

Application Program for Helping Road Complaints in Yogyakarta (APLANYA)

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ABSTRACT

In big cities like Yogyakarta in general, population growth and the number of private vehicles is very rapid, unfortunately not matched by the provision of adequate road infrastructure, so congestion is certain to occur, and this has really happened. If no action is taken or anticipated with an appropriate system, it is certain that total traffic jams will occur. The solution step to overcome this is to utilize the Application to help road complaints. To maximize the function of the Application, we try to implement an electronic-based system (online) to be able to access all public vehicles that pass on the entire urban road network according to the type of public vehicle (MPU, mini bus, medium bus, large bus, LRT, MRT, etc.). In an effort to support this system, it must be supported by adequate facilities, including all motorists are advised to download the application so that the movement of public vehicles is free from congestion. Another thing that is no less important is the condition or trip of the rider will arrive on time. With all the conveniences, the Application system is expected that people can access when they want to travel, so that congestion can be minimized.

Keyword: Application, Online, Infrastructure, Yogyakarta

INTRODUCTION

The development of the times at this time is of course caused by the development of technology, because technology is one of the things that makes the development of the times more advanced, besides that the development of information technology will also continue to increase and continue to develop in its use which will be more and more diverse in its use and delivery of information. Information media at this time is the media that is most highlighted by the public because the current use of information media has become one of the primary needs, because the dissemination of information at this time has been global where the spread of information can quickly spread throughout the world easily obtained. Besides that, the information system is also one of the important systems because we can know anything very easily with the sophistication of technology. System because we can find out anything very easily with the sophistication of technology. (Trimarsiah et al., n.d.)

The role of an application in information media is also an aspect of why this information system can be easily accessed and easily we can get the information. It is undeniable that with the application everyone can access but not all information is spread through the application there is also the dissemination of information through websites that can be accessed by everyone, but

with the existence of an application that is only used for the dissemination of certain information it will be easier and faster in disseminating information because it is more efficient if we use the application and the target that will get the information is also definitely right. Therefore, an information system and its use must also be precise and clearly targeted considering that at this time many things are happening, and we must always know what is happening around us. Therefore, an information system and its use must also be precise and clearly targeted considering that at this time many things are happening and we must always know what is happening around us, the use of an application is also useful because we can find out what is happening without us having to be at the location where an incident occurred.

In order to improve services to the community, of course, you can do a lot, one of which is the information system. The spread of information at this time is very easy and fast, it doesn't take hours for us to find out about an event that happened. According to databoks, the number of Indonesians who look for information via the internet (browsing) is 12.2%, while the number of Indonesians who often reach 47.5% then there are 28.2% who rarely look for information via the internet and the rest are people who very rarely or never even look for information via online / browsing. In addition, this data also found that Indonesians are accustomed to using the

internet in their daily lives with data of 91.2% of Indonesians often using the internet for communication and using applications. However, at this time the dissemination of information can mostly only be spread through websites, or we have to browse first. (Febrianto et al., 2019).

The dissemination of information today is of course very much and a variety of information that we can get, one of which is the dissemination of traffic information or information about road congestion, damaged roads or road repairs. but at this time there is no application that creates a creative idea using digital developments with a combination of creative thinking to create an idea that is very helpful for community service. It is undeniable that every time we pass through the road there must be many things that happen around the road, maybe the road is damaged or there is an accident, so the purpose of this delivery application is to provide information for road users who are going out to find out what happened before the person passed the road so that we can avoid many things that do not want to happen. With the combination of digital and creativity, it is hoped that it can create a very useful application considering that at this time there is no application for complaints or public notifications about existing roads, especially in the Yogyakarta area.

The purpose of the research is to find out or provide an overview to create an application to help complaints or notifications about the condition of a road in Jogja. This type of research is also to find out whether an application is effective enough to facilitate the dissemination of information and whether the information can match the target we expect.

Problem Statement

1. Is an app effective for disseminating information?
2. How can information be disseminated in the app?
3. What is the procedure for disseminating the information?

Research Review

1. To find out how to use the application
2. To know who can provide information with the application.
3. To understand how important the dissemination of information is at this time.
4. To find out which is more effective in disseminating information through a website or an application. To determine whether the dissemination of information can provide services to the community.

LITERATURE REVIEW

The delivery of information about the condition of a situation or place using a website or application can provide a much wider and more precise range of information than providing information manually. So that the delivery of information using a web system or application can greatly facilitate the community or everyone to find and get information about the condition of the place. (Irawan et al., 2016).

Therefore, the submission of information must be precise and targeted, so a system is needed to facilitate its delivery. various ways of delivering information in the world of social media, information has many meanings according to Barry E. Cushing in (Sagiyanto & Nasution, n.d.). Information is an activity that is useful for other people who will receive it. Based on what has been conveyed above, it can be concluded that information is data that is processed and interpreted that can be used for decision making that is useful for everyone who needs it.

According to (Wahyono, n.d.) information also has quality and the quality of information is very important and there are 3 things that can affect the quality of information, namely relevancy, accuracy and timeliness:

a. Relevance

Information will be very useful if it is relevant to those who need it and information will be relevant to its users when the delivery of the information is appropriate.

b. Accuracy

The delivery of information can be said to be targeted or accurate when the information is obtained by someone and the information is not misleading and according to real evidence.

c. On time

Information delivery must be fast and accurate, so when there is information delivery, it must be conveyed immediately and must not be late, late information will not be of good value.

APPLICATION

An application is a program that has been created and is useful for performing a specific command or task. according to kadir (2008: 3) the application is a program that has been designed to carry out a command or function for users who use the application. The application can also mean the use or application of an activity or form that is the subject of an idea and is made into a program that can help humans or users when needed. and to get a command we also have to have hardware for both computers and smartphones. The

application is a software program designed to simplify people's work and people's searches. this clarification is divided into 2, that is:

1. Specialist software application, which is an application that has program documentation that has the purpose of performing a specific task.
2. A packaged application is an application with a documented method to solve a specific type of problem.

From the above understanding, it can be concluded that the application is a collection of existing commands made by humans to carry out a certain task to facilitate every human job. The complaint application is an application that is designed or made to make it easier for the community to provide complaints to the government or to the application maker quickly and accurately.

SOCIAL MEDIA

Social media is a human-created development program that was originally a development of web-based and then internet-based technology, which has the same goal of making it easier for everyone to get various information, communication, and other news. the definition of social media according to (susanti, 2016) is a place or online media, where users can easily participate, disseminate create or create content that has been created. Besides that, social media also has characteristics.

Characteristics of social media

Social media certainly has several characteristics that are not shared by other existing media. social media also has limitations and special characteristics that are owned by social media itself (Nasrullah, 2016):

1. Network

Of course, social media consists of many networks of networks that are united and formed by this connection, the character of social media becomes a connecting character for those who need it.

2. Information

The importance of information in social media is one of the things that cannot be missed because the use of social media requires accurate and precise information.

3. Archive

Archives in social media archives are an important character because with an archive, someone can find out what has been there.

4. Interaction

The main characteristic in social media is the connected network between one user and another.

5. Social simulation

Social media has the characteristic of providing an image

in the form of digital simulation or virtual simulation to its users who access social media.

SOCIAL MEDIA FUNCTIONS

Social media is of course made to have functions and here are some of the functions of social media:

- a. Of course social media is where we can get what we want and with very easy and fast access
- b. Getting entertainment
Social media not only contains information but has a lot of entertainment
- c. Online communication
The use of social media at this time is mostly used to communicate between fellow users.
- d. Mobilizing the community
There are problems that occur, so there is a lot of chaos, so social media also has an important role to reunite both using information or entertainment.

DESIGN METHOD

RESEARCH METHODS

The research method used in this research is descriptive qualitative research method to find out whether the application to be made can help the community to find safety and comfort when driving out in Yogyakarta. This research will describe an application that is made to have what kind of role for the people of Yogyakarta whether it will have a big effect or no effect at all.

Application Design

In designing an application or yogyakarta road application that is useful for providing public complaints about the condition of a road in Yogyakarta quickly, it takes a lot of involvement with various figures to create or design this application such as requiring an IT expert to create coding and program the application.

The steps for making the application can include:

Requirement analysis

- Knowing who will use the application and to whom, whether students, workers or students.
- Knowing what features will be made in the application

1) Design of application content

Determine what will be added in the application whether when using the application must log in and have an account first or not, whether every report on road conditions will always get a notification, whether not only reports on potholes

2) Make sure the design is fit for purpose

In designing the application, of course, it is not that easy, so in making applications, we need a lot of experts who are accustomed to making applications, then we work together and need a lot of famous people to market the application.

Make sure every design in the application, starting from the logo of the application content and features, is in accordance with what is the purpose of making the application, because the design is not only an attraction for its users but is one of the objectives of choosing to use the application.

3) Application development

In application development has a very important function in the creation of an application, namely as a level of user comfort, therefore the team making this application must understand well how to develop applications such as:

- Alpha: Initial features/functionality in the creation of the application
- Beta: beta that is used in internal testing and testing in use.
- Release candidates: A stable application is an application that has a release candidate
- Gold master: ready to be released

4) Testing debugging:

Conduct thorough testing of the application to ensure it functions properly and is suitable for use to meet the needs of its users. Test the application with users to see if the application has good feedback.

5) Application launch

In the launch of the application requires many actors or an advertisement to spread the application so that the public knows what the application is used for and how it functions. but after launching the application cannot just stay like that, of course, the application requires continuous updates in order to keep up with what is happening starting from feature updates design updates and menu updates in the application.



Picture 1.1 Start Menu

Application Menu Display



Picture 1.2 Menu Display

RESULTS AND DISCUSSION

App Login Start Menu

Road Condition Problem Report



Picture 1.3 Problem Report

Problem Category



pivture 1.4 Application Menu Display

Problem Location



picture 1.5 Location

- In picture 1.1 is the initial menu when we enter the application, and we are required to log in using our own account if we already have an account we just enter our account then finish but if not we have to register our account first.
- In picture 1.2 shows the menu menu after we log into the application there are several menus that we can choose according to what we need.
- In picture 1.3 can be seen some reports that occur on the road such as damage to the road shoulder and others.
- In picture 1.4, we can see several categories that we can complain about in the application.
- In picture 1.5, we can see a map where we can report the incident and its location anywhere.

CONCLUSIONS

Roads are a means that people use every day to carry out various activities and to carry out activities from one place to another. Roads have an important role for human life; therefore, the condition of a road is very important both in terms of comfort and whether the trip is far or not. With the **APLANYA** application, it can provide many benefits for the community to find out about a road condition that will be passed. With the help of technological advances and the times, it can easily get road information without us being in that location. the application can provide information about what is happening on the road such as which roads are potholes, collapsed roads and others.

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