

Simple lexical decision task:

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In E-Prime, make a program to present four trials, two with words and two with nonwords. For each trial, have a fixation cross for 500 ms, then present the stimulus for 1750 ms (whether or not the subject responds), then clear the screen for 250 ms (this corresponds to a TR of 2500 ms). Collect a response during the stimulus. Use the "2" key for words, and the "3" key for nonwords (index and middle fingers of right hand on the scanner button box). Do not allow any other keys. Make the word and nonword trials occur in random order.

You should also include Hello and Goodbye screens at the start and end of the session, and possibly some instructions. In addition, to round out this exercise for fMRI, add the SRBox so that the program uses the button box (make sure to have it emulate the keyboard), and add a Ready screen to wait for the first pulse from the scanner. Make sure all appropriate objects use Cumulative timing mode.

Submit the resulting .es file (you may send the .ebs too if you like), plus one .edat file.

(For extra credit) Modified lexical decision task:

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- Allow a response to come anytime during the stimulus or the blank 250 ms that follows the stimulus. (E-Prime calls this "extended input", and illustrates this in the "Basic Reaction Time: Extended Input" sample in Appendix C of the User's Guide. It is a very useful and straightforward feature, and really should not be treated as such an advanced subject).

- Have the program score for correct responses.

As above, submit the resulting .es file (you may send the .ebs too if you like), plus one .edat file.