# Dictionary of Prabumulih Language-Based Android Murdianto, Leon Andretti Abdillah, Febriyanti Panjaitan

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#### Abstract

Mobile application become one of the most progessive technology nowadays. Android itself is the name of a company engaged in the field of information technology, especially software company named Android Inc. which was established in October 2003 in Palo Alto, California, USA. Android has many advantages such as operating system can be change according to the user's wants and easily develop applications free of charge, so many developers choose Android as the operating system. The main purpose of this Prabumulih dictionary application is to create a dictionary-based Prabumulih android that is expected to assist and provide benefits to the wider community who want to learn the language Prabumulih. Mobile Application Development Life Cycle Model (MADLC) is used to develop the mobile application. This method consists of the identification phase, design phase, development phase, prototyping phase, thase testing, deployment phase, manitance phase. The programming language used is java programming language. This application able to translate Prabumulih language into/from Indonesian and enrich with sentence translation.

**Keywords:** Mobile-dictionary, Android, Prabumulih language.

# 1 INTRODUCTION

One of the most growth technology nowaday is computer or information technology (IT). Computer technology is able to collaborate with many other disciplines (Abdillah, Syafei, & Hardiyansyah, 2007). Information technology has penetrated into the smartphone, one of which is based on Android handsets. Android is a package of software for mobile devices, including an operating system, middleware and core applications (Shu, Du, & Chen, 2009).

Android itself is the name of a company engaged in the field of information technology, especially software company named Android Inc. which was established in October 2003 in Palo Alto, California, USA. Android has many advantages such operating system can be changed according to the user's wants and easily develop applications free of charge, so many developers choose Android as the operating system. Android have been used in billion of gadgets like smatphones and tablets. In this paper, authors will develop mobile dictionary based on android for Prabumulih language.

A number of studies related to the mobile application dictionary: 1) Electronic Indonesian and Java Dictionary for Mobile Application by using Interpolation Search (Afifah, Santoso, &

Yuliana, 2010), 2) Mobile Application Dictionary of Psychology Terms (Parno, Dharmayanti, & Rahmansyah, 2011), and 3) Al Quran mobile learning (Sobri & Abdillah, 2013).

One language that is widely used in South Sumatra is the language Rambang Prabumulih community. One factor that makes language Rambang become widely used language is much Rambang society in the city Prabumulih. Rambang language formed from thousands of years ago. Rambang language is a language that one big clump with Malay civilization in Southeast Asia. Indeed many languages Rambang who seems to have a close relationship with the family of languages Siam (point group Indochina). Writing history stated that there are many relics inscriptions Pranagari script with Malay beginning in South Sumatra, but in fact the all population of tribes on the island of Sumatra, all using Kegenge script as written culture (Azhar, 2013).

The benefits of this research are as follows: 1) Expected with the availability of a Prabumulih dictionary, in order to help in presenting Prabumulih language digitally, 2) Hopefully, by the prabumulih dictionary can recognize media Computerized technology, and 3) It can be source of learning to build of Science and Technology in the field of computer which has been accepted for studying in Bina Darma University in Palembang.

## 2 RESEARCH METHODOLOGY

In this research, authors use three methods to to obtain data and information: 1) Study of literature (Literature): Namely data obtained through literature, conducted a study of the literature to get material from internet and read books that available the observed object, 2) Research (Observation): Data were collected with a view directly from the object under study at Prabumulih community, and 3) Interview: To obtain the data directly from the source to understand in connection with the observation that the author did. In this case the authors pose questions to the original Prabumulih namely with one of the former head of the village in the district Rambang Central.

Software development methods used in this study is the method of Mobile Application Development Life Cycle Model (MADLC) which consists of the following stages (Vithani & Kumar, 2014): 1) Identification Phase, 2) Design Phase, 3) Development Phase, 4) Prototyping Phase, 5) Testing Phase, 6) Deployment Phase, and 7) Maintenance Phase.

### 3 RESULT AND DISCUSSION

The results of this research is android-based Prabumulih dictionary application which has been built using eclipse indigo and can run on Android 3.0 (Honeycomb) to android 4.4 (kitkat). This android-based dictionary contains about 500 Indonesian words and Prabumulih words.

To test and run the application, the authors use virtual android emulator, and for the device is mobile android 4.1.2 (jellybean). This application can translate a sentence and have a sound pronunciation of the word.

# 3.0.1 Splssh Screen and Main Page

Page splash screen applications android based dictionary Prabumulih this as an opening page of the application dictionary based Prabumulih android (figure 1). The main page of the dictionary application android based Prabumulih showing an input and two buttons to

translate the word that has been entered by the user (figure 2).



Figure 1: Splash Screen



Figure 2: Main Page

# 3.1 Sound Page

Sounds on the application page Prabumulih android based dictionary provides translations of the text pieces and speak button. If we push the sound button, then android device will sound it.

# 3.2 Display Options Page Contents Menu

Contents of the application menu Prabumulih android based dictionary provides two menu options must be selected by the user, ie the menu sentence that has the function to translate in the form of a sentence.

# 3.3 Page Views Sentence

Sentence on page Prabumulih android based dictionary application showing a single input, one column of the translation sentence and three buttons to translate the sentence that has been entered by the user.



Figure 3: Sounds Page Views



Figure 4: Dsiplay Options Page Contents Menu

# 3.4 Page Views About

Application page on the android based Prabumulih dictionary is very simple, not a lot of additional features due to the content of the page only contains a brief profile of the application dictionary based Prabumulih android.

# 4 CONCLUSION

According to the results of the study and the explanations in the previous sections, we could some conclusions as follows:

- 1. This android-based Prabumulih dictionary runs in android platform from android 3.0 (Honeycomb) to android 4.4 (Kitkat).
- 2. This application able to help people and new comers in learning Prabumulih language.
- 3. This application goes offline so users need no data to run it after the installation.



Figure 5: Page Views Sentence



Figure 6: Page Views About

4. This application equipped with text-to-speech and translation of sentence.

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