

Web Mobile-Based Learning Media of Speaking Skill

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Abstract

In this study, the writers developed learning media based on the results of previous studies related to learning media for Dayak Ngaju language - English. From previous study, the application, as the learning media, has been equipped with images and audio for each displayed vocabulary. In this development, the writers designed and developed a web mobile based learning media for speaking skill of Dayak Ngaju language - English with more complex material related to expressions accompanied by audio output. The applied research model was used to adopt techniques in the Agile model using Extreme Programming which consists of planning, design, coding, and testing. For supporting the learning media development, the data were gathered through direct observation, interviews, and library research. The final product of the study was the web mobile based media of Dayak Ngaju Language - English especially for speaking skill which can be used by elementary school students in learning both local and international languages. The application displays several expressions related to telling location and taste with its audio output to help students learning how to pronounce a sentence or an expression. This media is also accompanied by real pictures to make it more interesting and can be accessed through the website, anytime, anywhere.

Keywords: Dayak Ngaju; English; Learning Media; Speaking skill, Web Mobile.

INTRODUCTION

English is the standard language of international interaction which has been widely used as a means of communication both orally and in writing. In Indonesia, English as a global communication language has been applied in various fields, one of which is in the field of education. Knowledge of this language has been introduced from an early age and is taught gradually at the elementary school level as local content.

Palangka Raya is one of the provinces in Indonesia that applies English and local languages as local content in teaching and learning activities at the elementary school level. In local content, the local language introduced is Dayak Ngaju which is the most speakers in Central Kalimantan province (Poewardi, et al in Sigirow, 2013: 1). This is one

of the government's efforts to maintain one of the cultural heritages, namely the local language. With the existence of two languages, English and Dayak Ngaju language, in learning in elementary schools, it is hoped that the younger generation will not only be able to master foreign languages but also preserve local wisdom.

Local content, both English and Dayak Ngaju, delivered in classroom learning includes the ability to use language or communicate, appreciation of literature, and mastery of language rules. The delivery of these two local content materials is adjusted to the grade level which includes simple vocabulary to compose sentences. Generally, the delivery of conventional materials through the media of books and notes is something that is still encountered in the classroom and children may experience boredom. To increase students' motivation and interest in learning materials, additional media is needed that can be implemented anywhere and anytime, not only limited to the classroom.

Media can be said to be one of the important factors in achieving success. Through learning media, learning activities become interesting and fun. Students will more easily absorb teaching material if it is accompanied by tools that are familiar to them, with an attractive appearance, and suitable with their age. Along with technology growing at this time, one of the media that can be developed for learning is an application connected to the internet.

There are many limitations or understandings put forward by experts about the media. The Association of Education and Communication Technology (AECT) in America defines media as all forms and channels that people use to convey messages or information. The National Education Association (NEA) says that media are forms of communication, both printed and audio-visual and their equipment (Sanaky, 2011: 3). According to Heinich in Sugiharto (2016: 24), learning media are intermediaries that carry messages or information for instructional purposes or contain teaching purposes between the source and the recipient. Meanwhile, Schramm in Kurniawati and Nita (2018: 69) said that learning media is a message-carrying technology that can be used for learning purposes. From the above understanding, it can be concluded that learning media is an educational tool that can be used as an intermediary in the learning process to increase effectiveness and efficiency in achieving teaching goals. In a broader Learning media are tools, methods, and techniques used in order to make communication and interaction between teachers and students more effective in learning that can stimulate students to learn in printed media, audio, visual, and audio-visual.

In this study, the writers developed learning media from the results of previous research related to local content learning media of Dayak Ngaju language and English, entitled '*Audio Visual Learning Application of Dayak Ngaju Language-English*' in 2020. The result of previous study was a learning application equipped with pictures and sounds for each vocabulary displayed. As the development of the previous study result, in this study, the writers designed and developed an application that can be used as a learning media especially on speaking aspect. Based on pre- observations and accompanied by literature review, learning English in elementary schools already covers these four important skills, but is still at a simple level and is more emphasized on introducing vocabulary or simple expressions and how to apply them in communication.

According to Edgar in Gautama, et al (2013), there are four important skills to be learned in English, namely speaking, listening, writing, and reading. Speaking is an

English skill in pronouncing or saying words. Listening relates to how the brain processes what is heard. Writing is a skill in English that learns to write vocabulary correctly, while reading is a cognitive process to get meaning or meaning from a text. In this study, English expressions introduced in the media are expressions related to telling location and describing taste which are equipped with a translation into one of the local languages in Central Kalimantan: Dayak Ngaju.

Some expressions displayed on the application are in English, Indonesia, and Dayak Ngaju languages. They are as follows:

1. Telling location

The sentences used in telling location are in English, Indonesian, and Dayak Ngaju as shown in table 1. For application, there are available audio for Dayak Ngaju language and English.

Table 1. Vocabulary and Sentences used in telling location

English	Indonesian	Dayak Ngaju
in front of	di depan	baun
Behind	di belakang	likut
Beside	di samping	silan
On	di atas	hunjun
under	di bawah	penda
There is a rooster is in front of your house.	Ada seekor ayam jantan di depan rumahmu.	Tege manuk jagau hung baun humam.
The cat is behind the tree.	Kucing berada di belakang pohon.	Pusa hung likut batang kayu.
Aina sits beside her aunty.	Aina duduk di samping bibinya	Aina munduk silan minae.
That bag is on the table.	Tas itu berada di atas meja.	Tas jite hung hunjun meja.
The bicycle is under the tree	Sepeda berada di bawah pohon	Sapeda hung penda batang kayu

2. Describing Tastes

The sentences used in describing tastes are in English, Indonesian, and Dayak Ngaju as shown in table 2.

Tabel 2. Vocabulary and sentences used in describing taste

English	Indonesian	Dayak Ngaju
salty	asin	bakahing
sweet	manis	manis
bitter	pahit	bapait
sour	masam	masem
hot	pedas	bahari
This dried fish is salty	Ikan kering ini asin	Pundang jituh bakahing
This cake is very sweet	Kue ini sangat manis	Wadai jituh manis tutu
This fruit tastes bitter	Buah ini rasanya pahit	Bua jituh bapait
This mango tastes sour	Mangga ini rasanya masam	Mangga jituh masem

This fried noodle is hot

Mie goreng ini pedas

Mie sanga jitung bahari

This application is the web mobile based learning media of Dayak Ngaju language and English equipped with audio on how to pronounce and read expression or sentence. According to Remik (2011), a web application is one application that uses browser technology and computer networks to access applications. Web-based applications are applications that can be built using the PHP programming language. Web-based applications can be accessed without having to be bound by time and place as long as there is an internet network to access them. Meanwhile, according to Pressman and Bruce (2014), a mobile application is an application that has been specially designed for smartphones using a mobile platform. In the other words, a web mobile-based application is an application that can be run using a smartphone and accessed responsively using a web browser. This new application is expected to be able to increase the interest and motivation of elementary school students in learning not only their native language but also one of the international languages namely English.

METHOD

The stages in this research adopt the technique in the Agile model, namely Extreme Programming. The Extreme Programming steps used in this study are as follows:

1. Planning

Knowing the scope of work as a plan to model the system, including searching for information on data and sites related to the needs of making audio visual learning application, output in the form of a web mobile-based system, features and functions according to the needs of system development namely expression or sentence lists of telling location and describing taste both in Dayak Ngaju language and English equipped with audio and real pictures for elementary school students. The modeling of the system that was built looks like in Figure 1.

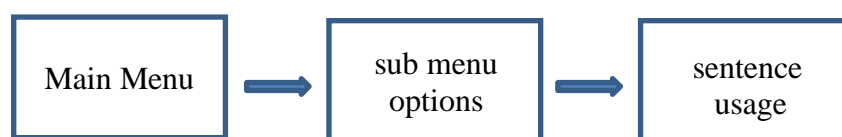


Figure 1. Modeling of Learning Media of Dayak Ngaju- English Speaking Skill Based on Web Mobile

2. Design

This stage makes the design of the workflow and design needed in study that is using diagrams and supporting software. The design of the application that is built is as shown in Figure 2 and Figure 3.

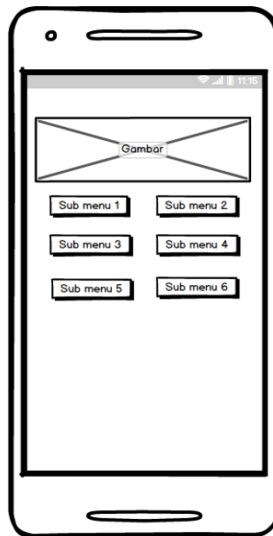


Figure 2. Sub menu design



Figure 3. Selecting Sentence Menu Design

3. Coding

The coding stage uses the coding found in supporting software to build web based systems.

4. Testing

Test the model using the system to find out the results of the model used to get a conclusion about the service or features and functionality contained in the application being built.

For supporting the learning media development, the writers used several data collection techniques in this study. These techniques help the writers to get the right data

and can be processed as well. Data collection techniques used here are direct observations, interview, and library research.

RESULT AND DISCUSSION

The study was carried out starting from data collection to process and results, it was obtained in the form of a display interface for language learning media through an application of Dayak Ngaju language- English equipped with audio in the form of a responsive web application aimed for elementary school students. Some of the interfaces that are presented both accessed on the web and web mobile, are as follows:

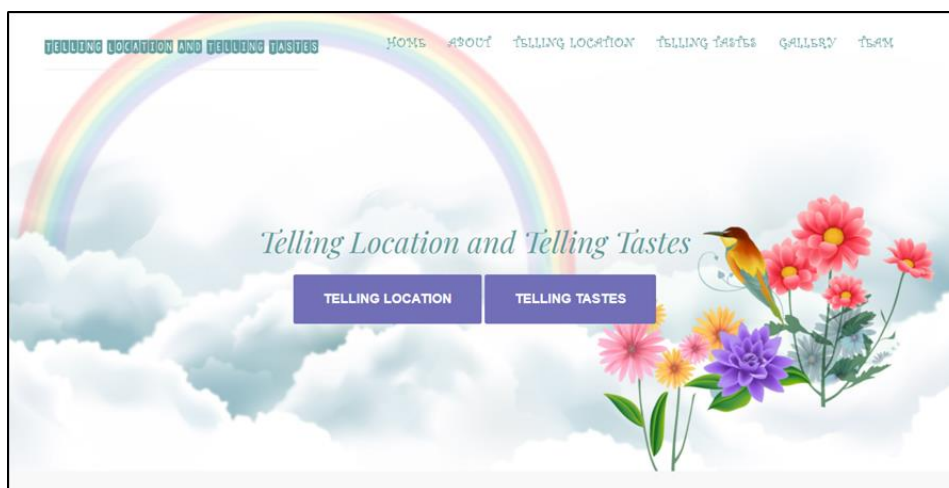


Figure 4. The main menu page for learning media accessed on the web

Figure 4 shows the display of the main menu page for the display of learning media accessed on the web. In Figure 4 there are 5 horizontal menus, each of which can be accessed. For the HOME menu it will appear as in Figure 4.

The main menu page can also be accessed on the mobile web as shown in Figure 5. Accessing the mobile web will display menu features with a vertical display.

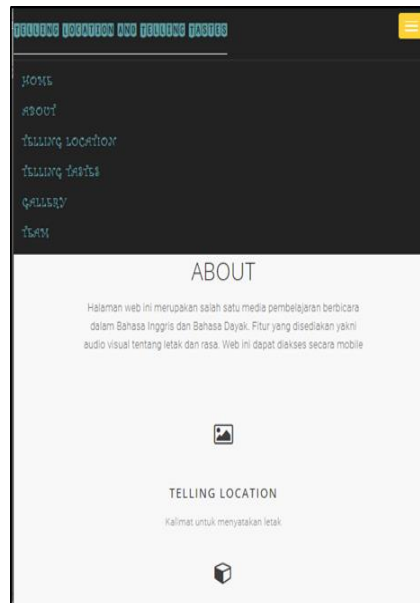


Figure 5. The main menu page for learning media accessed on mobile web

The HOME feature on mobile web access will display as shown in Figure 6.

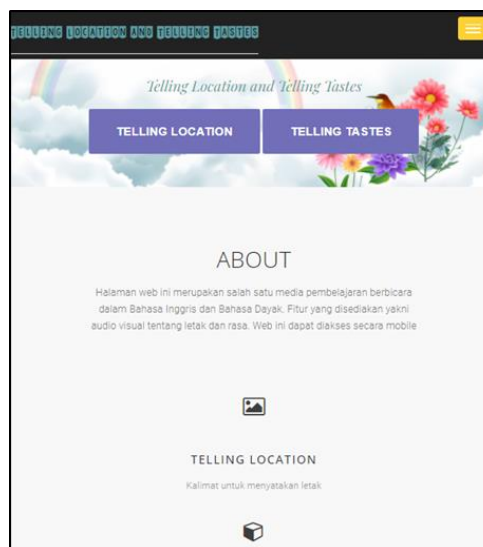


Figure 6. The main menu page for learning media accessed on mobile web

After HOME menu, there is ABOUT menu focuses on the display that will be showed in this application. There are 2 sections displayed on the ABOUT menu in accordance with the discussion of this application, namely Telling Location and Telling Tastes. The ABOUT page accessed on the web are shown in Figure 7 and accessed on the mobile web is as shown in Figure 8.



Figure 7. Display of ABOUT menu accessed on the web

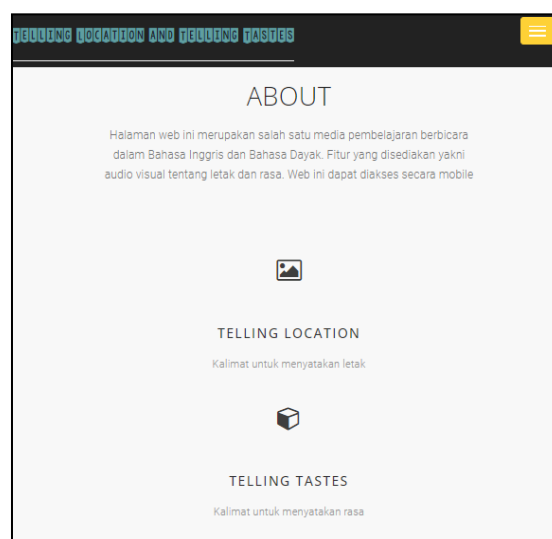


Figure 8. Display of ABOUT menu accessed on mobile web

TELLING LOCATION menu feature that provides photos of the use of sentences regarding Telling Location, the display is available in audio visual form, the presence of photos and sound. It also displays text for 3 languages when the cursor is hovered over the photo, namely English, Dayak, and Indonesian. The display of the TELLING LOCATION menu that is accessed on the web is shown in Figure 9. Meanwhile, if it is accessed on the mobile web, it is displayed as shown in Figure 10.

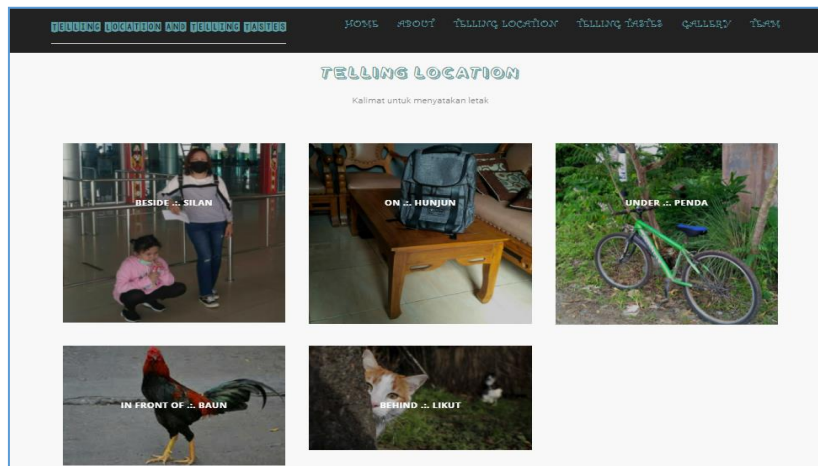


Figure 9. Display of TELLING LOCATION menu accessed on the web

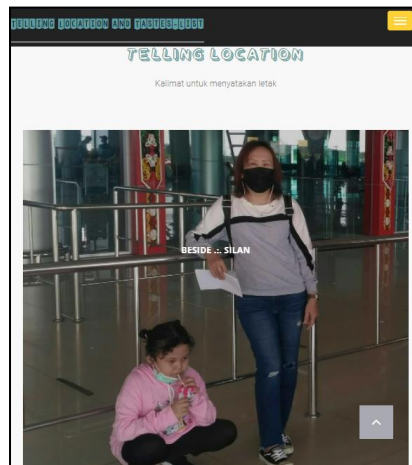


Figure 10. Display of the TELLING LOCATION menu accessed by mobile web

If you click on one of the photos in Figure 9 or 10, a larger image will appear as shown in Figure 11.

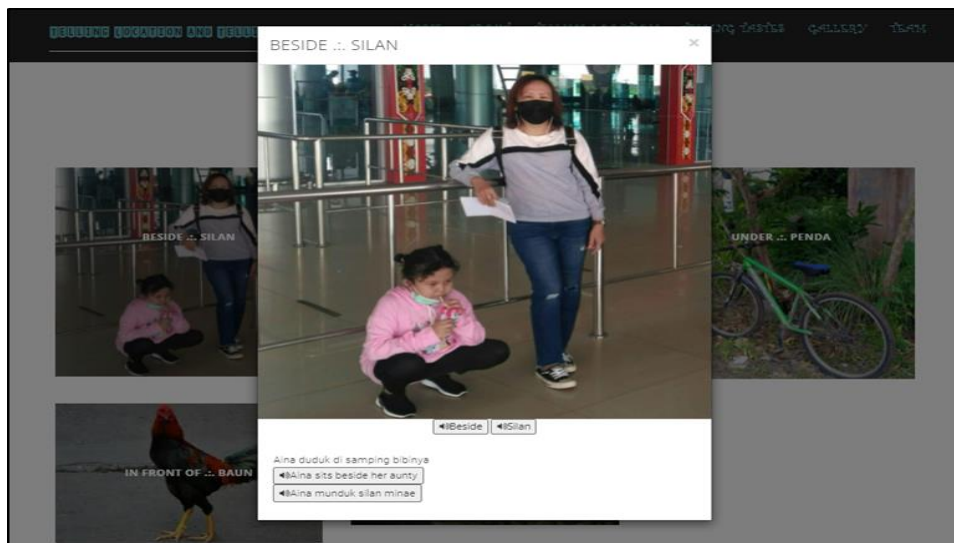


Figure 11. Display for audio of English and Dayak Ngaju

Figure 11 shows a photo and also an audio feature or sound that will be played if you click on the audio image. There are 2 audio options, namely English and Dayak Ngaju. This audio-visual feature is also found in the TELLING TASTES menu.

The next menu is TELLING TASTES, the same as in the previous menu, TELLING LOCATION. In Figure 12 and Figure 13 show photos. The presence of audio visual on the TELLING TASTES menu is also the same as on the TELLING LOCATION menu, namely the presence of sound or audio that will be heard when the audio button clicked.

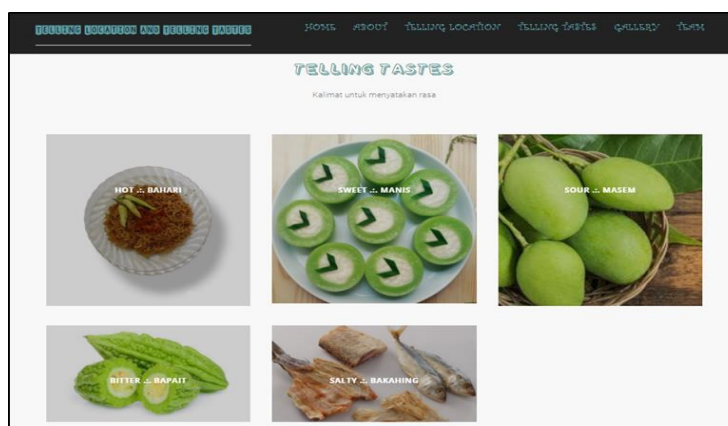


Figure 12. The display of TELLING TASTES menu accessed on the web

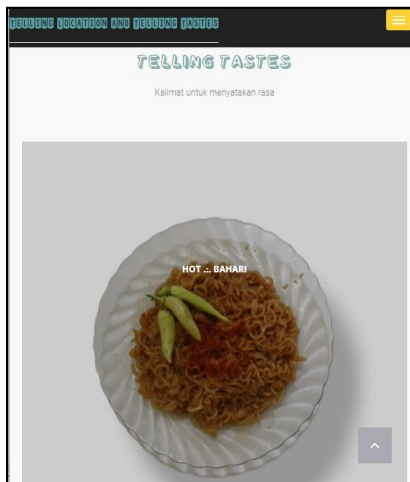


Figure 13. TELLING TASTES menu display accessed on mobile web

The next menu is GALLERY which displays all the photos used in the telling location and telling tastes feature. This menu is shown in Figure 14 which can be accessed on the web and Figure 15 which can be accessed on the mobile web.

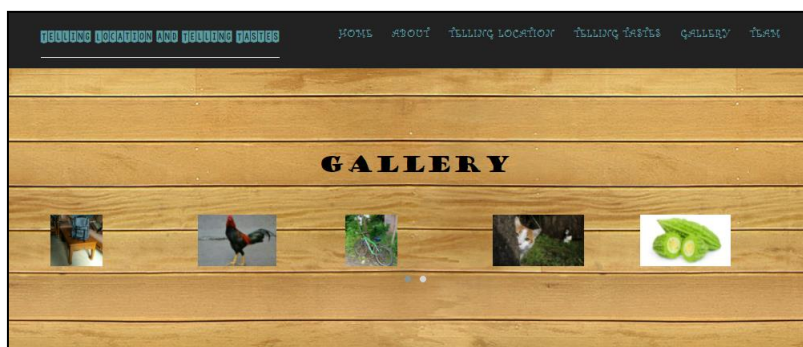


Figure 14. GALLERY menu display accessed on the web



Figure 15. Display of GALLERY menu accessed on mobile web

The last menu is TEAM which displays from the learning media application development team. The display for the TEAM menu is shown in Figure 16.

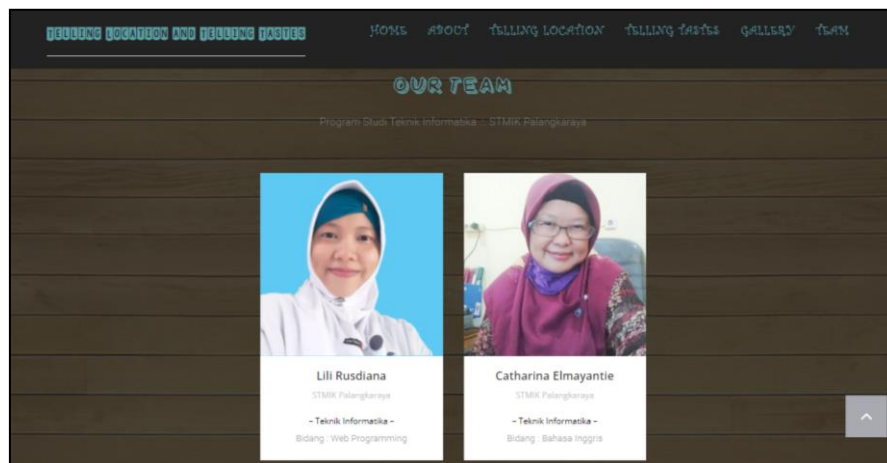


Figure 16. Display of the TEAM menu accessed on the web and mobile web

CONCLUSION

It has been mentioned previously that in this study, the writers designed and developed the web mobile-based learning media of Dayak Ngaju language and English especially on speaking skill. This media is able to be used as an alternative media for elementary school students in learning languages through interesting way because the technology applied in the development of this system is based on web mobile application so that the users are able to access it anywhere and anytime. The vocabulary and sentences displayed on the application are generally material learned at the elementary level such as how to tell location of things or person and describe about taste. This learning media is also equipped with audio and real pictures related to sentences displayed on the screen. But, there is weakness of this new application. This web mobile -based learning media does not cover all the existing words or sentences both in Dayak Ngaju and English. It is only discussed about two learning materials namely telling location and describing taste in line with textbooks of local content subject used by elementary school students.

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