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Application Android Based Scout Guide

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Abstract−*This Final Project discusses aboute applications scout guide applied to the android-based smartphone. the background of this research for Scout members use learning media through scout guidebooks. But sometimes the use of guidebooks scout less desirable and even often forget to put the book. Therefore, this researcher aims to help facilitate the scout members, learn the activities of the scouts by using android applications, Allows to learn wherever there is free time or while performing a scouting task. This app all information can be displayed, this information includes text, still images and sound. This application is designed using Unifield Modeling Language (UML) model that is Use Case Diagram, Class Diagram, and Activity Diagram. This application uses Java programming language. It is expected that with this application can help scout members better understand the learning of scout material.*

Keywords: *Application, Learning, Guide Scout, Android.*

1. INTRODUCTION

Scouting as a non-formal education movement is an inseparable part of the education system in preparing the nation's children to become national cadres who are qualified both morally and physically and in skills. At this time, Satya and Darma Scouts are the basis of scouting. In scout activities, Satya and Darma also require a guide, one of which is written in the scout pocket book, which is the guide for every member of the scout movement which contains important material in every scout activity.As technology develops rapidly, a medium is needed that can guide and provide information quickly. Android is an operating system that is developing rapidly and is one of the operating systems that is widely used on mobile devices such as gadgets and smartphones.

So it is necessary to have a guide that is different from the scout pocket book as a guide in general so that students or scout members can learn and understand about scouting, by utilizing Android operating system technology on gadgets and smartphones, which is one of the items that is almost always carried wherever the owner is active. , making it possible to learn about scouting, wherever you have free time or while carrying out scouting duties.

According to Safaat 2014, "Android is an operating system for Linux-based mobile devices that includes an operating system, middleware and applications. Android is an open platform that allows developers to create their applications. Android is distributed in two types. The first to receive full support from Google or Google Mail Service (GMS). The second is those that do not receive direct support from Google or Open Handset Distribution (OHD).”

According to Eueung Mulyana (2012), "As a platform, Android is a composition of several software (Software stack)". This stack generally includes the operating system, middleware, and key applications. Figure 2.2 shows the components and categories of each layer in the Android platform. At the bottom layer, Android uses a modified Linux Kernel. Linux provides, among other things, hardware abstract services, process management, and memory as well as network functions. Even though it uses the Linux Kernel, Andoid cannot be compared to a complete Linux system, because several key Linux components are not included (for example the built-in window system, glibc library, etc.).

Android runs several native libraries and a Dalvik virtual machine (Dalvik VM). Media codec, SQLite, Webkit, and OpenGL/ES are some of the built-in Android libraries. Meanwhile, Dalvik VM is an implementation of Google's version of the Java virtual machine which has been optimized for mobile devices so that it is more compact and efficient.

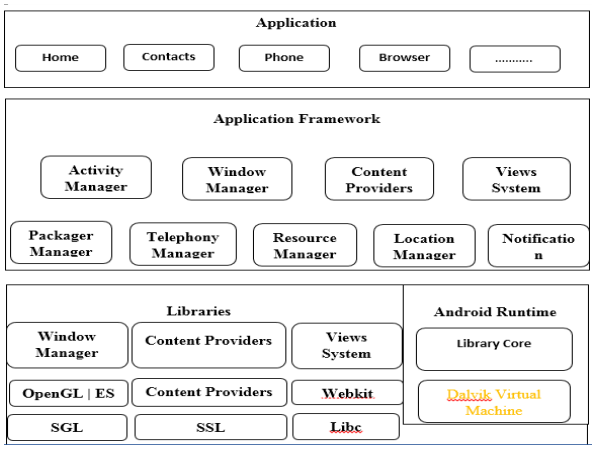

Figure 1 Arsitektur Andoid

Unifield Modeling Language (UML)

UML stands for Unifield Modeling Language, which means standard modeling language, UML has syntax and semantics, when creating models using oada elements, the models created in relation to one another must follow existing standards. In essence, UML is a consistent communication tool in supporting current system development (Shalahuddin, 2011).

UML is applied for certain purposes, usually including (Shalahuddin, 2011):

1. Design software.
2. Means of communication between software and business processes.
3. Review the system in detail to analyze and find out what the system needs. UML consists of 13 types of diagrams grouped into three categories. The division of categories and various diagrams.

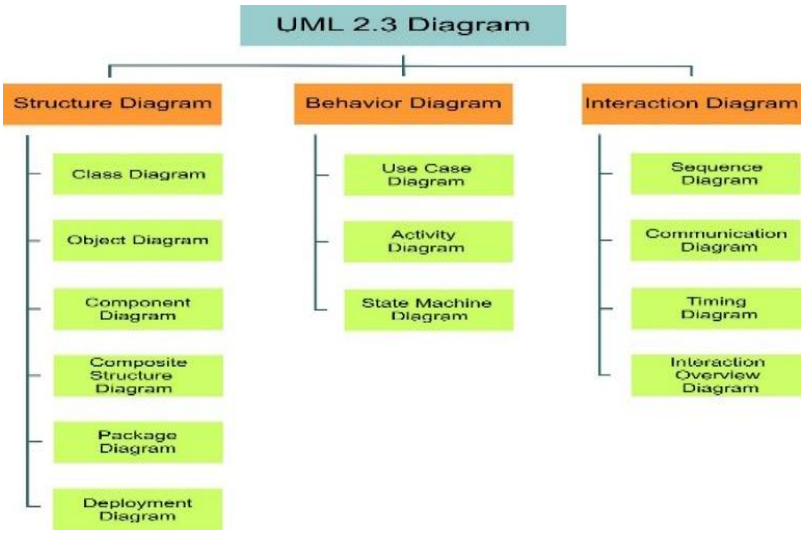

Figure 2. Diagram UML

2. RESEARCH METHODOLOGY

In completing the Android-based Scout Guide Application Design, several steps are required. The steps that the author uses to solve this Android application problem are as follows:

1. Planning
   Design or planning is the first step to start planning, in the design all the activities that will be carried out are arranged and the initial steps that will be taken are described.
2. Application Design
   In making an Android-based Scout Guide application, a design is needed to be able to define the overall application architecture. The author uses several diagrams required in UML, including:
   a. Making Use Case Diagrams.
   b. Making Class Diagrams.
   c. Making Activity Diagrams.
3. Program Testing
   This stage will be carried out when the application created by the author is complete by testing the software built. Something that is built must be tested. Likewise with software. All software functions must be tested, so that the software is free from errors, and the results must truly meet your needs.

3. RESULT AND DISCUSSION

Analysis of Information Systems

The Design Stage is the first stage carried out in planning the design of the Android-based scout guide application program. This scout guide android application is equipped with a scout guide menu, this application only displays the content of the scout guide material which is explained in the form of text, images and sound.

In creating an application there are several stages of application development that need to be taken into account, these stages include the stages of designing Use Case Diagrams, Class Diagrams and Activity Diagrams.

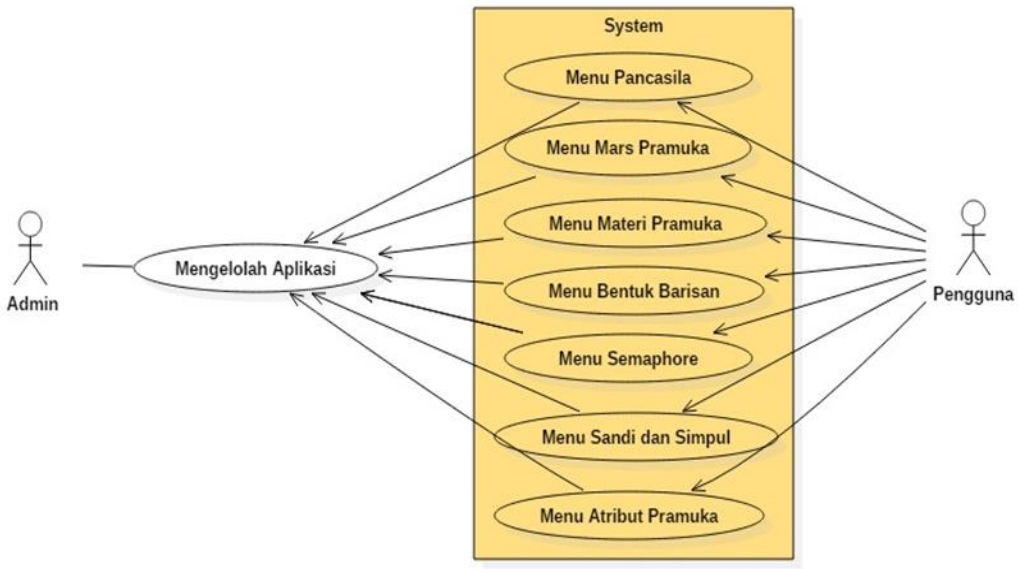

Figure 3. Use Case Diagram

Diagram of the Scout Guide use case diagram. Users can access the scout guide. Start menu, about menu and exit menu. After that, the user sees the scout guide menus, then the user sees the contents of each existing menu.

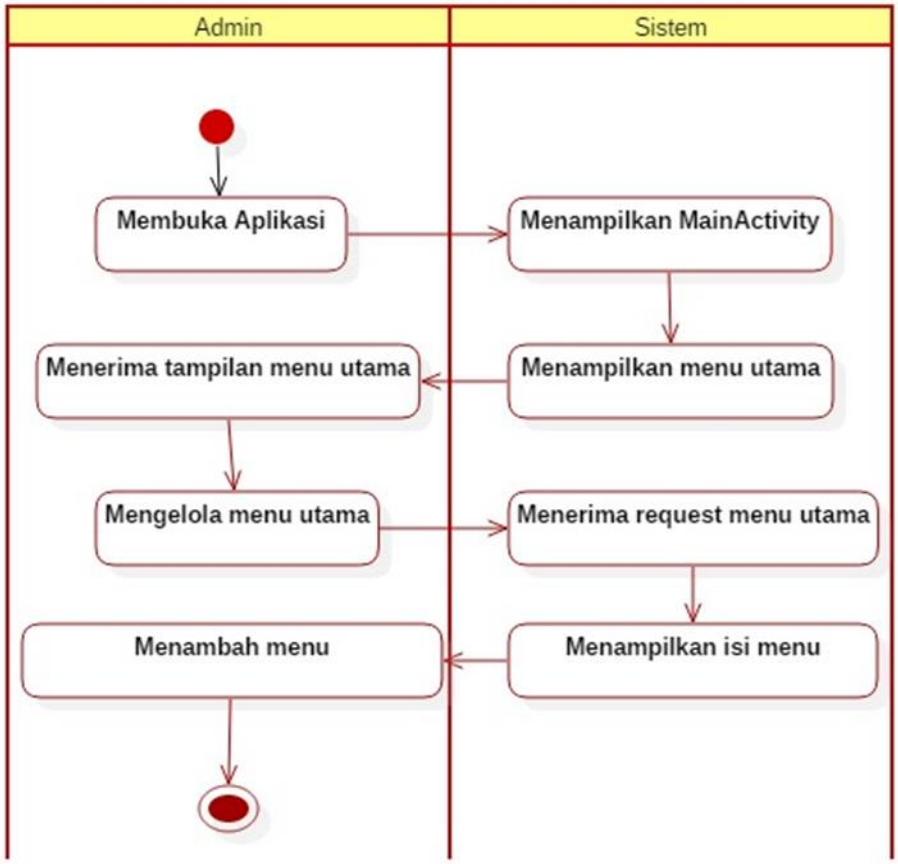

Figure 4. *Activity Diagram* Admin

In the Scout Mars Menu activity diagram, the first thing the user does is open the application, the system displays the main activity then followed by the main menu display, the user selects the start menu then the system responds by displaying the scout march menu, displaying the contents of the scout march and displaying the audio button

Layout Output Application Display Results

The program display is the result of the program that has been created and run on the emulator. The program display consists of the initial menu display, start menu, exit menu, about menu and there are several menus in the menu starting

from the Pancasila menu display, scout march menu, scout material menu, line form menu, semaphore menu, semaphore menu, password menu and node.

1. Layout Mainactivity

Figure 5. Mainactivity

The first time the application is run, the application displays the main menu which displays three active buttons, namely the start menu button, the second the exit menu button and the third the about menu button.

2. Layout Start Menu

Figure 5. Start Menu

4. CONCLUSION

The conclusion of the manuscript has no subsections. Conclusions and suggestions are written in one paragraph; they do not need to be separated. Like the references, the acknowledgment section is not numbered. An acknowledgment is written if there is one. Special thanks are addressed to funders for the research carried out or to people who are truly instrumental in carrying out the research.

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