Creating Reading Comprehension Quizzes and Crosswords with Hot Potatoes Version 6.0

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Abstract

This paper presents practical techniques for creating Web-based reading comprehension quizzes and crosswords. The computer program used is HOT POTATOES from Half-Baked Software Inc. This program enables teachers to create interactive Web-based exercises which can be delivered to any Internet-connected computer equipped with a browser. The exercises use HTML and JavaScript to implement the interactivity, but teachers do not need to know anything about these languages in order to use the programs. Teachers simply enter the data for the exercises (questions, answers, responses etc.), and press a button. The program creates the Web pages automatically, and can then be uploaded to a server.

Keywords: Reading Comprehension, Quizzes, Crosswords, Hot Potatoes, Web-based exercises

1. Introduction

The first electronic computer, using 18,000 radio tubes, was built in 1946 by three scientists at the University of Pennsylvania – Dr. John W. Manchly, J. Presper Eckert, Jr., and J. G. Brainerd. They called it ENIAC – Electronic Numerical Integrator and Computer. It cost $400,000 and had to be housed in a 30-foot by 50-foot room (Hendrickson, 2000: 164). It is absolutely different from the computers that we have today. It terms of price, a reasonably sophisticated desktop computer can be obtained with a price as low as $400. In terms of size, it can be smaller than 1 foot by 1 foot. The fast development in computers has made them indispensable for a lot of people.

The first software applications of computers were in 1950s, and they were mainly used in business. In 1970s, English language teachers started to turn their attention to computers. However, they faced several problems in using computers for English language teaching, such as the availability of the hardware and the technical skills required to run the software or to create computerized materials. The process of writing (or coding) computer programs is called programming, and it is usually conducted by programmers. Therefore, English language teachers often had

difficulties in writing a tailor-made computerized materials. The task became very time-consuming and costly.

Unlike the conditions in the 1970s, now software has become ubiquitous in our lives. Everyone, from any major, is involved with various types of software from the beginning and throughout his/her career. Therefore, it is necessary for teachers to keep abreast with the recent development in software, especially that related to English language teaching.

Nowadays, computer programs always include documentation, which is a written description of the functions of the program. Documentation helps the user operate the computer system and helps other programmers understand what the program does and how it accomplishes its purposes (Turban, Rainer, and Potter, 2005: 424). One example of a computer program which can easily be used by teachers is Hot Potatoes from Half-Baked Software Inc. This program enables teachers to create four types of interactive Web-based exercises. Two of these exercises – reading comprehension quizzes and crosswords – are discussed in this paper. All of these exercises can be delivered to any Internet-connected computer equipped with a browser. The exercises use HTML and JavaScript to implement the interactivity, but teachers do not need to know anything about these languages in order to use the programs. Hot POTATOES computer program is created by the Research and Development team at the University of Victoria, Humanities Computing and Media Centre. The program can be downloaded from http://web.uvic.ca/hrd/hcmc/. After that, it has to be installed in the computer. After it is installed, it has to be registered at http://web.uvic.ca/hrd/hotpot/register.htm. It is necessary to register the program so that there are more questions can be created.

2. Creating Reading Comprehension Quizzes

There are five steps in creating the reading comprehension quizzes: (1) Entering the multiple choice questions, (2) Adding the reading text, (3) Setting the time limit, (4) Configuring the appearance, and (5) Creating the Web page.

2.1 Entering the multiple choice questions

As with any other program, Hot Potatoes is run by clicking on the icon located in the "All Programs" folder or by double-clicking the icon which is on the desktop screen.

After opening Hot Potatoes, choose the JQuiz program by clicking the icon and an interface like the one below will appear. Follow the following steps:

1. Type the title in the title box.
2. Type the question in the question box.
3. Make sure that "Multiple-choice" is selected in the drop-down list box to the right of the question. This defines the type of question you want to make.
4. Type the answers in the boxes on the left, and the feedback on the right. Note that each answer, right or wrong, has its own feedback.
5. Check the "Correct" checkbox next to correct answer.
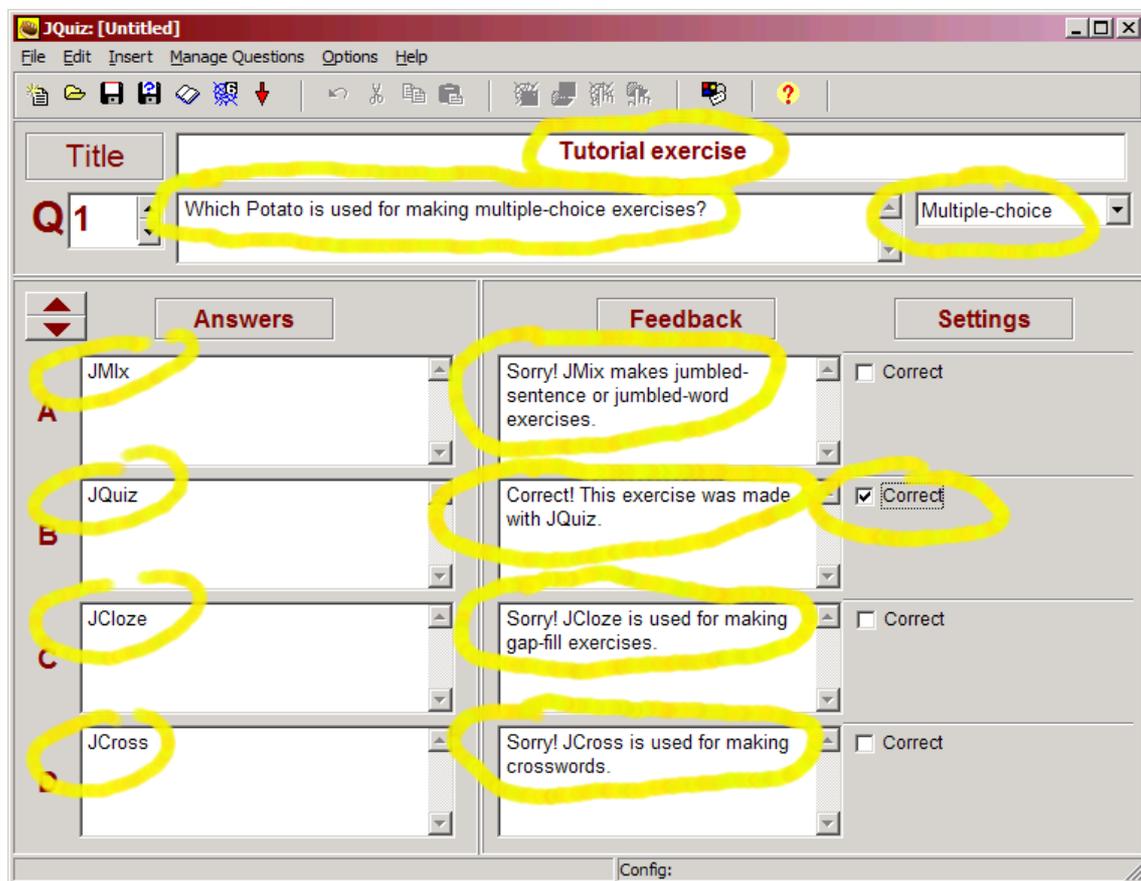

2.2 Adding the reading text

The reading text may be typed directly into the program, or it can be an imported from an external Web page. The following screen will appear after clicking on **Add Reading Text** from the file menu.
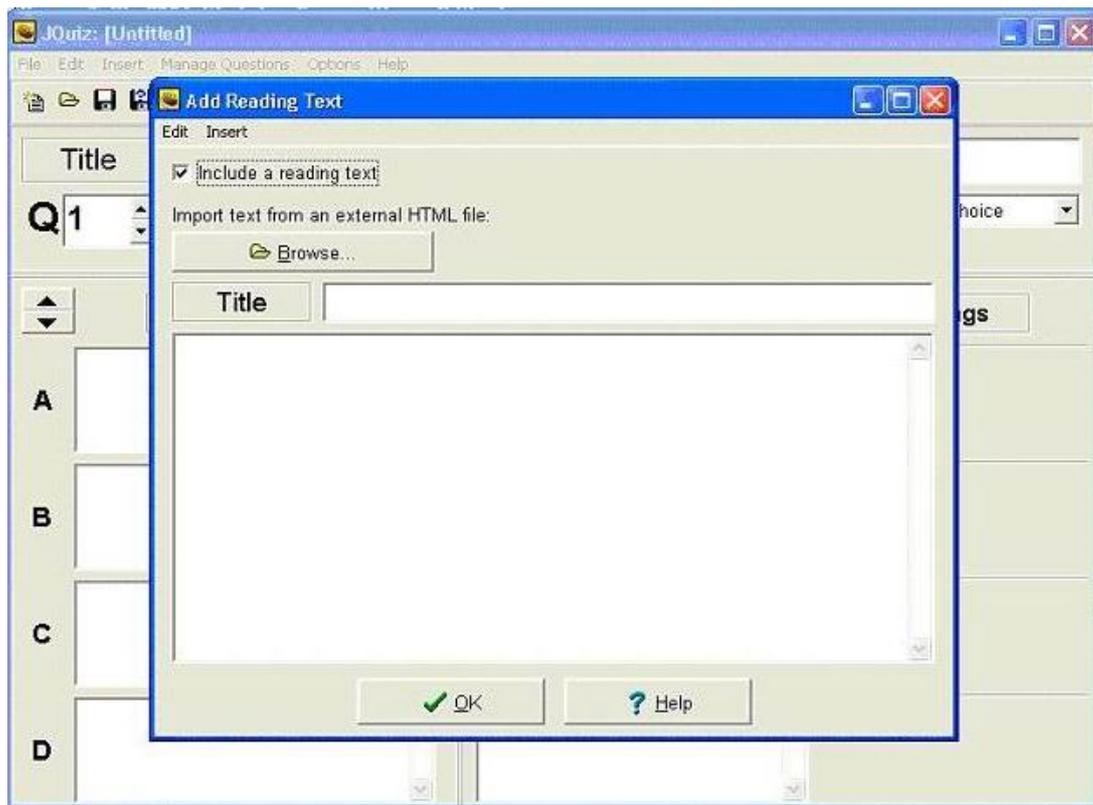
If the passage has been typed in another file, we can simply import the file by clicking the **Browse** button and find the file. Alternatively, we can type the passage in the box. We can also copy-paste a passage from another word processor. For example, if we have typed a passage in a Microsoft Word, we can just select the passage and press Control C. Then, put the cursor in the box, and press Control V. After that, click the OK button.

2.3 Setting the time limit

After the reading text is inserted and all questions are typed, the time limit can be set. It is up to the teachers concerning the maximum time to answers all of the questions of a reading text. A general guideline which can be used is one minute for each question. Therefore, the time limit for a passage which contains ten questions is ten minutes. The time limit option is in the Configuration File. Click the **Option** from the pull-down menu, and choose **Configure Output**. After that, click **Timer**, and the following screen will appear.
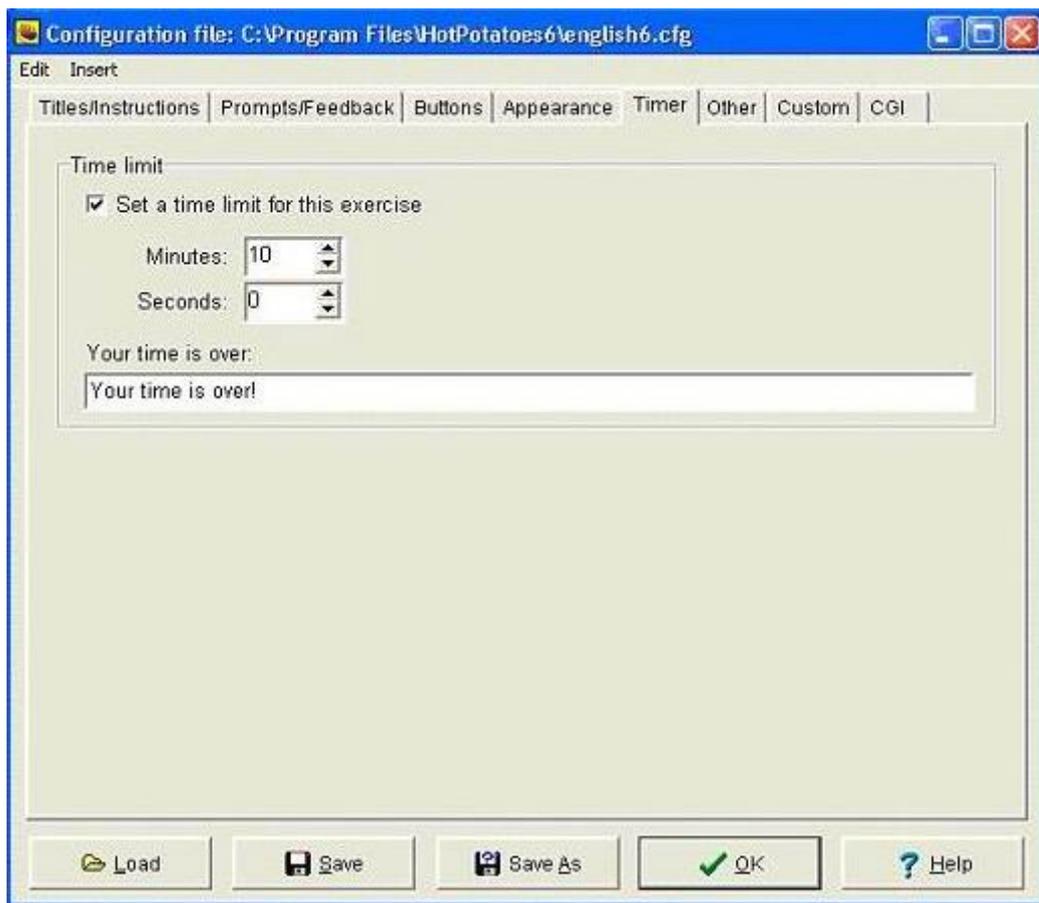
The time limit can be set per minute or second. We can simply change it by typing the numbers or using the arrow button. After the time limit is set, click the OK button.

2.4 Configuring the appearance

The configuration information is a collection of pieces of text, including instructions for doing the exercise, button captions, and link URLs, which are unlikely to change much from one exercise to another. The title of each exercise is likely to be unique. However, the subtitle (e.g. "Multiple-choice exercise") and the instructions ("Choose the correct answer for each question") can be changed, if necessary.

To change the configuration, first, click on Options/Configure Output to get to the configuration screen. In addition to the Timer, which is used to set the time limit, another important option in the configuration information is the Appearance. This should make the each reading exercise is unique. Therefore, the students will not get bored of looking at the same color and view all the time.
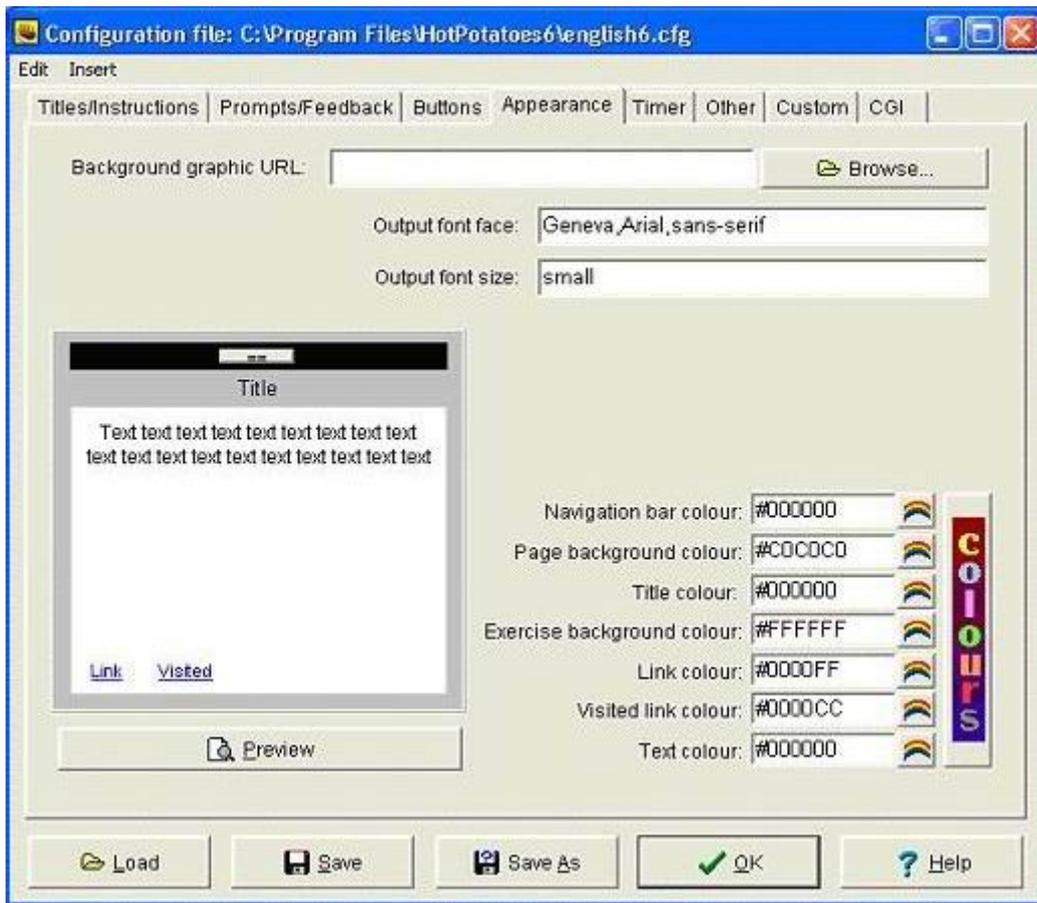
The choices of the colors can be seen by clicking the button on the right side of the codes. It is not necessary for teachers to understand the meaning of the six digit codes, because the colors can be readily selected using the cursor. Besides the colors, teachers can also change the font face and the font size. One thing that teachers should know is that the font size only recognized the standard computer language for font size, i.e. pt. The regular font size is 12pt. The smaller size which is also commonly used is 10pt. After the colors and the fonts are configured, press the OK button.

2.5 Creating the Web page.

The final step is to create a Web page from the data. This can be done by simply clicking on **Create web page / Web page for v6 browsers** from the File menu, then giving the page a filename. This is shown in the following figure.
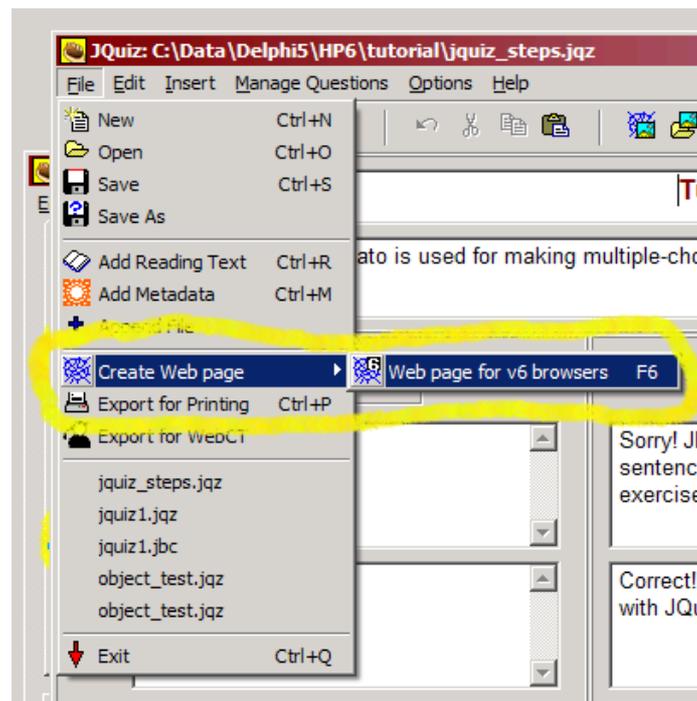
The file created has a .html extension and can be opened by any Internet browser. After opening the file, the student can see the reading text on the left side and the questions on the rights side. The student can choose an answer by clicking on a button. If the answer is correct, the button caption will change to a smiley face :-), and if it is wrong, it will change to an X (these standards can be changed in the configuration screen). In either case, the student can see feedback specific to that answer, if the teacher included the feedback when making the question.
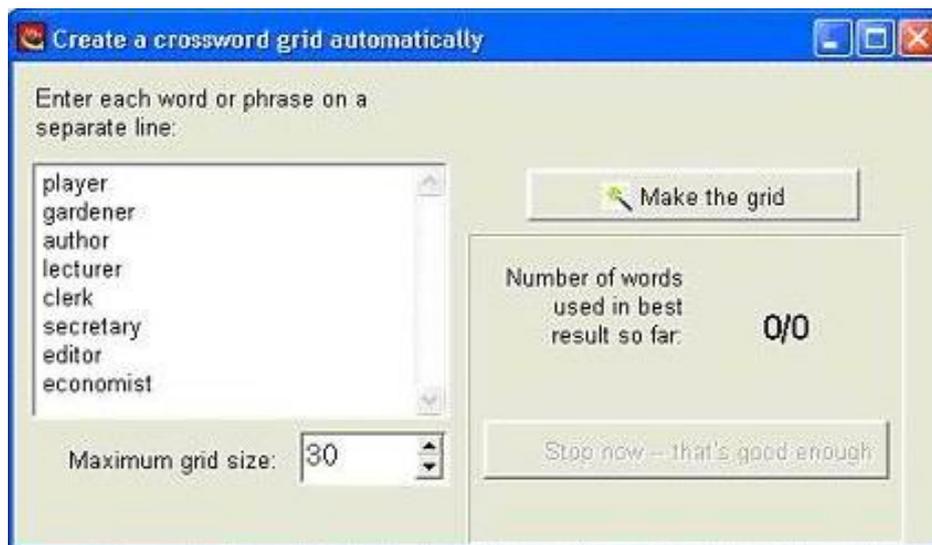
3. Creating Crosswords

The crosswords are also created in five steps: (1) Entering the words, (2) Making the grid automatically, (3) Adding the clues, (4) Setting the time limit, and (5) Creating the Web pages. The button of the Crosswords program is JCross. It is a very practical program for creating Crosswords. The program enables us to simple enter the words and the crossword will be created automatically within seconds. We do not need to concern whether the words will be suitable for building a crossword, because the program will do it for us.

After the JCross icon is clicked, the following screen will appear.
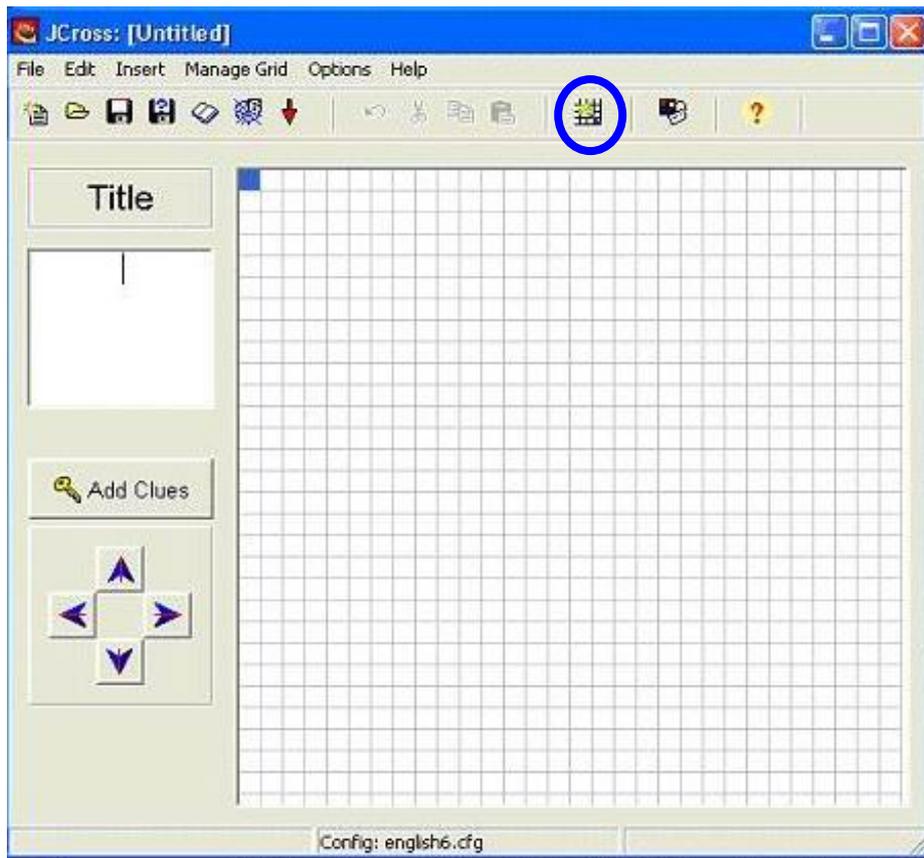
3.1 Entering the words

The words can be entered by clicking the third button from the right (in a circle in the figure above). After that, we can type each word on a separate line. Look at the following example:

3.2 Making the grid automatically

After typing all of the words, click the **Make the grid** button to create the crossword automatically. The result looks like the following figure.

3.3 Adding the clues

The clue for each word can be added by pressing the Add Clues button. The view is as follows:

3.4 Setting the time limit

It is up to the teachers concerning the maximum time to complete a crossword. A general guideline is thirty seconds for each clue. Therefore, the time limit for a crossword which contains thirty clues (say, fifteen Across and fifteen Down), is fifteen minutes. The same as the JQuiz, the time limit of the JCross is also in the Configuration File. Click the **Option** from the pull-down menu, and choose **Configure Output**. After that, click **Timer**, and modify the number of minutes and/or seconds.

3.5 Creating the Web pages

The same as the JQuiz, and other authoring tools, the Web page for the Crossword can be created by simply clicking on **Create web page / Web page for v6 browsers** from the File menu, then giving the page a filename. This is shown in the following figure.
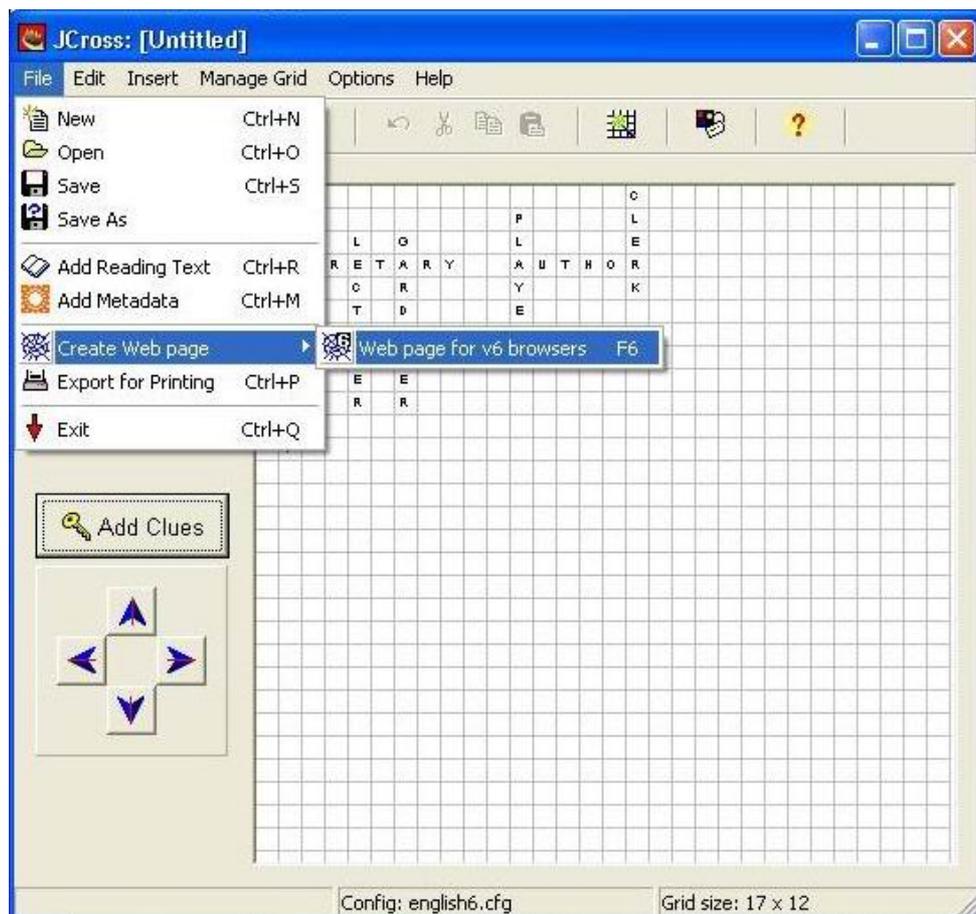
The file also has a .html extension and can be opened by any Internet browser. After opening the file, the student can see the crossword directly. The student can then click on any number in the crossword to see the clue. The student can type in the answer and press enter to see whether it is correct or incorrect.

4. Conclusion

As explained in this paper, e-learning materials can actually be created by anyone, even with a basic knowledge of computer language. The computer program explained here is one of several programs which make the tasks of creating e-learning materials an easy one. This program has been proven user-friendly and can be used by any teacher, even with very little computer skills. The files created are not only interactive but can also be tailored to the materials used by the teachers. In addition, it enables teachers to keep abreast with the development of technology in EFL.

References

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Turban, Efraim., R. Kelly Rainer, Jr., and Richard E. Potter. 2005. *Introduction to Information Technology*. Illinois: John Wiley & Sons.

http://web.uvic.ca/hrd/hcmc/