PERTABLEMENTS: AN ANDROID INFORMATICS FOR PERIODIC TABLE OF ELEMENTS

THESIS

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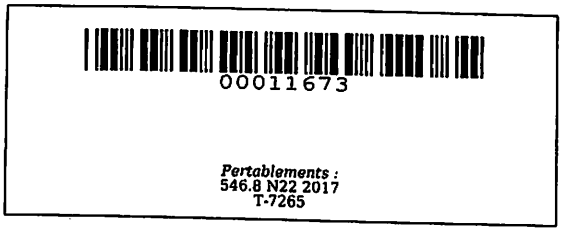
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ABSTRACT

NAVALES, GIAN CARLO F. and SARMIENTO JOSHUA J. Pertablements: An Android-Based Informatics for Periodic Table of Elements. Undergraduate Thesis. Bachelor of Science in Information Technology. Cavite State University, Indang Cavite. April 2017. Adviser: Ms. Gladys G. Perey.

The study entitled "Pertablements: An Android-Based Informatics for Periodic Table of Elements" was developed to be a supplementary for periodic table of elements. It was developed from June 2015 to March 2017 at the Department of Information Technology in Cavite State University - Main Campus and at Marahan, Alfonso, Cavite. With this study, students and educators can have a supplementary tool in their learning procedure and teaching practices respectively.

The research methodology used for the development of the study was the System Development Model which is composed of nine (9) phases: requirement definition, system and software design, specific change, build system, test system, integrate system, testing the whole system, system complete, and deliver final system. The respondents of the software evaluation were composed of 60 students and chemistry teachers.

The researchers have developed two (2) modules for the mobile application namely: information module and game module. Series of testing and software evaluation were performed by the researchers and the respondents of the study. This yielded a general result of "Excellent" which denotes that the system has met and exceeded several expectations and all of its objectives were fulfilled.

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INTRODUCTION

The periodic table of elements is a chart that includes all of the natural and artificial elements known in the universe. Elements are the basic building blocks of matter. The periodic table is more than a list of the elements. It is also a guide and a tool to understand chemical reactions and the materials involved in building the Earth and universe. It often appears as a roughly rectangular chart with individual squares containing information about each element. The periodic table consists of seven (7) periods. The classification of elements in the periodic table helps scientists understand known elements and predict the properties of new synthetic elements (Ham, 2008).

However, many traditional materials are still used in school nowadays. At the age of modern technology, innovation must be created to be adopted by this old-fashioned practice. The periodic table of elements, commonly used by students, is an example that