Presence Integration and Course Values for Final Value Creation

S R Fenny * and Nugroho B
Jurusan Sistem Informasi, Fakultas Teknik dan Ilmu Komputer, Indonesia Computer University, Jl. Dipatiukur no.112-116 Bandung West Java Indonesia

*r.fenny.syafariani@email.unikom.ac.id

Abstract. The purpose of this study was to analyze the readiness and the implementation of the 2013 curriculum or K13. Improving the quality of education services requires the existence of data processing coupled with appropriate and adequate information technologies. Especially, data processing value that uses the 2013 the latest curriculum of Indonesia, namely the 2013 curriculum or K13, where the 2013 curriculum is conducted based on competence oriented on learning process, character building, and skills. In other words, this curriculum is qualitative. Acknowledging the procedures system of final value data processing, the contents consist of presence data and value data of each subject in the 2013 curriculum, the objective of this article is to propose and design new systems that can help and simplify the process of final value creation. There are two methods used in making this final value: approach method and development method. The approach method is the method of approach with Object Oriented Analysis (OOA). The tool is Unified Modeling Language (UML). Meanwhile, the development method used is the prototype method. This research result is the 2013 curriculum software that has functions or features in accordance with the desired, especially able to answer existing problems. The implication of the findings is in the form of the 2013 curriculum software that was made as the research result to show contribution to science in the theoretical model of problem solving.

1. Introduction
The curriculum is like a compass in guiding the ship to sail the world of education. Like a compass, curriculum plays an important role in organizing, directing, and guiding the learning activities [1]. Hubball & Burt. The development of information technology can also be a big influence in human life and way of thinking for the future [2-3]. Computer, sence Smartphone and other electronic devices connected to the internet play an important role in supporting the work activities undertaken in an agency [4]. During this time, it has been easier to access information that can be obtained anywhere and anytime, as well as database processing that has so far helped to facilitate the performance of various educational institutions [5]. Increased professionalism and quality of education services in schools that performs a lot of data processing activities in the learning process activities, to determine the final grade of the student, should be accompanied by adequate information technology necessities. Resulting in a well-performed storage and processing also always up to date [6].

This article does not aim to create yet another account of social presence; rather, it aims to discover the similarities and contradictions within the existing literature. To do this, we reviewed, analyzed, and
classified the definitions, theoretical foundations, measurements, and applications of social presence in computer-mediated communication (CMC) and online learning research [7-9].

2013 curriculum or K13 is an instructional guidance method or a guide in the process of teaching and learning activities at school, developed on the "Standard Based Education" and Competency-Based Curriculum theory. The 2013 curriculum is oriented towards the learning process, character building, and skills. In this case, data processing is required to support the necessity of the curriculum assessment [10].

In problem identification that the absence of a mutually integrated assessment system between subject teachers and homeroom teachers, to avoid repetition in the student's final grade input, the necessity and the usage of grades processing data of 2013 curriculum and each student presence still use the writing on books, which resulted in stacked files thus making data searches slow and inefficient, this may result in damage or loss of data, and the process of creating the student's final grade report requires considerable time, because of the student data files number that will be inputted one by one in preparing the student final grade report (report card) [11].

Based on the elaboration above, this research is important to analyze the readiness and the implementation of the 2013 curriculum or K13. And the measuring instruments include several aspects, namely, 1) socialization of the curriculum by the Education Office of the district; 2) mental readiness of the students and teachers related to the pedagogical readiness; 3) training for main teachers in the implementation of the curriculum and giving explanations for peers; 4) assessing the teachers’ competence; and 5) monitoring and assisting the implementation of the curriculum [12].

2. Methodology
To approach this case, the descriptive method was used with the aim of deciphering properties or characteristics of a symptom and events that occur today. The author conducted the research to get data on the research object. Data types are classified into two types, primary and secondary data. Descriptive method was used to collect the data. A primary data source is data obtained directly from the source, data and information observed and recorded. The primary data sources were obtained from various ways such as direct observations and interviews. A secondary data source is data collection in the form of documents or information owned by the agency, by collecting the necessary data and information from relevant sources with the problem under research.

2.1 System approach and development method
Object-Oriented Analysis approach method was used for this research. At Figure 1 that prototype method was used for information systems data processing goods and production. Because it could facilitate the author, if one stage was not appropriate then it could go back to the previous stage so it would be quite effective in getting the clear necessities and rules. System development method prototype. (Figure 1)
2.2 Analysis and design tools
The tool used in this research was Unified Model Language (UML). According to Djono Irwanto (2006: 1) UML is one of depiction graphics languages supported by a single meta-model, which helps descriptions and design of software systems, especially systems built using technologist.

3. Results and discussion
Overview of the proposed system is a Web-based 2013 curriculum grade processing information system, which focuses on assessment, presence for report card. The proposed procedure design for 2013 curriculum academic information system is using use case and activity diagram. Use Case is a depiction particular function in a system of components, events or classes. In figure 2 showing use case process and activity diagram at figure 3 for process presence, figure 4 showing process assessment, and figure 5 for report card in this system. (Figure 2)
Activity diagrams depiction on execution and system flow. This diagram not only modeling software but modeling the business model as well. Activity diagram shows activity of actor behavior. (Figure 3)

![Activity in process presence](image1)

Figure 3. Activity in process presence.

In Figure 4 showing activity in process assessment for make procedure information system. (Figure 4)

![Activity in process assessment](image2)

Figure 4. Activity in process assessment.
For activity in report card is in (Figure 5).

**Figure 5.** Activity in report card.

Using database for implementation the information systems of goods data processing and production is as the storage of overall academic information systems data and presence assessment data containing the command of SQL codes in the software.

The result are depictions in the system application. for the report card application at (Figure 6).
Figure 6. Student's report card.

The result are depictions in the system application. Criterion variables: final grades and retention. One of the criterion variables, final grade, was based on the class records from online program administration staff at the end of the semester. Course final grades included A, A-, B+, B, B-, C+, C, C-, D+, D. In this study, students' final grades were divided into 10 groups: (0-45) = D, (46-45) = D+, (51-55) = C-, (56-60) = C, (61-65) = C+, (66-70) = B-, (71-75) = B, (76-80) = B+, (81-85) = A-, (86-100) = A.

Another criterion variable, namely knowledge and skills include subjects taken by students, spiritual attitudes and social attitudes with descriptions, extracurricular with descriptions, and also absence, was defined as indicators of assessments for final grade of students.

4. Conclusions
The conclusions of research entitled are the management process of preliminary assessments until final assessments can be performed effectively and efficiently with this application and could reduce the burden of homeroom in inputting the final student grade report because this academic information system has a feature to fill report cards automatically, which is already integrated between the school
teacher and the homeroom teacher, facilitate the teachers in evaluating student assessment results because the system is easy to understand in grades management.

Acknowledgements
First of all, thanks to Dr. Ir. Eddy Soeryanto Soegoto as Rector and Founder of University Computer Indonesia (UNIKOM) and Dr. Ir. Herman S. Soegoto as dean of FIKI unikom who provided insight and expertise that greatly assisted the research, and guidance in giving me full strength to complete this research and presents sincere appreciation goes to Unikom. In arranging this research, a lot of people have provided motivation, advice, and support for the researcher, intended to express gratitude and appreciation to all off them.

References
[1] Permendikbud No 68 Tahun 2013 Tentang Kerangka Dasar dan Struktur Kurikulum Sekolah Menengah Pertama / Madrasah Tsanawiyah.
[2] Ladjamudin bin Al-Bahra 2005 Analisis dan Desain Sistem Informasi 1st Ed (Yogyakarta: Graha Ilmu).
[3] Permendikbud No 81A Tahun 2013 Tentang Implementasi Kurikulum.
[4] Nazir 1988 Metode Penelitian (Jakarta: Ghalia Indonesia).
[5] S Pressman Roger 2002 Rekayasa Perangkat Lunak Pendekatan Praktis 1st Ed (Yogyakarta: Andi dan McGraw-Hill Book Co).
[6] Irwanto D 2005 Perancangan Object Oriented Software dengan UML 1st Ed (Yogyakarta: Andi).
[7] Widodo P P dan Herlawati 2011 Menggunakan UML (Bandung: Informatika).
[8] Nugroho B 2005 Database Relasional dengan MySQL 1st Ed (Yogyakarta: Andi).
[9] Permendikbud No. 24 Tahun 2016 kompetensi inti dan kompetensi dasar (KI KD) pada Kurikulum 2013 revisi untuk jenjang SD/MI, SMP, SMA, dan SMK.
[10] Oztok M and Brett C “Social Presence and Online Learning: A Review of Research,” International journal of E-learning & Distance Education 25 (3) 21-25.
[11] Liu S Y, Gomez J and Yen C-J 2009 “Community College Online Course Retention and Final Grade: Predictability of Social Presence” Journal of Interactive Online Learning 8 (2) ISSN: 1541-4914.
[12] Dominggus Rumahlatua, Estevanus K Huliselana and Johanis Takariaa 2016 “An Analysis of the Readiness and Implementation of 2013 Curriculum in The West Part of Seram District, Maluku Province, Indonesia ” International Journal Of Environmental & Science Education 11 (12) 5662-5675.