

**MACTAN LEGEND: DEVELOPMENT OF AN ANDROID
BASED GAME ABOUT LAPULLAPU**

THESIS

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**MACTAN LEGEND: DEVELOPMENT OF AN ANDROID BASED GAME
ABOUT LAPU-LAPU**

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ABSTRACT

DUNGO, RAVEN R. and RAGUNDIAZ, ANDREW C. Mactan Legend: Development of an Android Based Game About Lapu-Lapu. Undergraduate Thesis. Bachelor of Science in Information Technology. Cavite State University, Indang, Cavite. May 2019. Adviser: Simeon E. Daez.

The study was conducted from September 2018 to May 2019 at the Department of Information Technology, Cavite State University, Indang Cavite to develop an android based game about Lapu-Lapu. Specifically, it aimed to: 1. create an information module that will educate the students by displaying trivia about Lapu-lapu in the game; 2. create a gameplay module that promotes a history of Filipino hero who is Lapu-lapu, to the students especially to grade school students; and 3. create an application which is user-friendly, educational and enjoyable game.

The proponents used the Prototyping Model in the development of the android game named Mactan Legend. The prototyping is a systems development method in which a prototype is built, tested, and then continued as necessary until as acceptable prototype is finally achieved from which the complete system or product requirements are known in detail ahead of time. It is an iterative, trial and error process that takes place between the developers and the users.

The system is consisted of three (3) modules: information module, gameplay module, and settings module. The information module contains more trivia about the history of Lapu-Lapu. This module displays a trivia in every loading of the game. The trivia will focus on what happened in the journey of Lapu-Lapu before his encounter with Ferdinand Magellan and after the battle in Mactan Island on April 27, 1521. The gameplay module is only in one player mode and the player or the user will use Lapu-Lapu as the main Character of the game. The user will only play 8 levels/stages in the

map provided in the game and have to defeat all Spaniards who wants to colonize the Mactan island. Then at the last stage Lapu-Lapu will encounter Ferdinand Magellan. User can only jump over to another level when finished the current level they are in. Lastly, the settings module allows the user to change the level of a game volume from the user/player's preference.

The developed system was evaluated by potential end-users. Forty (40) participants composed of ten (10) Information Technology experts for the technical evaluation and thirty (30) grade 5 students for the non-technical evaluation were the evaluators. The overall result of technical evaluation was Excellent with a mean of 4.35 and standard deviation of 0.71. The over-all result of non-technical evaluation was also Excellent with mean of 4.34 and standard deviation of 0.71.

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INTRODUCTION

Android is a mobile operating system developed by Google, based on a modified version of the Linux kernel and other open source software and designed primarily for touchscreen mobile devices such as smartphones and tablets. In addition, Google has further developed Android TV for televisions, Android Auto for cars, and Wear operating system for wrist watches, each with a specialized user interface. Variants of Android are also used on game consoles, digital cameras, personal computers and other electronics. Android has been the best-selling OS worldwide on smartphones since 2011 and on tablets since 2013. As of May 2017, it has over two billion monthly active users, the largest installed base of any OS, and as of June 2018, the Google Play store features over 3.3 million apps.

Role-playing is a popular pastime and a subculture in itself and features various subgenres such as live-action roleplaying, massive multiplayer online role-playing, text-based online gaming forums, videogames. These games appeal to gamers as their target group, offering not only entertainment but also a sense of community both within