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MALUKU PROVINCE INTRODUCTION APPLICATION USING ANDROID-BASED SMARTPHONE

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ABSTRAK

The fort as a place that can be used as a historical source can be utilized as much as possible by utilizing existing technology so that the functions and benefits obtained are more optimal and efficient. Often when you are in a new place and need information about the place, many people such as people outside the area or local people have difficulty asking where or to whom. In Maluku province, there is a historical fort that the general public should know about the historical information of the fort so that they can take advantage of it.

It will be easier if there is an application that can provide information on historical forts in Maluku province, which are presented in the form of images, text, and video. and ADT (Android Development Tools) to implement the application design into an android application. *Keywords: History, Benteng, Maluku Province, Information, Android*

Introduction

Maluku Province is one of the provinces located in eastern Indonesia. Maluku province has abundant natural resources. The influence of geographical location and history also makes Indonesia have a variety of diversity, both in terms of different ethnicities, languages, religions, customs and cultures as well as various kinds of forts, historical monuments and so on.

Currently, cellphones or mobile phones have developed from tools to communicate only with telephone and SMS services to become very multifunctional communication and information media devices with operating systems and developer support, known as smartphones. The presence of smartphones allows users to enjoy various applications made by developers to facilitate access to communication or information to carry out and support various activities.

At this time many people have made applications that help users of these applications get the information they need quickly and accurately, and users of these applications have proven to be very helpful for users in obtaining information and completing their tasks. However, based on the author's review on the Android Market (a website that provides android applications) there is no application that provides information about forts in Maluku province, so the author will make this application.

Based on the discussion above, the author wants to make an application on an Android-based smartphone to provide information about the history of the fort in Maluku province. This application is expected to make it easier for users of the Android operating system to find out various things about the history of the fort in Maluku province. This application is expected to later be able to help users to find information and increase knowledge about the history of the fort, the location of the fort, the area of the fort and everything related to the fort in Maluku province. Based on this, this scientific writing was made with the title "Maluku Province Introduction Application using Android-Based Smartphone".

Literature review

Definition of Information

The term information we often highlight in the scope of technology, such as the term information technology that we generally know. However, information has a very broad meaning, not only in technology. Despite the fact that we cannot deny that this information is closely related to technology, because with the development of technology itself information is also growing rapidly, because it is appropriate that the development of technology and information has formed an era, namely the "Information Age".

Maluku History

Like other regions in Indonesia, the Maluku Islands have a long history and cannot be separated from the history of Indonesia as a whole. This spice-rich archipelago has been known internationally since time immemorial. In the early 7th century, sailors from mainland China, especially during the Tang Dynasty, often visited Maluku in search of spices.

Java Platform Android

Applications created and developed in this paper use the Java programming language for the Android platform. This Java platform is similar to Java 2 Standard Edition (J2SE) due to the structure of commands for conditions and loops, the types of variables that can be used, and the operators used. This platform can be said to be the development of J2SE which is applied to mobile applications that are different from J2ME (Java 2 Micro Edition), because the resulting file has an .apk extension instead of .jar.

On Android, users of the Java programming language are no different from Java for other platforms, which require a product issued to assist in making applications, namely the Java Development Kit (JDK) which is software used for managing and building various Java applications. The JDK is a superset of the JRE, containing everything in the JRE plus the compilers and debuggers needed to develop applets and applications. The JDK that supports android apps is JDK1.6.0_24(JDK 1.6 update 24).

Mixed Navigation Structure

The mixed navigation structure is a combination of the three previous structures, namely linear, non-linear and hierarchical. This navigation structure is commonly referred to as a free navigation structure. This navigation structure is widely used in website creation because it can provide higher interaction capabilities, as shown in Figure 1.

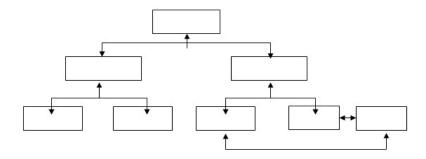


Figure 1. Mixed Navigation Structure

Results and Discussion

The plan that will be made is an application of knowledge about fort information in Maluku province. This application displays the names of historical forts in the province of

Maluku, the definition of forts, monuments, history of Maluku, videos and profiles. The menu about the name of the fort consists of 17 buttons as follows. The Amsterdam fort button contains information about the Amsterdam fort on the border between the Hila country and the Kaitetu country, especially around the Central Maluku region. The Victoria fort button contains information on the Victoria fort in the sirimau area of Ambon. The button button for the belgica fort contains information on the belgica fort in the neira area.

The navigation structure is the most important structure in making an application. The navigation structure is a plan of relationships and work chains from several different areas and can help organize all application elements by giving commands and messages. The advantage of using this navigation structure is that an application is able to provide relevant information. better.

The navigation structure briefly describes the application flow. The navigation structure also provides convenience in analyzing the interactivity of all objects in the application and how their interactivity affects the user. In this application a hierarchical navigation structure is used which is used as a reference in making the navigation structure, it can be seen in (figure 2)

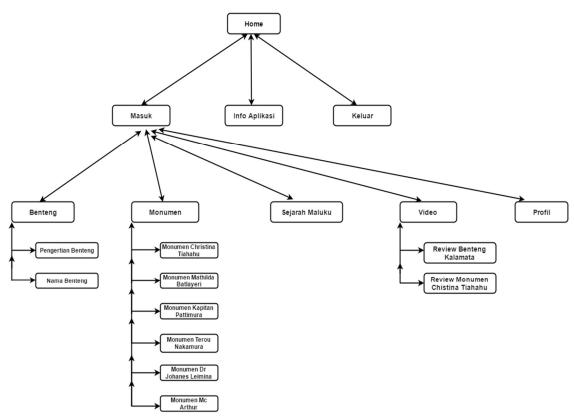


Figure 2. Application Navigation Structure

In the main menu display design there is a logo for the coffee distribution application in Indonesia and there are only two menus consisting of entering to start the application and exiting the application. For more details see in (figure 3.).



Figure 3. Main Menu Display Design

Creating Profiles in AVD Manager

To create an android application, you need an AVD (Android Virtual Device) which is an emulator to run android applications that have been created, this AVD runs on a Virtual Machine. How to create an AVD is to select AVD Manager which is located on the windows menu in the eclipse menubar and a new window will appear. AVD Manager view can be seen in (figure 4.)..

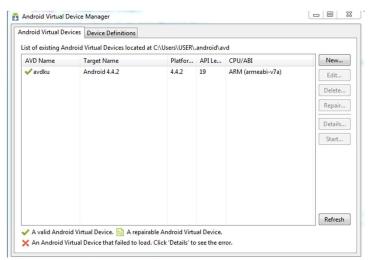


Figure 4. AVD Manager display

When the application is run, the first thing that appears is the Home Page. This design section consists of three parts, namely Background Image, TextView and Button. On the button there are login, application info and exit. The main menu display. How to make the main menu first click historyofthecastle - select res - right click on layout then new - android XML File. After you finish creating the xml file, then create a java class by clicking historyofthecastle – select src - .com.example.historyofthecastle and right click on com.example.historyofthecastle – new then select Class.



Figure 5. Main Menu Display

Next, create a java class with the name home.java by clicking HistoryOfTheCastle - select src - .com.example.HistoryOfTheCastle then right click on .com.example.HistoryOfTheCastle - select New - Class.



Figure 6. Display Options Menu

Next, create a java class with the name home 2. java by clicking History Of The Castle - select src - .com. example. History Of The Castle then right click on .com. example. History Of The Castle - select New - Class..



Figure 7. Fortress Name Menu Display

After the user's main menu display process opts out, a message box will immediately appear, which says "Are you sure you want to exit this application?" There are also options, namely "NO" and "YES". If the user selects "YES" it will exit the application and vice versa, if the user selects "NO" it will remain in the application. The output view can be seen in (figure 8).



Figure 8. Exit dialog box display

Testing

The next stage is the testing stage. In the testing phase, it aims to find out whether the fort information application project in Maluku province is running as expected or not. Testing can be done with two options. The first right-click on the name of the application that was created then select Run As and finally select Android Application, then the second way is to

click the green button Run HistoryOffheCastle and select the name of the project that has been created.

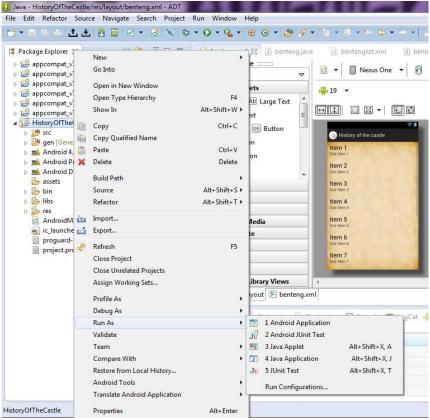


Figure 9. Test

Conclusion

This Android-based application for information on historical heritage in Maluku province has been successfully created according to the method used. by collecting data by searching on the internet or from other sources, then doing system design, application creation and application design using the eclipse application and conducting trial stages using the android emulator.

This application provides information about historical forts that exist, especially in the province of Maluku. This application was developed into an android-based application to make it easy to use anywhere and anytime, because this application is offline or does not require internet access to run this application, but if the user wants to go to the video option, internet connectivity must be required. This application has a simple interface to make it easier for users to use it.

Reference

Agus Wahadyo dan Sudarma S. "Tip Trik Android Untuk Pengguna Android Tablet dan Handphone". Penerbit Media Kita, Jakarta, 2012

Des Alwi. "Sejarah Maluku". Penerbit Dian Rakyat, 2005

Dwi Agustina "Maluku Manise". Penerbit Departemen Pendidikan Nasional, 2011

Raharjo Budi, Iman Heryanto, dan Arif Haryono, "*Tuntunan Pemograman Java untuk Handphone*". Informatika, Bandung, 2007

Tim EMS. "Panduan Cepat Pemograman Android, Elex Media". Komputindo, Jakarta, 2013 Yuan Yudistira. "Membuat AplikasiIphone, Android & Blackberry itu gampang". Penerbit Media Kita, Jakarta, 2011

- Zaki Ali, WinarmoAdy, Community Smitdev. "Membuat Sendiri Aplikasi Android Untuk Pemula". ELEX MEDIA, Jakarta, 2013
- URL: https://cokpra1994.wordpress.com/2015/05/09/arsitektur-kelenteng/ Diakses pada tanggal 6 Mei 2016
- URL: https://id.wikipedia.org/wiki/Android_(sistem_operasi) Diakses pada tanggal 8 Juni 2016
- URL: https://id.wikipedia.org/wiki/Informasi Diakses pada tanggal 8 Juni 2016
- URL: https://id.wikipedia.org/wiki/Java Diakses pada tanggal 8 Juni 2016
- URL: https://id.wikipedia.org/wiki/Monumen Diakses pada tanggal 6 Mei 2016
- URL: http://hparea.com/pengertian-kelebihan-kekurangan-android.html Diakses pada tanggal 8 Juni 2016
- URL: http://nationalgeographic.co.id/berita/2012/11/cerita-di-balik-benteng-benteng-indonesia# Diakses pada tanggal 6 Mei 2016
- URL: http://shabrinac.blogspot.co.id/2013/05/pengenalan-eclipse.html Diakses pada tanggal 8 Juni 2016