HANDLING REPEATEDLY ASKED WORD MEANINGS AND VOCABULARY BUILDING IN EBOOKS

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ABSTRACT

A system and method for implementing vocabulary building into existing dictionary assistance function in an e-reader are disclosed. The vocabulary builder helps the user improve his vocabulary in a number of ways. When the user highlights a word to seek meaning, instead of presenting with the meaning directly, the system will store in memory and present the context in which the user had asked for its meaning previously. The system may present a dialogue box with previously read sentences and snippets in which the word was present. The dialogue box also presents buttons “Got it” OR “Need help”, which in the latter case gives the dictionary meaning. If the user had previously asked for meanings of synonyms of the word in question, then the system would provide the user with a dialogue box, presenting those words like a quiz game, to be identified in snippets or sentences the user had read before. The system and method make the e-reader device more interactive and interesting. Also, the user would find that enhancing his vocabulary while reading could be fun. Scoring in the quiz and further attempting to score more will give improve the reader’s sense of self confidence and enhance the learning process.

BACKGROUND

An e-reader, also called an e-book reader or e-book device, is a mobile electronic device which is similar to a tablet computer that is designed primarily for the purpose of reading digital e-books and periodicals. The e-reader helps the user with a dictionary while reading an e-book, periodical etc. The e-reader is highly interactive and the user is provided with the option to highlight or double click on a word to look for its meaning. On double clicking the particular word the system will present a dialog box with the meaning and
synonyms of the word in question. In addition to the existing dictionary feature the e-reader can be added with more features like vocabulary builder which will make learning more interesting and fun.

DESCRIPTION

A system and method are proposed to provide vocabulary builder function in addition to the existing dictionary function in an e-reader. The proposed idea is to challenge the user’s memory in the form of a quiz game so that learning could be fun. When the user double-clicks on a word to seek meaning, instead of presenting him with the meaning of the word directly the system would first check for three conditions:

a) If the user had already looked up meaning of the same word while reading the same e-book or some other e-book and the number times he had checked

b) If the user had previously asked for meaning of any of the synonyms of the word in question

c) While reading the same e-book, if the user had come across any of the synonyms of the word in question in the previous pages he had read but did not ask for their meaning.

Based on identifying one or more of the aforementioned criteria the system is configured to perform the following functions:

1) If the system determines that the condition (a) is met i.e., the user had previously looked up the meaning of the same word, say 5 times, while reading the same or some other e-book, it would present a dialog box to the user with the particular 5 sentences or snippets where he had read the word before. The user is then provided with two selectable buttons (i) Got it and (ii) Need help. On selecting “Got it” the user can tell
the system that he can now remember the meaning of the word in question from the context of the snippets. On clicking the “Need help” button the system will provide the user with the dictionary meaning and synonyms of the word in question.

2) The system determines that condition (b) is met i.e. if the user had previously asked for meaning of any of the synonyms of the word in question. For example, the user might have come across 3 synonyms of the word in question, 3 times, and each time he might have asked for the meaning of each of the synonyms. Then the system would provide the user with a dialogue box, like a quiz game, including the snippets or sentences having the already read (and looked up) synonyms of the word in question. Within the dialog box, the user is asked to highlight the words from the snippet or sentences which he thinks can be synonyms of the word in question. While the user is engaged in playing the guessing game the system would also keep providing score to the user.

For example, if the snippets have 3 synonyms and the user has highlighted 3 synonyms which are correct, the system would indicate to the user that "You have got 3/3, you are awesome!" However, if the user highlights only 2 out of 3 synonyms correctly then the system can indicate to the user that "You have scored 66.6% in this quiz, you can do better" and then show the dictionary meaning of the word in question.

3) The system determines that condition (c) is met i.e., while reading the same ebook, the user has read (or came across in already read pages) three synonyms of the word in question, but did not ask for their meaning. The system would then comprehend that the user knows about three synonyms of the word in question and predicts the word in question might be another fancy word that might be interesting to the user. Here, the system presents the user with a dialogue box like a quiz game. The dialogue
box will include the snippets or sentences comprising the synonyms of the word in question which were already read and questioned. The user is asked to highlight the words from the snippet or sentences which he thinks can be synonyms of the word in question. While the user is engaged playing the guessing game the system would keep providing score to the user.

For example, if the snippets have 3 synonyms and the user has highlighted all 3 synonyms correctly, the system would indicate to the user that "You have 3/3 correct, you are awesome!". However, if the user highlights only 2 out of 3 synonyms correctly then the system can indicate to the user that "You have scored 66.6% in this quiz, you can do better" and then show the dictionary meaning of the word in question. As the user is already aware of the synonyms the “Need help” button will serve no purpose here, but it can still be provided for further assistance.

The implementation requirements for building the system are as follows:

a) The system is configured to capture snippets or sentences of the words for which the user looked up for meaning from the dictionary. The system would make a repository of all the words the user had looked for meaning and the associated sentences at a suitable storage location such as the reader device itself or to Cloud.

b) System is further configured to store book name, page number, day on which meaning was sought by the user, along with each stored snippet or sentence.

The implementation of the above said method to the system makes the e-reader device more interactive and useful. Also with this addition of new functions to the e-reader enhancing of vocabulary while reading could be fun. Scoring in quiz and further attempting to score more will give a sense of self confidence.
While recognizing the sentences where the user had already read the same word, the user might be able to better comprehend the meaning of the word in question and may not need dictionary assistance for that word, which enhances the user’s vocabulary without actual assistance. At the same time the user can check whether his understanding is correct or not by clicking on the “Need help” button. Introducing synonyms of a word and their usage in sentences in the form of a quiz makes learning fun for the reader, and also helps the user learn alternative words for words they already know.

The system and method makes the e-reader device more interactive and interesting. Also, the user would find that enhancing his vocabulary while reading could be fun. Scoring in the quiz and further attempting to score more will give improve the reader’s sense of self confidence and enhance the learning process.