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Development of Applications about Hazards and Preventions of Drug Based On Android

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Abstract. The number of drug abuse was increase among the younger generation, it caused younger generation fall into drug abuse, and it will lead to physical and mental damage. The lack of knowledge of drugs danger is one of the most potential problems, so in this study we made an application about the types, dangers, and how to avoid its abusement. The application built using PHP programming language with codeiniter framework on admin part, while the parsing data between mobile application server using Javascript Object Notation (JSON). This application has been tested and 85% respondents stated that this application provides positive benefits especially for the socialization of drug abuse.

1. Introduction

Based on survey results from Badan Narkotika Nasional (BNN) on 2005, 13,710 student respondents showed 10 years drug abuse. Surveys from BNN reinforce the results of the study. Dr. Dadang Hawari in 1991 stated that 97% of the perpetrators were aged 17-24 years. From the results of the survey found that the trigger factors of drug abuse were teenagers ranging from family problems or broken home, that want to find a sensation, depression, and easily affected another person. In addition, the lack of drug abusing knowledge among adolescents showed the biggest factor[1].

Robby Robson stated that to adopt a technology in the world of education required two basic needs, that technology should make the teaching strategy more effective and the technology must be available and accessible [2]. For that we need a new innovation that can be used as a tool to facilitate the distribution of information about drug abusing prevention. In the previous research, not much has been developed about this application, in 2016, Eko Setyo Raharjo entitled "Development of Application of the dangers of smoking, alcohol, and drug-based android as a medium of learning in health education courses". The purpose of the study is as a medium of learning about the dangers of smoking, drinking, and drugs. In this application there are 3 menus of cigarettes, alcohol, drugs. The each menu contains submenu that explain about the impact caused by consuming the substance for health [3].

From this problem, it could be the reason the author makes an application that can help users in obtaining information about the types and categories of drug circulating in the community, drug abuse, the impact of drug use, and prevention and prevention of drug abuse. Accessible easily, the author makes this application based on android, where android smartphone users are very common and dominate the society today. With the application is expected to abuse drugs and drugs among
adolescents, and can add insight into the type of drug and its impact on health so that users are not interested and fall into drug abuse.

2. Experimental
The design of the application "NO DRUGS Application which provides information about knowledge of drug and drug abuse prevention" can be seen in Figure 1.

![Application data flow](image)

**Figure 1.** Application data flow

Web based application built for admin is built with PHP programming language with codeigniter framework, so it can communicate directly with the server through the network. As for mobile-based applications created using android studio tools used to create android interface applications, create android apps menu, and coding android applications. While parsing data between servers with mobile applications using Javascript Object Notation (JSON). The decomposition is done by a web service built with PHP via the HTTP protocol.

Preparation of system design [4] and relation between tables is needed in system development. From table that have been made, hence can made class diagram [5] which looks like picture 2 below:
Then to see the usefulness of this application, taken respondents 30 respondents from the community guidance. Interviews used as data collection techniques if researchers want to know things from the respondent more in depth and the number of respondents less or small (Sugiyono, 2010: 194) [6].

Figure 2. Class diagram NO Drug application
3. Result and Discussion

In this application No Drugs, web applications are managed by the administrator. Application can be managed can be more than one admin that has been registered in charge of managing this web data. Admin can perform action in the form of data input, edit data, search data, and delete data (CRUD). This app comes with terms and descriptions of all types of drugs based on words published from BNN 2012 [7]. The development of this app using android studio, according to Felker (2011) Android Studio is an IDE from Google which was launched during the Google I / O event in May of 2013 and is an IDE. Alternative to the Eclipse IDE. In its official website it is said that Android Studio is the official IDE to develop android applications, which are IDEA-based intell [8]. Previous learning helps in the development of no drug applications among them study about knowledge of the dangers of drugs [9] and the influence of peer education on adolescent knowledge [10] and study about Effect of Community Health Education on Physical Activity Knowledge, Attitudes [11].

The development of No Drug’s assistant is expected to be helpful in the socialization of the dangers of drugs, so that the nation's children can avoid the moral damage caused by this illicit goods. This expert system is designed with web and android versions, so the bias makes it easy to operate. The version of the website has many feature of the login page, type, class, and abuse, as shown in Figure 3.

![Figure 3. Interface of NO DRUG Application](image)

Display on the countermeasures page displays a list of data countermeasures that have been stored in the database. On the menu there is a feature to set the number of rows to be displayed. In addition there is also a search facility to find the desired data. There is added button to add data, delete icon to delete data, and edit icon to display the edit data form. The countermeasure page can be shown in figure 4.
Here is the view on the law page. On this page will display a list of legal data that has been stored in the database. On the menu there is a feature to set the number of rows to be displayed. In addition there is also a search facility to find the desired data. The button added to add data, delete icon to delete data, and edit icon to display edit data form.

In order to test the usefulness of this application, given the test to some respondents, in this case there are 30 respondents that and got the result 53% said it is very necessary to socialize the danger of drug misuse to the public. And 67% stated that no drugs applications can be useful in assisting in the socialization of hazards and drug abuse, and 47% stated that the application of NO DRUGS is sufficient to provide complete information on the dangers of drug abuse. More details can be seen in the following picture 5.

![Figure 4. Interface for prevention of DRUG](image)

![Figure 5. Result of observation NODRUG application](chart)
4. Conclusion
Applications "No Drugs" based on android has been running well on some android jellybean smartphone and needed for dissemination of drug abuse, so it can be one application that helps the field of education to increase knowledge of drug abuse.

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