required to develop applications on the Android platform using the Java programming language.

Mobile applications now become one of the needs because Telecommunication tools are scattered around the world requires applications that simplify the work of users anytime and anywhere, especially in terms of information (Rianto.,et al, 2006). Information itself is the result of the process of analysis, manipulation and presentation of data to support the decision-making process. Mobile application comes from the word application and mobile. In term of application is a ready-made program designed to perform a function for the user or other application and can be used by the intended target while mobile can be interpreted as moving from one place to another. Mobile applications can be defined as an application program that can be run or used even if the user moves from one place to another and has a small size. This mobile application can be accessed via wireless devices, pagers, PDAs, cell phones, Smartphone, and similar devices (Jim, 2001).

Modeling is the stage in making a model of a real system. The purpose of modeling is to determine information (variables and parameters) that are considered important to be collected, so that there is no unique model and the model is simplified. Use Case diagram describe system procedures in general are Android-based Minangkabau language learning designed. In this research, Use Case Diagram is a picture of the relationship between actors and systems, this diagram gives an overview of the whole system and actors, so the components used are very few. Use Case Diagrams are made to provide an overview of how users interact with the system, and what functions within the system can be used by the users. In figure 1 is The Use Case Diagram of the Minangkabau language learning application

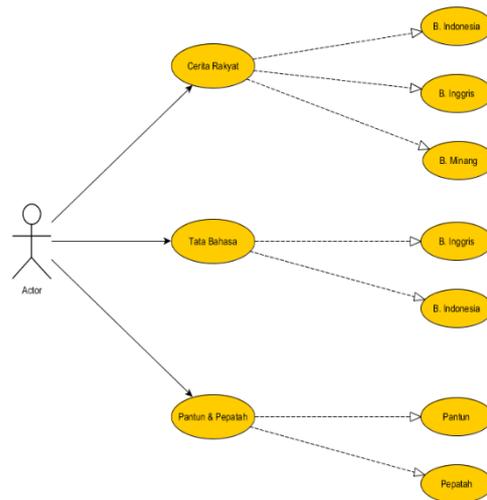


Figure 1. Use Case Diagram

This application was built with the aim of introducing Minangkabau language in order to help the users to improve their ability of Minangkabau language that is owned based on mobile with Android platform. This application is called "Minang Rancak". The following are the results of the implementation of the Minangkabau language learning application display. This view is the first display that appears when the application is opened. Automatically, the display will continue to the main menu. The main menu display is a display that contain the initial menu. The appearance for this application consists of some main menus. The available menus are Vocabulary Menu, Dialogues Menu, Folklore menu, Minangkabau language material menu and verse & Proverb menu. The initial page view of this application is shown in Figure 2.



Figure 2. Minang Rancak Page

In the Folklore menu there is story content. Each story has three languages, namely Indonesian, English and Minangkabau language. Stories presented in this application are The Story of The Grasshopper (Tukang Rumpuik), The Story of The Honest Buyung (Si Buyuang Bana), The Story of The Poor (Curito Urang Bansaik) and The Story of King Malik (Rajo Maliak). Folklore or short stories are needed to add vocabulary to the Minangkabau language, as a basic learning reference for the Minang language so that the Minang yung generation can speak the Minang language in their daily lives. The more understanding of the vocabulary of the Minang language, the easier it is also to speak using the Minang language. In addition to the Minang language short

story material, it is expected that the Minang generation knows the stories of the Minang community. The view from the Folklore menu are shown in Figure 3.



Figure 3. Folk Story Menu Page

In grammar menu there are three learning content which each of them is presented in two languages, those are English and Indonesian. Grammar presented in this application is Phonology, Morphology and Word Classes. The display in the Grammar menu is shown in Figure 4

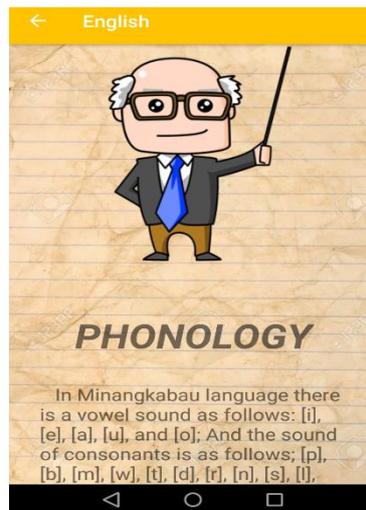


Figure 4. Phonology and Grammar Page

For the expression's menu such as verse and proverb, it displays Minangkabau verse and proverbs which are presented in two languages; those are Minangkabau Language and Indonesian which is shown in Figure 5

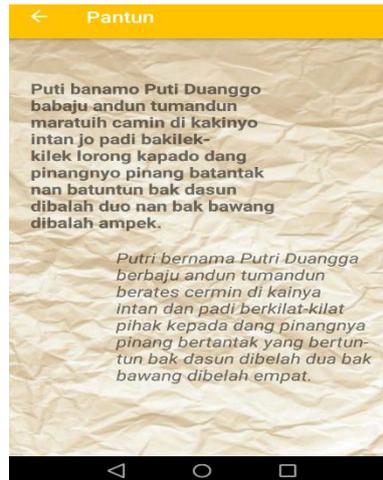


Figure 5. The Verse and Proverb Page

Conclusions

Media is a tool to achieve learning objectives. The use of appropriate media can support the success in the learning process. This will make it easier for the community to achieve the learning objectives especially for language learning. In this case, the rapidly expanding technology can be utilized appropriately, because by utilizing this technology, it can help and facilitate various things, especially in terms of learning. The multimedia product introduction of Minangkabau language is based on multimedia on the Android operating system which can be one of the solutions or alternatives as an interactive and practical learning media. With this application, users especially the Minang young generation can learn the Minangkabau language more fun because it uses interesting and interactive media. The appearance for this application consists of some main menus such as numbers, vocabulary, Minangkabau Language material, greetings, conversations, Folklore, expressions such as proverbs which makes it easy to learn Minangkabau language anywhere and anytime by using mobile phone based on android.

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