

# Game Development for Indonesian Language Evaluation Materials in Elementary Schools

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## ABSTRACT

The purpose of this literature review is to determine the level of visibility of the game based on Mobile Gaming which provides opportunities for elementary school students to evaluate Indonesian learning in elementary schools with games from Android Apps. The results of this study are (1) the development of Games applications with the Android Operating System can be used in the learning environment, (2) learning evaluations can be applied to Indonesian Language in Primary Schools while still in an area affordable by the spare part device, and (3) Learning application development is more widely used by paying attention to user experience, ease of users in application development. The conclusion of this study is that the Android Operating System-based Game can be utilized in areas that are affordable by spare parts. Suggestions from this study are that more Android games are taught in Indonesian learning in High Class.

**Keywords:** *Android Apps, Mobile Gaming, Android Operating System, Language Assessment*

## 1. INTRODUCTION

The growth of information and communication technology gave birth to a variety of opportunities to develop learning processes that provide enough space for application developers to develop applications for the development of the Android platform. Application development in Android Ecosystem provides opportunities for developers to develop applications that are in line with the ideas they have. With a basis for the Open Sources control system, for the application development process, each application developers develop applications-based development despite touching on the technical aspects and aspects of the mastery of teaching materials. Sharma, et al (2017: 10) argues for mastering application development, a Apps Developer despite mastering basic knowledge related to application development, meaningful in User Interface and User Experience which is the basis of thinking about insightful behavior on the use of android applications.

To take advantage of Android-based applications, an individual even has experience and knowledge in developing applications and platforms that have benefits for users. Casino, et al (2015) argues that the development of android applications that pay attention to usefulness to users, an application developer even though developing applications that are closely related to the development of skills that at the same time provide

opportunities for application developers to design applications that have usefulness to users of the application. To develop the application requires mastery of the User Interface that surrounds the display on the other side. User Experience encompasses the improvement of the skills of a developer to adjust to the developments that occur in his environment.

Schmalstieg (2016: 3) suggests that User Interface - based development has the opportunity to develop various opportunities that have benefits on the basic skills of an application developer. To develop applications, it is necessary to have insight into design knowledge from the displays in the application. The process of designing has the benefit of the existence of basic knowledge that accompanies each process that accompanies the basic knowledge of the application. To develop the application, the user interface is developed based on the skills of a programmer in carrying out coding activities that are useful in improving the skills of an individual in developing strategic steps.

## 2. ANDROID DEVELOPERS FOR MOBILE GAMING IN ELEMENTARY SCHOOLS

DaCosta (2018: 6362) states that applications are useful even though they pay attention to the concept of developing Android-based Mobile applications that have a view on user experience. In this case, the concept of

developing instructional materials despite taking into account the basics of application development that touches on the improvement of the capabilities and skills and the ease of the users of the application. To take advantage of the application, it is necessary to use criteria that are useful in improving the ability and skills to measure knowledge and skills to make it easier for users of the application in terms of facilitating application design that adapts to the increase in basic knowledge of each application developer. To develop knowledge, basic knowledge is needed in developing knowledge lines that have benefits.

Palomo-Duarte, et al (2016: 53) states that developing applications, the basic knowledge that needs to be possessed is the skill to elaborate on the basic knowledge that accompanies each application user. In developing applications, programs that develop applications even though they have opportunities to develop application design skills that benefit the improvement of basic knowledge of the application developers themselves. To develop the application of an application developer even if invited to work in a unified whole, in this case application development is useful in increasing an individual's basic needs and increasing knowledge lines that benefit the utilization of application development that provides opportunities for application developers for knowledge sustainability the basis that accompanies the process of developing applications based on Mobile Devices, more specifically related to Android-based Games.

DaCosta (2018: 6361) states that Mobile Gaming in the Android Operating System has the opportunity to design the steps obtained to develop the characteristics of each application development process. Android is seen as a multiplatform operating system that provides opportunities for users to develop applications openly followed by the development cycle developed by Android Ecosystem label that provides application development opportunities with open source (Open Sources). In this case, the application developed in the Android Operating System comes more from the Open Sources application but there are also application developers that utilize Android as part of Closed Sources based application development that only those application developers understand the application development process.

### **3. ANDROID OPERATING SYSTEM ON GAME DEVELOPMENT IN ELEMENTARY SCHOOL**

According to Palomo Duarte, et al (2016: 54), developing an application in the Android Operating System, developing application shortcuts (Short Cut) even though it was developed based on Cloud Computing. To develop this application, it is necessary to develop applications that provide benefits for increasing the

ability and skills to adjust to the environment. To develop applications in the Android Operating System, it is necessary to develop applications based on reliable sources. Another thing that needs to be calculated in the application development process is financing that takes longer. The funding process for application development can be done by means of Fund Raising, and / or by attracting Commercial Adds in the application development process. Another thing to note is the withdrawal of fees from each application development process that can use features in E-banking.

DaCosta (2018: 6362) states that the development of Open Sources based applications is an application that is designed based on sources that can be redeveloped. Resources developed despite developing data lines and compilation of knowledge possessed by application developers who have usefulness in the application development process. In this case, application development has more use in the development of life-based skills, which is based more on the code opened to be applied to the application developer process. For the application development process, it is necessary to develop linkages between applications and users. This process can vary between application developers.

According to Palomo Duarte, et al (2016: 52), with the Open Sources -based development process, the Closed Sources -based application development process involves more companies. The spirit that is developed is more on royalties and patent development (Copyright and Editing Rights) from an application. Closed Sources based application development also has the opportunity to be developed dominantly, in the sense of a comprehensive and consistent development force. In this case, the development process despite taking into account the process of further application development and overall consistency. In the application development process, the thing that despite being considered is a comprehensive and consistent development process. Besides this, skill enhancement despite paying attention to the principle of sustainability of an ecosystem in the behavior system of an Operating System.

Dondlinger (2015: 9) states the process of developing an operating system, a process for creating even though the design and design process is prioritized. This is what despite being considered in the development of Mobile Gaming. In this case, the process of developing Mobile Gaming even though it focuses on developing individual behavior where the application is developed. For the application development process, it is necessary to develop applications that have benefits in terms of developing a comprehensive range of knowledge. To develop applications, in this case the application development process has usefulness in the application development process related to the compilation of knowledge and the basics of the existence of a comprehensive application. Another thing that, although

focused in the application development process, is the connection with skills in developing applications related to the world of education.

Dondlinger (2015: 9) states that Mobile app has an opportunity, especially if it is associated with the Playground Project which is currently being developed simultaneously by the Information and Communication Technology community. In short, Playground Prospect is a form of community control over simple game-making techniques. To do the Playground Project, an individual is taught how to create a simple game by involving elements who play in the development project. In the Playground Prospect application, users of the application are encouraged to be able to utilize applications that encourage simultaneous use of various applications that are driven more by basic skills in making applications.

This is the key point of the existence of the Playground Project application. For this reason, the use of the Prospect Playground application is more driven by the skills of an application developer in developing ideas to be realized in the game. Basically, the use of games in the playground Prospect caused more by the use of individual behavior. Kim (2016: 142) stated that Playground Prospect-based applications are more developed in places that have special abilities in terms of developing skills and quality of self for the continuity of various knowledge that is arranged in the development of game-based applications both directly and indirectly. In the case of developing Mobile-based applications, the overall is more widely used as the basis for developing Mobile applications. In this case the skills and abilities of an application developer are more widely used to establish abilities and skills which in turn have the ability to develop basic skills and skills that predominantly provide opportunities for application developers to develop game applications in networks that provide benefits in the application development process to front.

Hussain, et al (2017) states that the game development process in the network is more widely used in the form of skills development and the ability to adapt to the skills of an application developer in terms of developing various backgrounds according to the development process to focus more on developing User Experience than developing based User Interface in which there are opportunities to develop creativity . This has the meaning of increasing skills and ability to adjust the abilities and skills in compiling data and combined with various backgrounds to ultimately provide opportunities in developing applications that provide benefits to improving skills to adapt to the environment.

#### **4. USER EXPERIENCE IN DEVELOPING ANDROID-BASED GAMES FOR INDONESIAN LANGUAGE EVALUATION IN PRIMARY SCHOOLS**

Hussain, et al. (2017) states to improve basic skills and skills that help to increase self-confidence and individuals as developers of qualified learning innovations. In this case, the skills to develop skills to adapt to this environment and feelings with the environment. In this case useful learning must be related to an individual's ability to transform ideas that have their own abilities and skills to transform ideas and individuals with the environment. In this case, the skills to innovate ideas and ideas are more related to the development of applications and ideas which in turn provide opportunities for individuals to transform themselves and ideas on the environment that opens opportunities to make these individuals as application developers who have opportunities to develop innovation and technology which in turn opens up opportunities for skills and innovation development.

Doshi, et al (2015: 136) states this, increasing the skills in doing innovation has a strategic position in terms of developing ideas and linkages with the environment which in turn encourages the individual to transform himself and his environment. The essence of evaluation is measuring the things that have been achieved and making predictions about events that occur in the future. In evaluating learning, an individual is faced with the ability and skills to make changes and transform ideas into a unified whole. In addition, the ability and skills to do a combination of educational ideas become dominant along with the pace of the times that requires an evaluation that is accommodating to the needs of students. Educational games can not only be used for learning, but educational games can also be used in the process of developing student learning evaluations. To conduct the evaluation process, a student is not only evaluated with cognitive skills but with the use of skills that are more competent in the ability to transform ideas and ideas in the form of a real program for the environment.

Hussain, et al. (2017) states that carrying out this process of individuals is taught even though the development of the learning process that encourages the improvement of the quality of themselves and the individual in order to become a person who has the skills and abilities in terms of developing a meaningful learning process in increasing the ability to encouraging the improvement of the individual's ability in terms of taking actions that have opportunities to develop themselves and the environment which are the results of the performance of the development learning process from the learning process carried out consistently and measurably in addition to developing the process that involves all elements of the learning participants. Another thing that

is related to the learning process is the development of the ability to conduct self-evaluation and a combination of ideas. This is one of the efforts to improve design capabilities in evaluating the processes that occur among researchers.

Doshi, et al (2015: 137) states that the development of the evaluation process requires improvement of evaluation programs that are useful in improving the ability and design of oneself and the environment. In addition, there is an increase in evaluation and on the other hand there is an increase in skills in terms of conducting self-evaluation and other individuals that give rise to an increase in skills and skills in conducting evaluations. Indonesian Language Learning in Elementary Schools even though associated with the improvement of skills to carry out the ability and skills to carry out an assessment of the steps arranged in the development of learning evaluation. Another thing that despite being considered is to carry out skills upgrading and the ability to design meaningful learning processes in improving the quality of learning itself. Another thing that is related to increasing the ability and skills is the quality of the evaluation of learning itself, which prioritizes the ability to design the learning process that prioritizes the evaluation process compared to the process of developing character education.

Doshi, et al (2015: 135) states that related to the improvement of self-quality is the improvement of skills in designing the quality of learning that touches on the development of learning that touches on the improvement of the individual's abilities and skills in developing steps that give benefit to the individual's ability in compile learning creativity. In this case there is a process of developing creativity that puts forward the process of learning evaluation related to the improvement of self-ability in developing the ability to do design on various facts that occur in the field. In this case, the skills to compile ideas become easy with the times, which in this case increases the development of the learning process.

Doshi, et al (2015: 136) states the development of evaluation, it requires the quality of Indonesian language material in elementary schools that have the opportunity to process education games. In this case, increasing the skills to develop an evaluation framework even though emphasizes the concept of user experience experienced by the learning participants. In the concept of user -based experience learning, even though a student is taught to evaluate the processes that accompany the stages of learning. To carry out the learning process, it is necessary to increase the skills and ability to develop the skills that accompany the improvement of fundamental skills that are meaningful in increasing the individual's ability to carry out evaluations of Indonesian language learning in elementary schools.

## 5. CONCLUSION

To compile a learning evaluation framework, the main design is needed, in this case increasing the abilities and skills that accompany the individual to transform ideas and ideas which in turn provide opportunities to improve skills and skills in developing ideas and evaluation shortcuts.

Besides that, the skills to compile ideas become dominant along with the development of the times that make these individuals have the opportunity to compile works that have benefits for the sustainability of these individual results.

## 6. SUGGESTION

In this case, the work of the individual even though it is developed optimally and comprehensively to produce work for the continuity of the knowledge that is meaningful in enhancing the abilities and skills of the individual in developing a framework of propositions that are closely related to the environment. Indonesian learning in elementary schools is more humane if using Educational Games that are in the Android application. This is a combination of the main ideas that accompany individual diversity, especially related to increasing the ability to adjust abilities and skills. In this case, evaluation of learning in Indonesian can be done by developing educational games.

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