

Multi Use Conversion System and Visual Based Encyclopedia

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Abstract- Information technology is a field of science that explores data, facts and various information as widely as possible in the form of numbers, text, images, analog and digital signals with a computer as a tool. Various data sources are grouped, modified, transformed and processed into other forms to be used as new data, new facts, new information needed by users, all of which can be referred to as information.

Processing that involves a variety of ways and techniques by using various software and hardware that are appropriate is expected to be obtained to give satisfaction to users of information which can then be used as data in other forms by users.

In addition, as the daily reality faced by many people is the transformation and conversion of one form of data into another form, both commensurate and in other forms, is often needed. For example, often someone needs certain information both words in a particular language, pictures and descriptions of an object and the like. So that these needs should be easily available, but because the tools or software that can provide the required information is not available. So it is necessary to have a program or model that has the ability to assist users in solving various problems in terms of transforming data into other forms such as a multipurpose conversion system.

The benefits of this program can later help students to explore various information in the form of illustrated dictionaries (encyclopedias) and as a tool to assist students in completing the tasks given by the teacher.

Index Terms- *Multi use Conversion System; Encyclopedia*

I. INTRODUCTION

Information technology is a field of science that explores data, facts and various information as widely as possible in the form of numbers, text, images, analog and digital signals. Furthermore, various data sources are grouped, modified, transformed and processed into other forms to be used as new data, new facts, new information needed by users, all of which can be referred to as information.

Processing that involves a variety of ways and techniques by using various software and hardware that are appropriate is expected to be obtained to give satisfaction to users of

information which can then be used as data in other forms by users.

To be able to explore various data and information broadly and optimally, it is certainly not easy, because it requires high skills, tenacity, skills and creativity so that a variety of data and information that is still rough can be realized into new data and information more broadly, flexibly, representative and effective and detailed and clear. Therefore, in order to realize this, the role of information technology that is supported by appropriate software and hardware will provide maximum, accurate, relevant and correct results.

In addition, as the daily reality faced by many people is the transformation and conversion of one form of data into another form, both commensurate and in other forms, is often needed.

Another thing that often happens is the fact that someone forgets how to calculate and certain units, so that when needed it will make it difficult for someone to open a book, search the internet and so on which is not always available.

Therefore it is necessary to have a software that is able to serve and solve various other needs in an integrated manner so that the software will be able to answer all user needs, both in terms of the appearance of digital dictionaries and encyclopedias.

The variety of information to be studied, in addition to the conversion of words in local languages, foreign languages, illustrated dictionaries (encyclopedias), number conversions, calculators, and various conversions needed along with the needs of prospective users of the program to various information, the writer formulates how to make a system program multipurpose conversions that can serve various information needs.

Making a multi-use conversion system program as an application of information technology that is expected to be used by various parties such as students or students.

This multipurpose conversion system program is expected to help students or other users in making various conversions. In addition, the program which is equipped with this encyclopedia feature will contribute a lot to students to browse various information needed, especially when the internet network has problems or is offline.

The target of this study is to build application programs that will be able to contribute to the development of information technology for students and / or general users in terms of various conversions. As well as the availability of encyclopedias that will be able to provide a variety of information visually.

II. LITERATURE REVIEW

The system according to Webster (1968: 378) in Winardi (2010: 125) is:

“System is assemblage of object arranged after some distinct method, usually logical or scientific; whole scheme of created things regarded as forming one complete while, universe, organization, classification, set of doctrines or principles, the body of functional unity.”

While Winardi (2010: 125) revealed the general understanding of the system as follows:

The system is a set of elements between which there are relationships. Often in the literature additional words can be found, which elements are aimed at achieving certain general goals.

Similar understanding is also conveyed by Moses (2004: 12), that the system is a combination of components organized and related to one another. The system has unique behavior and each component has a contribution and influence on the system.

The system comes from Latin (Systēma) and Greek language (sustēma) is a unit consisting of components or elements that are linked together to facilitate the flow of information, material or energy. This term is often used to describe a set of interacting entities, where a mathematical model can often be made.

The system is also a unit of interconnected parts that are in an area and have driving items, a common example such as a country. The state is a collection of several elements of other entities such as provinces that are interconnected so as to form a country in which the role is the driving force of the people in the country.

The word "system" is widely used in everyday conversation, in discussion forums and scientific documents. This word is used for many things, and in many fields too, so that its meaning becomes diverse. In the most general sense, a system is a collection of objects that have a relationship between them.

Based on some understanding of the system above, it can be concluded that:

The system is a collection of various objects or elements that are interrelated that support the full system that can be in the form of activities, thoughts, teachings, formulas and provisions that are interrelated to achieve a particular goal

III. METHODOLOGY

System design model that describes the complete stages from the start of Analysis and Definition of Requirements, System and software design, implementation and unit testing, integration and

testing system, operation and maintenance. The respective stages can be explained as follows:

- Analysis and Definitions Requirements, namely services, limits and objectives are determined in consultation with the user system. These requirements are then defined in detail and function as system specifications.
- System Design and Software, namely the system design process dividing requirements in a software system. This activity determines the overall system architecture.
- Unit implementation and testing, namely software design that is realized as a series of programs or program units. Unit testing involves verifying each unit whether it meets its specifications.
- System Integration and Testing, that is, the individual program or program unit is integrated and tested as a complete system to ensure that the system requirements are met and after fulfilling then the program is sent to the customer to be tested by the customer whether in accordance with the wishes determined by the customer
- Operation and Maintenance, which is the longest phase of the life cycle, because the system is installed, used and continues to be used by users who in this case are extension agents to find a correction factor that needs improvement.

IV. RESULTS

1. Program Results

The multi-purpose conversion system program that has been designed according to the previous proposal is given the file name SISKON. Where the intended conversions are grouped into language conversion (foreign languages and regional languages), encyclopedias (Scientists / Inventors, Figures / Heroes, Flora and Fauna) and number and unit conversions.



Fig. 1. User's menu



Fig. 2. Indonesian Heroes



Fig. 5. Encyclopedia of Heroes

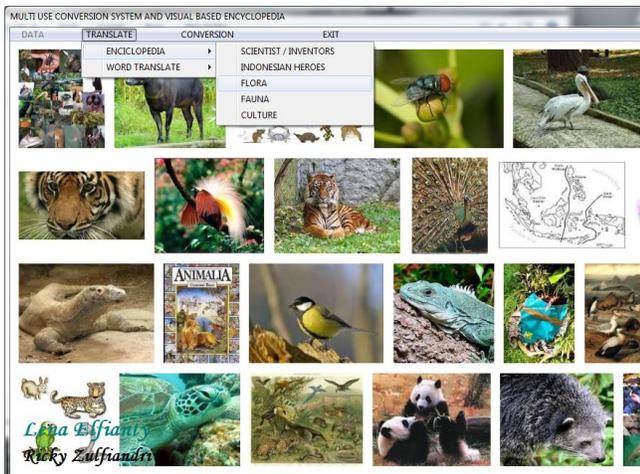


Fig. 3. Fauna

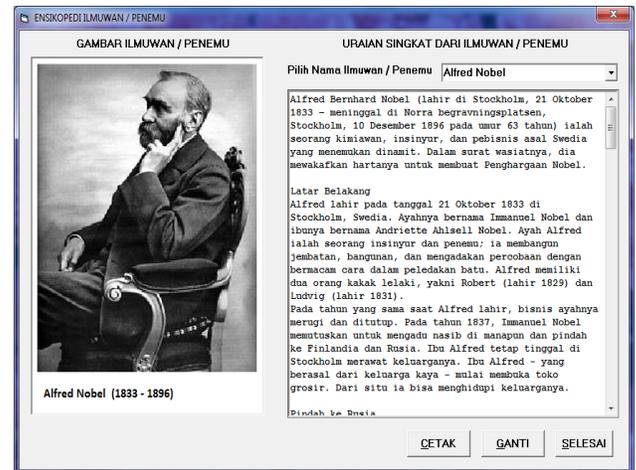


Fig. 6. Encyclopedia of Scientist/Inventors

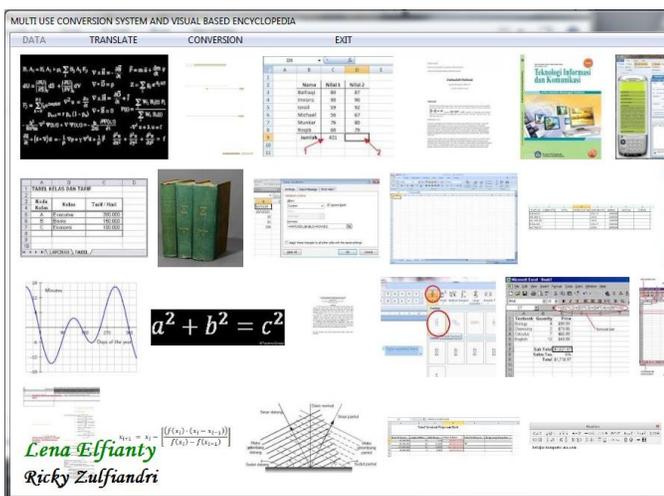


Fig. 4. Conversion

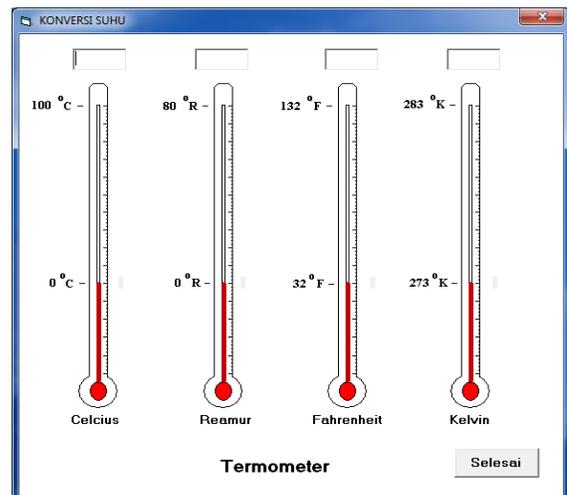


Fig. 7. Converting with any termometers

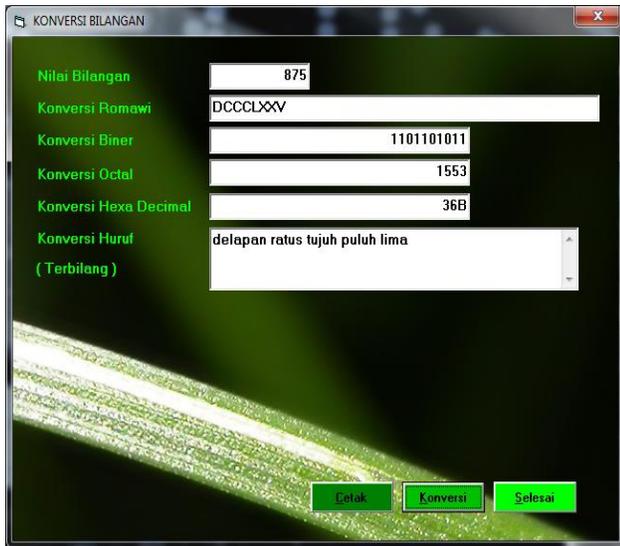


Fig. 8. Number Converting in any bases



Fig. 9. Word translating in any regional language

V. CONCLUSION

1. That the form of data processing does not merely have to change numbers into other numbers, but can also be changed and transformed into text and image forms that provide more information.
2. That conversions and encyclopedias are needed for many users because in certain conditions a person is susceptible to forgetfulness
3. That the scope of the field of information technology is very broad depending on how to utilize and interpret the information technology intended.

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