

**DEVELOPING AN ANDROID BILINGUAL TALE BOOK OF
THE ORIGIN OF NGEBEL LAKE**

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ABSTRACT

Android is a famous operating system, and that can run various types of applications. Android applications can be developed to meet various needs, including to disseminate information. In Ponorogo, there is a famous tourist attraction named Ngebel Lake. This place has an interesting story, but it is not yet known to many people. Therefore, an Android application can be used to introduce this place to more people. This research is design and development research that used the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) development model. The development of this Android bilingual tale book was validated by language and IT experts. The result of the field testing an android bilingual tale is user-friendly and easy to use. The text of the story can be read, and the application has found adjustment. The audio is clear and the application is responsive.

Keywords: *Android, Bilingual, Tale*

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INTRODUCTION

According to (KBBI, 2012), a tale is a story that never really happened. Indonesia has many fairy tales from each region. To preserve local fairy tales in the technological era, many of them are being replaced with digital versions accessible through Android-based smartphones. Android applications can be developed to meet various needs, including to disseminate information. The use of the Android application to disseminate information can be useful to Ponorogo, a regency in East Java famous for its title "Bumi Reog", a place where Reog dance originates. Ponorogo has many tourist attractions, including a very famous natural site, namely Ngebel Lake.

Ngebel Lake has an interesting tale about its origin which only a few people know about due to limitations in finding the information. Moreover, the management has not yet provided media to introduce the lake to the public. Based on the interview with a representative of the Department of Culture, Tourism, Youth, and Sports, it was found that an Android application can be an alternative media to introduce the tale of the origin of Ngebel Lake to attract more people to visit the lake. With the application, tourists will know and read the tale on their Android smartphones. The preliminary research above confirms that there is a need for the application. The application can introduce Ngebel Lake as a tourist attraction through the tale of the origin

of the lake. Because both domestic and international tourists may visit Ngebel Lake, it is decided that the application should contain a bilingual tale book about the origin of the lake.

LITERATURE REVIEW

Ardani, Dermawan, Arthana, & Putrama (2020) who developed “I Sangging Lobangkara” Balinese folklore as an Android-based game, the current successfully built an Android application using the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model.

METHODOLOGY

Research Design

This research adopted Design and Development Research by Richey & Klein (2014). Design and Development Research is the research to make an experienced-based systematic study design, development, and evaluation processes for creating instructional and non-instructional products and tools and new or added models that determine their development (Richey & Klein, 2014).

The use of design and development research because this research focused on developing an Android bilingual tale book about the origin of Ngebel Lake. The development consists of five stages: analysis, design, development, implementation, and evaluation.

Data Collection

The data collection methods for this research product were interviews and questionnaires. The researcher interviewed the staff of the Department of Culture, Tourism, Youth and Sports Ponorogo Regency to get the data needed for this research. The researcher interviewed the head of the tourism industry and destination sector to obtain exact data research about the tale of the origin of Ngebel Lake. As for the questionnaires, the researcher distributed them to 25 respondents in the analysis stage and 52 respondents in the evaluation stage. The questionnaires were made in Google Forms and distributed using a social media platform.

DEVELOPMENT RESULT AND DISCUSSION

In this analysis step, the researcher used several methods to collect the data, namely: (1) interview, (2) questionnaire. The data were collected through interviews with the Department of Culture Tourism Youth and Sports Ponorogo Regency historian and questionnaires to the selected respondents. The first interview was on December 15 2023 with Mr. Sugeng Prayitno to know whether an Android application was needed. He mentioned that Ngebel Lake had an interesting tale but it was not popular among the public. The researcher offered to create a bilingual story based on Android so everyone could access it easily and the tale could help promote the tourist attraction.

In this design stage, there were two languages used to tell the tale, Indonesian and English. The application was planned to contain easy-to-understand languages, have clear illustrations, have attractive designs, be easily accessible and free, have buttons that function well, have customizable fonts, and have quality audio. The minimum Android version to run the developed application must be a minimum of version 5.0 (Android Lollipop).

In this development stage, after the narrative is paraphrased and translated, the next step is to create illustrations based on the story using Ibis Paint X. Recording the audio using voice recorder in the smartphone. the researcher developed an Android application using Reading App Builder. In this step, the researcher put the contents that were already prepared. Before inputting the contents into the Reading App Builder application, the researcher put the illustrations and narrations into two Microsoft Word files, one in Indonesian, and another one in English. The content and synchronizing of the audio were done, and the researcher clicked the “Build Android App” menu to build the application.

In this implementation stage, this Implementation stage was conducted in June. In this implementation step, the researcher distributed the field-testing questionnaires to visitors of Ngebel Lake. The field testing was conducted on 4-7 June 2024. The purpose of the field testing was to obtain responses from the users of an Android bilingual tale book of the Origin Ngebel Lake

to determine whether the application is suitable for implementation.

The researcher distributed the questionnaires via an online Google Form containing 10 questions for participants to complete. Referring to the result of the field testing, shows that the users of the Android application is quite satisfied because the application can introduce Ngebel Lake to the user through the tale story.

Evaluation

In the evaluation stage, the researcher obtained suggestions for application improvement based on the results of the field testing conducted on 4-7 July 2024. In the last suggestion, the respondent suggested a scroll-down feature. This could not be implemented because the application used a different standard method where the user could move from one page to another by sliding the pages from left to right to the other around. The scroll-down feature would be implemented automatically when there was a long text on a page. Because the narration on each page was not too long, there was no need to scroll down the page to read the narration.

Discussion

This research developed an Android application of the bilingual tale book of the origin of Ngebel Lake. In the process of developing the application, the researcher followed the five-step process outlined by Richey and Klein (2014). These steps include analysis, design, development, implementation, and evaluation.

In the analysis phase, the researcher gathered information from the historian at the Department of Culture, Tourism, Youth, and Sports in Ponorogo Regency through interviews. Furthermore, questionnaires were distributed to selected respondents to perform an initial need assessment.

In the design phase, the researcher decided on the two languages used, Indonesian and English. The application would contain texts, images, and audio narrations. The application was designed clearly, including the language used, accessibility, illustrations, menus, fonts, and audio. The application was also meant to run only on Android devices.

In the development stage, after the narrations of the tale were obtained, they were paraphrased and translated into English. Then the researcher used Ibis Paint X to illustrate each character to accompany the narrations. The next step that the researcher did was recording the Indonesian and English versions of the tale by using a voice recorder on the researcher's phone. After the audio narrations were completed, two types of files were integrated into the Reading App Builder application. They were the Indonesian and English text narrations in two separate Microsoft Word files, in which the illustrations have been included, and the audio files, in Indonesian and English. After the application was successfully built using the Reading App Builder, two experts were involved in validating the product.

During the implementation stage, the field-testing questionnaire was distributed. A total of 52 respondents, both domestic and international respondents, were participating. The feedback, comments, and suggestions gathered from this questionnaire were used for the final evaluation phase.

In the evaluation stage, based on the questionnaires distributed at the end of the implementation stage, it was found that 63.5% of the respondents strongly agreed that the text of the story could be read clearly, and 50% of them strongly agreed that they were satisfied with the use of the application. Some improvements to the application were implemented based on relevant feedback and suggestions.

As (Habibi & Karnovi, 2020) suggested, the current research confirmed that an application is a pre-built program designed to execute various commands for problem-solving using specific data processing techniques on a computer or smartphone. Its purpose is to achieve more precise results aligned with the application's intended goals. Technically, the application developed in the current research is based on Android, which was mentioned by (Juansyah, 2015) is a Linux-based mobile smartphone operating system that combines the operating system, middleware, and applications.

CONCLUSION

This research is about developing an android bilingual tale book of the origin of Ngebel Lake. To develop this research, the researcher used the research design by Richey and Klein (2014) with the ADDIE model. The ADDIE model (2014) consists of five stages that are followed to develop the product in this research. These five stages are Analysis, Design, Development, Implementation, and Evaluation. In the analysis the researcher used questionnaires and interviews to collect the data for the research. In the design stage, the researcher uses bilingual language, that is Indonesian and English. The application contains narration, illustration and audio. The development stage, translating the narration after making the illustration and recording the voice use smartphone. Use Reading App Builder to develop an Android application by synchronize the voice first and after the step done click the button in the Reading App Builder to build the application. The current research successfully developed an Android application of the origin of Ngebel Lake. The results of the questionnaires distributed to 52 respondents indicated that most of the respondents strongly agreed that the application met the criteria of a good application. This application can be used by Android-based smartphone or tablet users for free. The application can be downloaded at <https://bit.ly/applicationoftelagangebel>.

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