

# MM 319 Program Three

## Purpose

Completing this assignment will give you experience in creating a multimedia title that incorporates multiple screen formats, transitions between screens, and draws its content from external files. Doing so will give you an opportunity for practical application of chunk expressions.

## The Task

This program will be an interactive quiz module such as one might find included in an educational multimedia title. The questions will all be multiple choice, but there will be two possible formats. One is a text-only question, and the other is a question that includes a picture. The two question formats will require different screen layouts. In addition to the two question screen templates, the quiz will include a title and instructions screen and a screen that reports the score and gives feedback to the quiz taker.

The quiz questions will be stored in a text file, with all the information for one question being stored on one line. The necessary information includes the stem (actual question), four possible answers, and the letter of the correct answer. If the question includes a picture, the name of the picture file will be the seventh item on the line. The items will be separated by tilde (~) characters, because a question might include commas.

## Specifications

When the program launches, it will display an instruction and title screen informing the quiz taker how to proceed. It will also load the quiz information from a file named "Quiz.txt" although the user won't be aware of this. The quiz begins when the user presses a key or clicks the mouse, and the first question will appear, with the four possible answers next to four buttons labeled "A," "B," "C," and "D."

When the user clicks one of the four buttons, the program compares the answer chosen with the correct answer from the file, and tallies it if it is correct. It then displays the next question in the appropriate template. When the last question has been answered, the program will display a screen giving the score and feedback as follows:

At least 90% right: Your understanding of the material is excellent.

80 — 90% right: Your understanding of the material is good.

70 — 80% right: Your understanding of the material is fair

60 — 70% right: Your understanding of the material needs improvement.

Less than 60%: Your understanding of the material needs much improvement.

Report the score as "You got  $x$  out of  $y$  correct above the feedback.

The screen size should be 800 by 600. You should allow room on the picture format screen for an image 3.75 inches wide and 4 inches high.

Note that the program should number the questions. The numbers won't be in the file.

Use appropriate transition effects between "screens."

**Document** your code, and use sensible identifiers.

Avoid redundant code. This is especially important in a development environment like Director in which duplicated series of statements attached to various sprites are easily overlooked. You might change one and forget to change others, leading to inconsistent program behavior.

### **Gotchas—Things to Watch For**

An empty text container has one line. This means that the number of lines in the quiz will seem to have one more line than it really has.

The puppetTransition command seems like a logical choice for this application. However, it takes effect only in the frame the playback head is in at the time the command is issued, and therefore you'll need to use the transition channel in the score.

Remember that the image files and text file must be in the same folder as the director file. I'll warn you in advance that Director can't read every image type—psd and tiff files are out. Director like jpegs.