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PENGEMBANGAN APLIKASI BERITA ONLINE BERBASIS ANDROID PADA WEBSITE TANJUNGPINANG POS MENGGUNAKAN ANDROID STUDIO

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ABSTRACT

Tanjungpinang Pos is a National newspaper from Kepualaun Riau that has been present for the people of Tanjungpinang city, almost every day this newspaper is present to accompany the public with news about the city of Tanjungpinang and other Riau territories, with technology development such as this Tanjungpinang Post newspaper also opens a digital market with presenting a website for its news site, but the need for news is getting wider, with the increasing market for Android smartphone users, it is pushing to create an online Android-based news application. In the future, to present online news more widely with this application. This application works by connecting to the Tanjungpinang Pos news site, so that when the website updates the application the issue will also be updated. The application is not needed to install this application, this application makes using Android Studio software that will connect it to the Tanjungpinang Pos website, this application aims to access Android users in accessing news through their smartphone, so users can only install the application and will get news up to date every day.

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1. INTRODUCTION

With the development of digital technology in this era of globalization, the need for information is increasing as well, Tanjungpinang post is one of the providers of news information from the Riau Islands, especially the city of Tanjungpinang, with the development of technology that changes people's lifestyles to read increasingly changing news, thus to sustaining the needs of the community for news in the current era, the authors designed an online news application based on Android, which in the current era Smartphone usage is increasingly widespread and becoming a common thing. This application will use an Android-based Smartphone as a place to install it. This is because the Android operating system is open so that the development of an application is increasingly free, besides that the majority of people who have smartphones use an Android-based operating system.

A. Website

Website is a collection of pages that are related to other files that are interrelated. In a web page there is a page that is usually known as the home page. Homepage is a page display that first appears when someone visits a web page [1].



Figure 1 Tanjungpinang Pos Website

B. Android Application

In terms of understanding the application itself is a program that is used and created to carry out a function for application users and the use of other applications that can be used by the target to be addressed. According to the executive computer dictionary, applications have the meaning of a problem solving process that uses a type of application data processing technique that usually aims at a computation that is targeted or expected. According to the Indonesian Dictionary the meaning of application includes, "Application is the application of a system design to process data using rules or provisions of a particular programming language" [2].

C. Android Studio

Android Studio is an official IDE (Integrated Development Environment) that is usually used in the development of an Android application that can be used open source or free. The launch of Android Studio was published by Google on May 16 at the Google I / O Conference event in 2013. Since then, Android Studio has replaced Eclipse's position as the official IDE to develop Android-based applications [3].

D. Webview

Android System Webview is a system component developed and made by Chrome that allows an application to load web pages even without using a web browser. On the Android 4.3 operating system and below, the Android System Webview uses code based on Apple's Webkit like the technology that is owned by the Safari browser [4].

One of the application of this webview system is the Line Today application in this application the news presented comes from the news website, but the reader does not need to access the browser to be able to read the news, the reader can directly access the news through the application The line.

2. RESEARCH METHOD

Testing is done into two stages, namely alpha testing and beta testing. Alpha testing is done by the method of observation and checklist using blackbox testing. This test is carried out operationally by the author and the office environment with the observation method. At this stage the testing is carried out on functional aspects to test performance and interface errors. Beta testing is done by applying the use of the questionnaire method to a number of respondents. Respondents who will participate in this study were taken by purposive sampling technique with the number of respondents participating as many as 34 respondents. Beta testing itself is intended to determine the feasibility of the program in terms of functional, visual and convenience aspects.

A. Blackbox Testing (Alpha Testing)

Blackbox testing is a software testing that is focused on the functional specifications of a software, the way blackbox testing works is by setting aside the control structure so that the focus point is focused on domain information. Blackbox testing, the software developers make it possible to create a set of input conditions that will test all functional requirements in a program [5].

BLACK BOX TESTING APPROACH

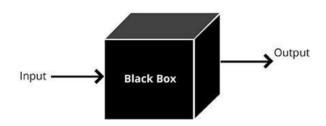


Figure 2 Blackbox Testing Concept

B. System Concept



Figure 3 System Concept

The system description in the picture describes the work process of the Tanjungpinang Pos Android application system which includes:

- Android application accesses the website through the internet, but the data in the website is changed into an application display that has a local data web, so the process of loading the data does not require an intermediary for third-party applications.
- The computer device accesses the website through the internet with a 3rd party browser, all data is loaded on the computer that is called using the Tanjungpinang Pos website url address.

3. RESULT AND ANALYSIS

Tanjungpinang Pos online news application is made using android studio, where the application can only be used on Android devices, making this application is by changing the Tanjungpinang Pos news website page so that in making the database stored on the server, not on the user's device. Every time a user accesses information, the application will request data from the server and then display it on the device.

A. Operating System Adjustments

The initial stage in developing this application is to adjust the OS to the target user, the OS used in this case is annoid 4.0.



Figure 4 Operating System Adjustments

B. Creation of a Webview Mainview

At this stage making the initial appearance of the application using the webview system is a system where the application will be able to display the website content and call the database of a website in the form of an android application.

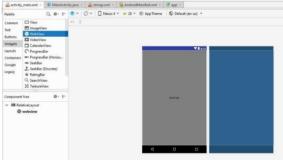


Figure 5 Webview Page

After completing the webview creation then proceed with the creation of a program script for commands in the application between the command to open the application and the back button.

C. Implementing Website Addresses in Applications

At this stage the website address will be input into a webview script that aims to call the website address into the android application, the advantage of this method is that the application will always update according to the relevant website, but in this method a stable internet access is needed to run the application smoothly, and the more responsive a website will have a good impact on the application.

```
protected void onCreate(Bundle savedInstanceState) {
   super.onCreate(savedInstanceState);
   setContentView(R.layout.activity_main);
   myWebView = (WebView) findViewById(R.id.webview);
   WebSettings webSettings = myWebView.getSettings();
   webSettings.setJavaScriptEnabled(true);
   // Memasukkan alamat website yang akan di convert
   myWebView.loadUrl("http://tanjungpinangpos.id/");
```

Figure 4 Script Url Input

D. Testing Questionnaire (Beta Testing)

The questionnaire was used as a test of the application by involving respondents. Respondents were taken using a purposive sampling technique, beta testing itself is intended to determine the feasibility of the program in terms of quality usability aspects. The usability factor is measured using the application of a questionnaire that will be given to respondents, respondents who will be involved are potential users of the application "Tanjungpinang Pos" namely Tanjungpinang society and also the general public.

The testing method uses a Likert scale. A Likert scale is a scale used to measure perception. The attitude or opinions of a person or group regarding an event or social phenomenon. Based on the operational definitions set by researchers. Research instruments using Likert scale can be made in the form of a checklist or multiple choice. The scoring is determined by using the directly scale as in the following table.

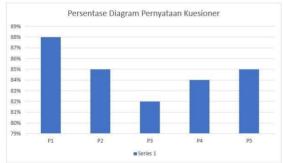


Figure 6 Analiysis of Beta Testing

In making the Tanjungpinang Pos online news application, the results obtained were quite satisfying from all analysis. Looking for the average value of the percentage, it was found that the success of this application with a value of 84.80% or 85% indicates that the respondents were very understanding about the application and very agreed on the elements which is in the application. 85% quantitative data shows that the value has an interval between 75% and 100%, which means it is included as a Very Good criterion.

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4. CONCLUSION

Based on the results of the tests and analysis conducted, the conclusions can be drawn as follows:

- Generate an android-based online news application by utilizing the Tanjungpinang Pos online news website.
- The use of android studio as a medium for developing android applications using webview techniques.
- From the results of the due diligence conducted on 34 respondents of Tanjungpinang Pos online news application get a total score of calculation of 85% which shows the application can function very well.

ACKNOWLEDGEMENTS

Here are some suggestions that the writer can summarize based on the results of the design, implementation, and testing that have been carried out. The suggestions include:

- In operating an application with a webview system you should use fast internet access to facilitate the process of loading data from the website.
- It is hoped that the research that has been made can be a means of developing websites into Android applications.
- It is hoped that further research can further expand the mobile platform to IOS.

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