DEVELOPING BILINGUAL SYNCHRONIZED AUDIO FOR ANDROID APPLICATION OF EAST JAVA TOURIST ATTRACTION LEGENDS

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Abstract: The use of audio as an accompanying material is a common practice in material development. The audio material is usually used in conjunction with images or videos. The process of combining audio and images or videos to create learning materials is not hard to do, as there are many tools, both free or paid versions and can be used intuitively. However, it is quite rare to be applied in tourim industry, especially in some attractions in East Java. This research aims to develop bilingual synchronized audio for the android application of tourist attraction legends in East Java. The research was Design and Development Research (DDR) employed the ADDIE model. It was conducted in English for Tourism Industry, State Polytechnic of Malang. This study used interviews and questionnaires as data collection methods. This research results bilingual synchronized audio for the Android application of tourist attraction legends in East Java. The application can be used by users to learn about the legend of Selomangleng Cave, Ngebel Lake, and four folklores of Probolinggo Regency. Moreover, it can be learning material for teachers to teach English especially listening, integrating with other skills such as reading, speaking and writing.

Keywords: Android Application, Bilingual Synchronized Audio, Tourist Attraction Legend

Introduction

The use of information technology nowadays is quite sophisticated and adaptable to many fields, most notably the tourism

sector. According to Musdar, et.al.[1] tourism is one of the sectors that has the potential to become one of the fastest-growing incomes in Indonesia. The growth of tourism in Indonesia is estimated to be 7.2 per cent per year, which is higher than the global average of only about 4.7 per cent annually.[2] According to Mantala,[3] technological advancements make it necessary for people to be able to access a variety of types of information, even if they are limited to using smartphones. Dadape, et.al.[4] developed an application that helps tourists to gather information about tourism objects so they can determine goals more accurately before visiting them.

However, Pedrana states that location-based services represent a new frontier for business objectives since they will provide vital information and communication for business owners while tailoring services to the locations of customers.[5] With services based on information location and delivery that is faster than traditional communication methods. Therefore, information technology is important for the tourism sector.

Out of all the information technology, android is one of the most widely used technologies to facilitate system maintenance through electronic devices like tablets and smartphones. Android is also a popular choice because of its open-source or simple design, which allows developers to easily modify, improve, and distribute the device to other users. According to Maiyana and Priyanta, android is an operating system designed for mobile devices running Linux. The first operating system was developed by Android Inc. and later acquired by Google in 2005.

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[1] Musdar, I. A & Arfandy, H. (2020). Rancang bangun sistem informasi pariwisata Sulawesi Selatan berbasis android dengan menggunakan metode prototyping, SINTECH (Science Inf. Technol. J., 3(1), 70–76. doi: 10.31598/sintechjournal.v3i1.542.

[2] Dengo, F. et. al. (2022). Pengembangan sistem informasi pariwisata berbasis android. Jambura Journal of Informatics. http://ejurnal.ung.ac.id/index.php/jji. DOI: 10.37905/jji.v4i2.15351

[3] Mantala, R. (2017). Pengembangan sistem informasi pariwisata kota Banjarmasin berbasis android. At-Tadbir : Jurnal Ilmiah Manajemen, 1(1), 81-92.

[4] Dadape, J., Jadhav, B., Pranav, G., Seema, V., & Parag, A. (2012). Smart travel guide: application for Android mobile. International Journal of Electronics, Communication & Soft Computing Science & Engineering, 115-120.

[5] Pedrana, M. (2014). Location-based services and tourism: possible implications for destinations. Current Issues in Tourism,17(9), 753-762. https://doi.org/10.1080/13683500.2013.868411

Nowadays, social media, games, online learning applications, video streaming, and educational apps dominate Android applications. This app has a variety of functions, ranging from learning to entertainment. There are a few Android-based applications that are specifically designed for the hospitality industry. This application serves the purpose of assisting travelers who will be travelling, starting with making accommodation and transportation arrangements and ending with selecting the desired vacation spot. For this reason, the tourism operators also need to catch the opportunity. Investing in Android-based promotional media could be the best alternative. One promotional medium that might be used is a local legend or folktales from a particular area. Reading interesting stories can make readers feel curious and want to visit the location. It can increase the popularity of the places.

These days, Android applications are also used in tourism sectors. The Indonesian government also developed an application to support tourism in Indonesia. Kemenparekraf/Baparekraf RI on its website stated that there are five trustworthy and recommended applications which can be downloaded by tourists while traveling. They are Wisata Alam Indonesia, Atourin, Tlusure, and East Java Trip.[6] Each application has its specifications and function. Each app also has some flagship features that provide the tourist's needs such as information on recommended tourist attractions, road conditions/ traffic jam information, recommended itinerary for vacation, and so on. In short, the Android application can be useful if it is developed based on the need.

People usually enjoy nature without knowing the story behind it. Whereas, merging the beauty of nature in tourist attractions and the story can make the places more meaningful. Some of the regencies in East Java that are prospective to be visited are Kediri, Ponorogo and Probolinggo. Those regencies have potential tourist attractions carrying legends or folklore. One of the natural tourist attraction legends in Kediri is Selomangleng Cave. Based on the interview with staff management of Selomangleng Cave, it was found that they need an application to make the visitors easy to get information, not only about the cave formation, but also the story of the cave. There are

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[6] Kemenparekraf. (2023, August 19). Aplikasi terpercaya sebagai referensi berwisata. https://www.kemenparekraf.go.id/ragam-ekonomi-kreatif/aplikasi-terpercaya-sebagai-referensi-berwisata.

many visitors in Selomangleng Cave, but a very limited local guide is available to deliver the story. It makes the visitors only enjoy the cave.

Furthermore, there are also some foreigners coming to visit Selomangleng Cave, but they do not have any information in the English version. Another natural tourist attraction legend in Ponorogo is Ngebel Lake. It was found from the interview with staff management that many people do not know exactly about the legend of Ngebel Lake. Visitors mostly like the view and nature, or even have picnics with their families. In addition, they need promotional media with technology-based, for example, an android application to make visitors easily get information while enjoying the lake for all ages.

It also happens in Probolinggo Regency. The most famous natural attraction that has folklore in Probolinggo Regency is Mount Bromo. Meanwhile, many parts of Probolinggo Regency keep stories or folklore. However, these folklores have not been known by many people, even tourists who come to Probolinggo regency. Besides, they mentioned that they need to have media that are easy to access by smartphone. To conclude, those three regencies need an Android storybook application that can be simply downloaded and opened from their smartphone.

The android storybook applications of Selomangleng Cave, Ngebel Lake, and some parts of Probolinggo are being developed by students of English for Tourism Industry. They create applications for those three places. Those applications contain stories for each tourist attraction which provide pictures and texts. The visitors and common people can read the story with supported pictures. This cannot fulfill the needs of all visitors, especially for those with special preferences and needs. Some people like reading, while others may love listening rather than reading. Thus, developing such a bilingual audiobook can be an alternative to accommodate the needs of the people.

Adding the audio for the text provided does not just simply record the audio and upload it in the Android application. Once the users play the audio, it should be in line with the text provided. This process has not been done lately. It is not an easy way to make the audio the same as the text written in the story. Therefore, this study aims to develop bilingual synchronized audio for the Android application of tourist attraction legends in East Java. By Having a complete feature combination of pictures, text, and audio, it is expected to be opened and installed by prospective visitors, so they are willing to visit the Selomangleng Cave, Ngebel Lake, and some

places in Probolinggo regency. Furthermore, since the synchronized audio is available in two languages, i.e. Bahasa Indonesia and English, it can be a source or exposure for beginner learners to study English.

Literature Review

Audio is the technology that deals with recording, changing, saving, and sending sounds we can hear using electricity.[7] This technology is not something, but it is almost inseparable to our daily activities. Indeed, as we use our computers and smartphones, this technology is practically related to what we can hear, for example, when we play music, watch presentations on video sharing websites, and listen to audio books.

In many cases, audio materials complement other forms of media such as images or texts. This integration enhances the overall sensory experience, providing a multi-dimensional engagement for the audience. For example, audio may accompany visual aids, reinforcing learning through a combination of auditory and visual stimuli. In another situation, audio is frequently employed as a voiceover for video files, which further strengthens the storytelling and emotional impact of the visuals. Therefore, audio is an integral component of multimedia, which combines different types of media, including audio.[8] Moreover, Audio production is not only limited to the music industry but also to other sectors, including the film, podcasting, and video game industries.[9]

In the educational sector, the use of audio materials can significantly support the effectiveness of the teaching and learning process. It can even support independent study.[10] With the development of digital platforms, students can access podcasts, audiobooks, and online lectures, which provide an immersive and flexible approach to acquiring knowledge. As for English language learning, the use of audio supported material will enable students to

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[7] Sheldon, R. (2022). What is audio?. TechTarget. https://www.techtarget.com/whatis/definition/audio

[8] Abdulrahaman, M. D., Faruk, N., Oloyede, A. A., Surajudeen-Bakinde, N. T., Olawoyin, L. A., Mejabi, O. V., Imam-Fulani, Y. O., Fahm, A. O., & Azeez, A. L. (2020). Multimedia tools in the teaching and learning processes: A systematic review. Heliyon (Vol. 6, Issue 11, p. e05312). Elsevier BV. https://doi.org/10.1016/j.heliyon.2020.e05312

[9] Kody, A. (2021). What is audio production?. iZotope. https://www.izotope.com/en/learn/what-is-audio-production.html

[10] Smaldino, S. E., Lowther, D. L., Mims, C., & Russell, J. D. (2019). Instructional technology and media for learning. Pearson.

have options of listening to what they need to learn, instead of reading texts. This will motivate students to learn independently better, as they have an option to suit their learning styles.

Synchronized audio generally refers to the coordination of audio elements with other media, ensuring they play together seamlessly.[11] This concept can be illustrated with captions on video, where the captions must be displayed at the correct time and place so that the audience can get the written information about what is being spoken correctly. If the audio is not synchronized with the captions, it is possible that the text is displayed slower or faster than the time of the audio is spoken by the actors or actresses.

Synchronized audio, however, is not only important for video making, but also for other purposes, including read-aloud application. In this application, a spoken audio track with accurate timing information is usually used to highlight words on the page in time with the spoken audio.[12] It is crucial to clarify that this differs from synthetic text-to-speech. The read-aloud feature utilizes a pre-recorded audio track, providing a more engaging listening experience.

Rouse said that an Android app is a software application which runs in the Android operating system.[13] Built for mobile devices, Android apps are specifically designed for a smartphone or a tablet PC. Users can get these applications through Google Play Store, also widely known as Android App Store, which is the primary marketplace of Android apps. Moreover, users can also download them through multiple Android app-focused websites.

According to Barrey and Crowley,[14] Android apps are organized into four components. These components include activities, which are user-facing and implement display and input capture; services, which operate in the background independently of user activity; broadcast receivers, which respond to system-wide

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[11] Accessible Web. (2023). What is synchronized media? https://accessibleweb.com/question-answer/what-is-synchronized-media/

[12] Jones, K., Macho, Z., & Paige, L. (2018, January 22). Reading aloud: Merging audio and text just got a lot easier. BookMachine. https://bookmachine.org/2015/11/18/reading-aloud-merging-audio-and-text-just-got-a-lot-easier/

[13] Rouse, M. (2020, August 7). Mobile application. Technopedia. What is a Mobile Application? - Definition from Techopedia

[14] Barry, P. & Crowley, P. (2012). Modern embedded computing: Designing connected, pervasive, media-rich systems. Elsevier. https://doi.org/10.1016/C2011-0-05083-4

announcements; and content providers, which enable access to application data by external applications and system components.

Novarlia stated that tourist attraction is the base of tourism itself. She also mentioned that without a tourist destination in a certain area, the tourism there would have major difficulties in developing.[15] Beckkendorf on the other hand, also says that attractions are the core component of tourism. It is called a "tourist attraction" for a reason, which is to attract tourists. Attractions can be considered as the places, people, events, and things that make tourists gaze or be attracted to the destinations. That proves that a tourist attraction not only meant a place, but it could also be the people or even the events or costumes.

Meanwhile, Erislan mentioned that a tourist attraction is anything that has uniqueness, beauty and value diversity that is tangible whether it is natural or even man-made. By so, it could be anything that can be seen by these tourists and attract them to go to that certain place. According to Savchuk, the name legend speaks for itself. He claims that the term "legend" means a certain ancient legend, a story that carries a meaningful message. The legend is also based on a story about certain events that allegedly took place. In some cases, legends could be heard from certain eyewitnesses or "chosen people" who are abel to witness miracles or odd happenings.

Strapparava also claims that legend is considered as a folklore consisting of stories that are plausible enough to be believed which is usually about some rare and exceptional events that supposedly happened to a real person in a real place. Basically, it is a tale of a believable and sort of believable event happening to a certain person or a group pf people. Adding to that, Gilbas mentions that legends are just fully formed narratives that are considered as recapitulations of past experiences, showcasing the identity of a group of people.[16] In other words, sometimes it can be a heritage story that is passed on to create an identity in that group of people. Based on all those statements, Legend is just a genre or folklore that tells a tale about certain believable yet unbelievable happenings that are happening to some people or certain chosen people.

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[15] Novarlia, I. (2022). Tourist attraction, motivation, and prices influence on visitors' decision to visit the cikandung water sources tourism object. Budapest International Research and Critics Institute-Journal (BIRCI-Journal), 5(3).

[16] Gilbas, S. A. (2018). Structural and motifemic analysis of legends. Green Publishing House. Journal of International Academic Research for Multidisciplinary (JIARM) Vol, 6(1), 56-64.

Method

This study used a design and development research approach. It studies processes of design, development, and evaluation with the goal of providing empirical data for making or improving instructional or non-instructional products and tools.[17] This design was chosen since the coverage of the research is to develop bilingual synchronized Audio for the android application of tourist attraction legends in East Java. These bilingual synchronized Audio is used to equip written stories in android application of tourist attraction legends developed by students as their final project. This design and development research employed the ADDIE model proposed by Dick, Carey, and Carey. There are five stages in this model, analysis, design, development, implementation, and evaluation.

The analysis stage enables the researchers to determine the gap's potential cause. At this point, the researchers conducted a needs analysis by interviewing and sharing questionnaires to students working on their thesis report writing. Design stage allowed researchers to create a plan about the audio that was developed, based on the result of need analysis. They created a concept about the content, the way to synchronize them with written stories, and the way the audio was put in android applications. Those were done by the researcher team.

In development researchers produced, synchronized, and validated Audio. When the audio is completely input and synchronized, a media validator reviewed it. The lecturer from the English Department was the language validator. Meanwhile, the media validator was an IT practitioner or lecturer of English department. The next stage is implementation. This stage accommodated the researchers to use the product to target users. In this stage, researchers distributed questionnaires to students, tourist attraction management, and visitors. The results of the questionnaire were the basis for researchers to evaluate the synchronized audio for android application. The final phase of this research is evaluation, researchers evaluated the processes and products' quality at this point, either prior to or following deployment.

This research was conducted in English for Tourism Study Program, Politeknik Negeri Malang. The research was done in April to October 2024. The population of this research is tourist attraction

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[17] Richey, R. C., & Klein, J. D. (2014). Design and development research. Handbook of research on educational communications and technology, 141-150.

legends in East Java. Meanwhile, the samples are Selomangleng Cave in Kediri, Ngebel Lake in Ponorogo, and four Folklores of Probolinggo Regency. The primary methods for obtaining data were interviews and questionnaires. During the analysis step, an interview and questionnaire took place. The purpose of the interview and questionnaire is to gather information about the need for bilingual synchronized Audio for android application of tourist attraction legends and the necessity of its development. The implementation stage used of the questionnaire. User opinions on synchronized audio content, voice, and language usage were gathered using a questionnaire. The media validity of the audio was also verified through the usage of the questionnaire. It was given to the media or IT validator.

Result and Discussion
Result

The results of this research consist of development stages done by the researchers. each step conducted including analysis, design, development, implementation and evaluation. Before deciding to develop bilingual synchronized audio for tourist attraction legends in East Java, the researchers distributed questionnaires and interviewed students working on their thesis report on developing android applications for tourist attraction legends in East Java. There were three students as the respondents in the analysis stage. They developed android applications based on the legends of Selomangleng Cave, Ngebel Lake, and four Folklores of Porobolinggo Regency namely the legend of Mount Batok, Kasada ceremony, and Crowing Rooster in Jatisari Village. There were five questions addressed to the students regarding the difficulties in developing android applications for tourist attraction legends. One of the questions was about whether students have been aware of the synchronization between audio and text highlighted when the audio played. The fact was that students did not know how to synchronize audio with the text highlighted.

Furthermore, based on the results of interviews with Wafa Syahidah, Rizky Aulia Nurfajri, and Rika Rahmawati, it was found some difficulties in developing an android application for tourist attraction legends they were working on. It is because they have never experienced and dealt with technology before, especially the software to create an android application.

R: *"Apa tantangan kalian dalam membuat cerita legenda berbasis android yang sedang kalian kerjakan?"*

S1: Banyak Ma'am, karena kita belum pernah membuat cerita dalam bentuk aplikasi android. Jadi ini pengalaman pertama saya."

S2: "Sama dengan Wafa Ma'am, kalau untuk menulis cerita dan menjadikan dalam dua bahasa mungkin sudah bisa ya Ma'am. tetapi membuat aplikasi nya itu yang kami belum memahami."

S3: "Sama dengan Wafa dan Rizky Ma'am, ini pengalaman saya yang pertama membuat aplikasi, jadi harus belajar dulu dari awal."

R: "Lalu, bagian mana yang kalian anggap paling sulit?"

S1:"Kami harus merecord satu2 audio nya, dan menyelaraskan dengan teksnya itu saya tidak bisa Ma'am.

S2: "Mengepaskan antara audio dan teksnya Ma'am agar sinkron itu kami tidak bisa. Jadi, kami membutuhkan bantuan untuk itu Ma'am. "

S3: "Sama Ma'am, saya tidak punya gambaran gimana caranya biar audio yang diputar itu bisa sesuai dengan teks yang sedang dibaca oleh pengguna"

They also mentioned that they could not synchronize audio with the text highlighted. It was the most difficult part in creating an android application story. Therefore, it was needed to synchronize the audio and text for the android application story they created.

The second stage in developing bilingual synchronized audio for tourist attraction legends in East Java is design. In this step, researchers created a plan by deciding the software used to create an android application and to synchronize the audio with the text. Researchers chose Reading App Builder software to create an android application and aeneas to synchronize the audio with the text highlighted.
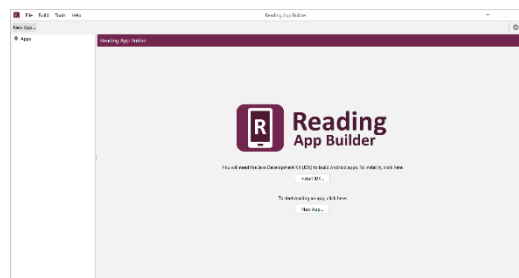

Figure 1.

After that, researchers set the audio format that was .mp3. In this stage, researchers also decide the text format that was used in the android application i.e. MS.Word.

The next stage in developing bilingual synchronized audio for tourist attraction legends in East Java is development. There were seven things to do in the development stage. First, researchers compiled all audio recorded by students. There were ten folders audio for three android application stories of the Selomangleng Cave legends, Ngebel Lake, and four Folklores of Porobolinggo Regency namely the legend of Mount Batok, Kasada ceremony, and Crowing Rooster in Jatisari Village. The audio was in two languages, Indonesian and English. Since all audio files were still in .m4a, researchers should convert them one by one to .mp3 using *online audio converter*.
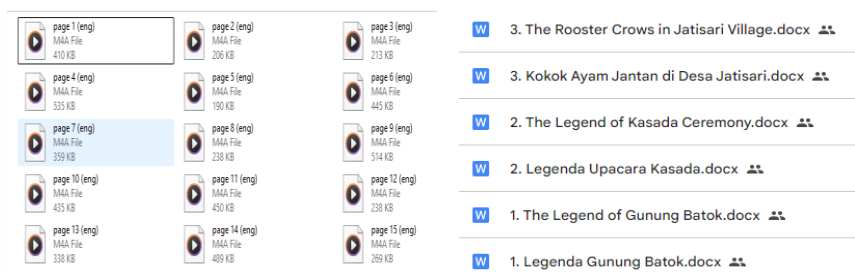

Figure 2.

After compiling the audio, researchers collected text files that have been written by students. Each text that appears in the application should be in line with the audio. If there are two folders of audio files in Indonesian and English, there should also be two text files available for the application. Next, researchers uploaded all audio files and text into the application.
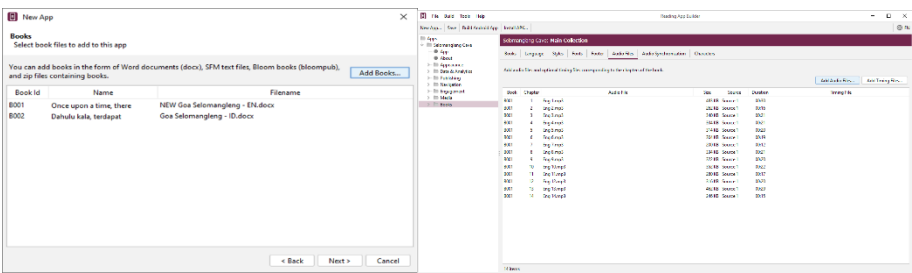

Figure 3.

After all the audio and text had been uploaded into the application, researchers started to synchronize the audio and text. They decided to use synchronization using aeneas. When synchronizing using aeneas, researchers should input which punctuation characters mark the end of phrases, for example., ?, !, :, ;, , as the symbol that the phrases ending with those marks would be highlighted when the audio played. It was done twice since the android application are bilingual or in two languages, Indonesian and English.
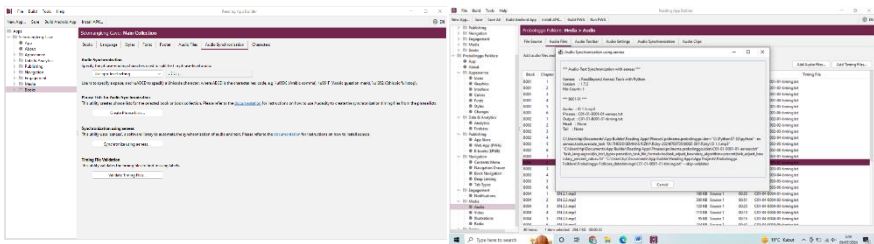

Figure 4.

The last step in the development stage was validating the bilingual synchronized audio that has been set in an android application. Researchers asked Mr. Andi Reza Maulana, S.Pd., M.Pd to become IT validator. He is an English lecturer as well as an IT practitioner. There are five questions regarding the android application and synchronization between audio and text. There were three applications validated. The result above shows that bilingual audio of Selomangleng Cave, three folklores of Probolinggo, and Ngebel Lake have been well synchronized with the text highlighted in android applications. The audio butten also works well.

The fourth stage in this research is implementation. In this stage, researchers did field testing to target users. They distributed questionnaires to ensure that three android applications with bilingual synchronized audio have met their expectations. It was distributed to android users, local and foreign tourists.

it can be concluded that 75.5% of respondents strongly agreed that the story about the legend of Selomangleng Cave, Ngebel Lake, and Probolinggo Folklore can be easily understood can be understood easily because the storyline is coherent and clear, and because the text in the application can be read clearly, which will provide comfort for readers. Additionally, 73.5% of respondents agreed that the application is easy to use, with no lag or error, and that all features

that it has are accessible without being interrupted. At the end of the question, the researcher asked about the satisfaction of the users of the application after using it. A total of 72.9% of the people who responded strongly agreed that they were very satisfied using the application, which indicates that the application is simple to use and does not confuse its users.

Discussion

The purpose of this study is to develop bilingual synchronized audio for the android application of tourist attraction legends in East Java. The development of such application is in line with research done by Wahyudi & Fuad;[18] Ramitha, Julianto, & Fathurahmani;[19] and Dewi & Setiawan.[20] Users of the application can learn about the four folklores of Porobolinggo Regency, Selomangleng Cave, and Ngebel Lake. Those three regencies have their own uniqueness and nature beauty. Researchers worked on five different stages of development: analysis, design, development, implementation, and evaluation as it is stated by Dick, Carey, and Carey. The researchers discovered issues in creating Android-based story applications during the analysis stage. The android application refers to this research is software specifically designed for mobile devices such as smartphones or tablet PC run by android operating.[21]

The researchers came up with a strategy to coordinate the audio and the highlighted text throughout the design phase. Before the audio and text could be set and played together seamlessly,[22] three important issues had to be resolved. To create the Android application and synchronize the audio and text, the researchers first

[18] Wahyudi, M. H., & Fuad, N. (2021). Pengembangan aplikasi Foichen Apps (Fairytale of Indonesian Children) berbasis android. Prosiding SNST, 11. doi:http://dx.doi.org/10.36499/psnst.v1i1.5151

[19] Ramitha, Julianto, V., & Fathurahmani. (2015, Juni 22). Aplikasi cerita rakyat (Folktale) nusantara berbasis android. Jurnal Sains dan Teknologi, 1(1). Retrieved from
https://web.archive.org/web/20210814054158/https://jsi.politala.ac.id/index.php/JSI/article/download/96/46

[20] Dewi, N. P., & Setiawan, I. K. (2020, Oktober). Pengenalan cerita rakyat I Gede Basur melalui cerita berfigure berbasis android. Jurnal Nawala Visual, 2(2). Retrieved from https://jurnal.idbbali.ac.id/index.php/nawalavisual

[21] Rouse, M. (2020, August 7). Mobile application. Technopedia. What is a Mobile Application? - Definition from Techopedia

[22] Accessible Web. (2023). What is synchronized media? https://accessibleweb.com/question-answer/what-is-synchronized-media/

chose the software. To create the app, they went with Reading App Builder, and Aeneas was utilized to synchronize the audio. They decided to use the.mp3 format for both English and Indonesian audio meaning that researchers implemented some components of multimedia.[23]

It was necessary to record the audio for every single file. Audio produced can be music or film, but this audio contains stories of each legend.[24] The Microsoft Word text format for the Android application was also selected by the researchers. They decided to write the stories that are likely to be believed by people, belongs to certain ancient legend carrying meaningful message, and served in narrative way the for the application.[25] Each story of a language needed to be put in its own document. This is intended to make text highlighted run in time and accurately with the spoken audio.[26] The audio was recorded, verified, and saved by researchers during the development phase[27]. They collected the written stories, got ready for audio production, recorded the audio based on the stories, and edited it all according to the design stage plan. Additionally, the audio was embedded into the Android application and synchronized with each page by the researchers.

There are three products developed in this research. Those are android application of Selomangleng Cave in Kediri, three folklores of Probolinggo, and Ngebel Lake in Ponorogo. By the existence of those android applications, everyone can access and download. It can be beneficial since it can attract visitors to come to those places and unintentionally, it can affect those attractions

[23] Abdulrahaman, M. D., Faruk, N., Oloyede, A. A., Surajudeen-Bakinde, N. T., Olawoyin, L. A., Mejabi, O. V., Imam-Fulani, Y. O., Fahm, A. O., & Azeez, A. L. (2020). Multimedia tools in the teaching and learning processes: A systematic review. Heliyon (Vol. 6, Issue 11, p. e05312). Elsevier BV. https://doi.org/10.1016/j.heliyon.2020.e05312

[24] Kody, A. (2021). What is audio production?. iZotope. https://www.izotope.com/en/learn/what-is-audio-production.html

[25] Gilbas, S. A. (2018). Structural and motifemic analysis of legends. Green Publishing House. Journal of International Academic Research for Multidisciplinary (JIARM) Vol, 6(1), 56-64.

[26] Jones, K., Macho, Z., & Paige, L. (2018, January 22). Reading aloud: Merging audio and text just got a lot easier. BookMachine. https://bookmachine.org/2015/11/18/reading-aloud-merging-audio-and-text-just-got-a-lot-easier/

[27] Sheldon, R. (2022). What is audio?. TechTarget. https://www.techtarget.com/whatis/definition/audio

development.[28] Furthermore, those android application also serve activities allowing users to learn English independently and culture at the same time as it provides pictures for young learners.[29] English audio and text highlighted can be exposure to English learners. Teachers can also implement it as materials to teach English for basic levels. Nevertheless, the drawback may occur since it only users to read short stories rather than complete version. Smartphones that do not support android system such as iPhone cannot download these applications.

Conclusion

There are three products developed in this research. Those are android application of Selomangleng Cave in Kediri, three folklores of Probolinggo, and Ngebel Lake in Ponorogo. By the existence of those android applications, everyone can access and download. It can be beneficial since it can attract visitors to come to those places and unintentionally, it can affect those attractions development. Furthermore, those android application also serve activities allowing users to learn English independently and culture at the same time as it provides pictures for young learners. English audio and text highlighted can be exposure to English learners. Teachers can also implement it as materials to teach English for basic levels. Nevertheless, the drawback may occur since it only users to read short stories rather than complete version. Smartphones that do not support android system such as iPhone cannot download these applications.

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