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Prototype Application Multimedia Learning for Teaching Basic English

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Abstract

English is a language that must be known all-digital era at this time where almost all information is in English, ranging from kindergarten to college learn English. elementary school is now also there are learning and to help introduce English is prototype application recognition of common words in English and can be updated dynamically so that updates occur information to new words and sentences in English to be introduced to students.

Keywords: Education, Learning English, Prototype Application

1. Introduction

Multimedia learning are very much of the simplest and cheapest to the sophisticated and expensive category with different feature too [1]–[5]. There can be made by individuals and some are produced by the company. In this increasingly dynamic era of information, educators are required to be creative in order to improve the quality of learning [6]–[8][9]. Nowadays computer technology has offered new opportunities[10] in learning process either in classroom, distance learning or self-study [11]–[15]. Computers have a very much function in the world of education, especially as a medium of instructional media[16], [17], Simulation[18]–[20] that can be used by faculty and students.

In addition, learning media strategy also has a contribution in improving the activity and motivation of students in learning[15], [21]–[23]. The use of appropriate teaching media in the learning process can generate new desires and interests, generate motivation and stimulation of learning activities[24]. The more intensive the learning experience that the learner learns, the higher the quality of the learning process in question. Student involvement is based on the motivation and high interest of the students in following the learning process, and also from the teacher is required to master the use of various media and learning strategies.

English is a common knowledge that must be known at this time by students ranging from kindergarten, elementary and high school, to facilitate learning English for elementary school students and to introduce the use of computers as educational media is made a prototype application of speech recognition and sen-

tence in English using programming language such as Borland Delphi for implementation because this programming are easy to used and many application has been developed for simulation, education and others [25]–[33] and also to implemented Text To Speech to English pronounce by computer it make this prototype much more perfect.

2. Methodology

Learning is a composite combination that includes human elements, materials, equipment facilities, and procedures that affect each other to achieve the purpose of teaching [34]–[37]. Humans involved in the teaching system consist of students or students, teachers or lecturers, and other personnel, such as laboratory personnel. Materials, including books, whiteboard, chalk, photography, slide, film, audio and video tape[38].

Computer Assisted Instruction is a teaching that uses computers as aids and can be used as a learning machine or teaching machine, a computer as a tool can provide a variety of help[38], such as:

- Keep learning materials that can be utilized whenever needed.
- Provides information on the various references and sources and audio-visual tools available.
- Provide information about the study room, and teaching staff.
- Giving information on student learning outcomes.
- Suggest activities and assess new tasks to do next.

Software development methodologies are developed and implemented in order to produce a good software and according to user

needs. The methodology used in software development is the Classic Life Cycle approach commonly referred to as the Water-fall model, this cycle is systematic, with sequential approaches to building software, starting at the system level and developing up to testing and error correction. There are 6 steps for making software, the steps are:

- System Engineering**
Since software is always part of the system, it must start with determining the needs for all the system elements, and then allocating some subset of those needs to the software.
- Analysis**
Analysis is the process of collecting software requirements. To understand the program to be built, must be understood insight information from software, required function, performance and interface.
- Design**
Software design is actually a collection of processes focused on 4 (four) different attributes, namely data structure, software architecture, details of procedures and interface characteristics.
- Encoding**
At this stage the design should be translated into a machine-readable form. The target of this stage is to write the program in detail on each module.
- Testing**
The testing process focuses on the internal logical of the software to ensure that all statements have been tested, and on the external functional to find faults and ensure that inputs meet the needs.
- Maintenance**
Maintenance is the stage of repair or completion of software that has been completed due to changes or additions that occur according to user needs or requests. To do so, reuse every step of the previous work cycle.

Prototype of multimedia learning application has several common word and sentences options it's made for the user to learn English, some of which are as follows:

- Learning Numbers
- Learning Fruit
- Learning Animals
- Learning Vehicles
- Daily Speech

3. Results and Discussion

Prototype application created using Borland Delphi programming language, Absolute Database as Database, and Text To Speech provides ease of learning for application users.

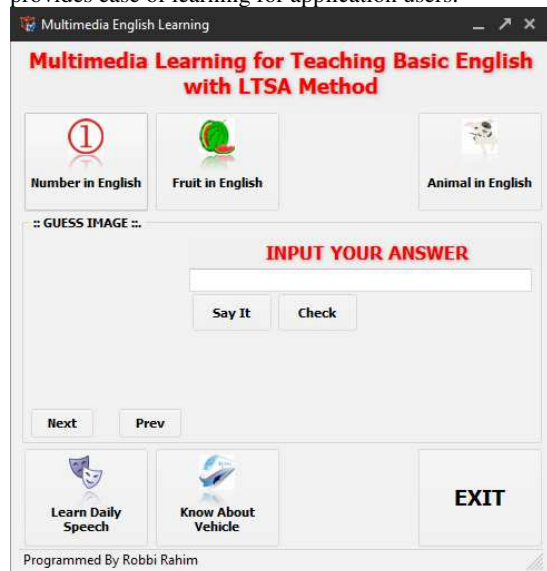


Fig.1: Main Form

Figure 1 is a prototype of the application created, in Figure 1 there are several buttons for accessing Basic English learning, for example is Number in English which is used to display the image of numbers and words in English as figure 2.



Fig.2: Learning Number

Figure 2 is a view of knowing the word in English and there is Say It facility to pronounce the word in English and check to check whether the word is in accordance with the picture.

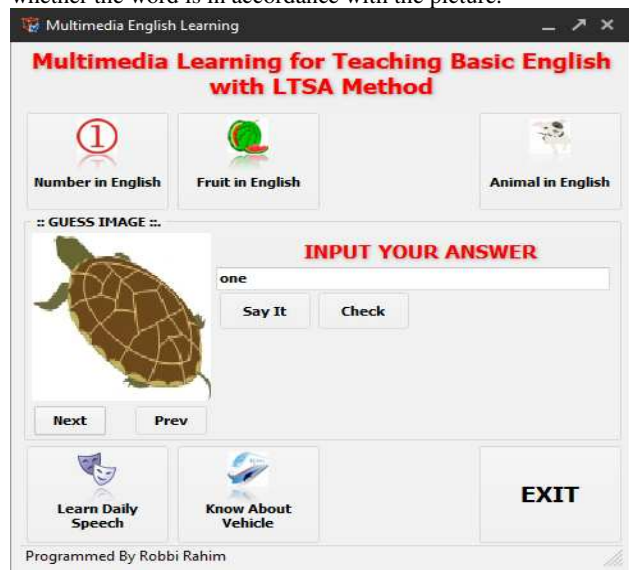


Fig.3: Animal in English

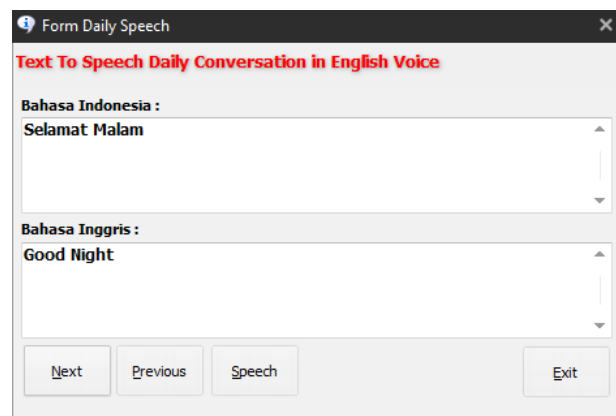


Fig.4: Learning Daily Word

Figures 3 and 4 are other information of the prototype of the application that was created and the testing made this application

easy to use and there is a voice feature to say a word or phrase in English so easy to follow the user.

4. Conclusion

Learning English with the help of the computer based learning can help for users, especially elementary school students to know the English language, especially common words and everyday sentences, applications designed far from perfect words and can be developed better by adding many features to make it easier learn English.

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