```
function [correct] = HANGMAN()
correct = 0;
bad = 0;
arrWord = {'LAPTOP', 'WHEAT', 'HOMEMADE', 'SOURDOUGH', 'PITA', 'FLOUR', 'TOAST', 'BAGUETTE',
length1 = length(arrWord); %This line to 14 is meant to grab a random word out of an array, w
hich its length is turned into a varaible called length2
rndNum = randi(length1);
arr1 = arrWord(rndNum);
word = char(arr1);
length2 = length(word);
blankWord(1) = ' '; %The start of the blank word
for i = 2:2:(length2 * 2)-1 %This loop will create the word that has " " instead of letters.
    blankWord(i) = ' ';
    blankWord(i+1) = ' ';
end
fprintf('Welcome to Hangman!\n'); %welcomes user to hangman
counts = 0;
for i = 2:2:(length2*2) -1 %This makes the letters in the word have 1 space between each othe
  leftOver = word(i:end);
  word(i) = ' ';
  word(i+1: end+1) = leftOver;
plays = 1; %These are initialized values for how much the user has made correct and incorrect
ed guesses.
plays1 = 1;
rightG = '';
wrongG = '';
\dot{j} = 1;
qCheck = '';
while(counts < 6) %loop will run until player loses</pre>
   right = 0;
   repeat = 0;
    check = (blankWord ~= word);
   for i = 1:length(check) %This loop checks if all of the letters in the blank word and req
ular word are the same.
       if(check(i) == 0)
       right = right + 1;
        end
    end
    score = 0;
    quess = '';
    if (plays > 1 || plays1 > 1) %Tells the user his or her right and wrong guesses
        if (~isempty(rightG))
            fprintf('Right guesses: %s\n', rightG);
        else
            fprintf('You have made 0 correct guesses\n');
        end
        if (~isempty(wrongG))
        fprintf('Wrong guesses: %s\n\n', wrongG);
```

```
else
           fprintf('You have made 0 incorrect guesses\n\n');
       end
  end
       fprintf('%s\n', blankWord);
       if(right == length(word)) %will break the loop if the word and the blank word are the
same
            break;
       end
  fprintf('You have %i guesses left\n', counts); %Player enters a letter
  guess = input('Guess a letter: ', 's');
  guess = upper(guess);
  if(length(guess) > 1)
       bad = 1;
  elseif(isletter(guess) == [])
       bad = 1;
  elseif(isletter(quess) == 0)
      bad = 1;
  end
  while (bad == 1)
       fprintf('Only letters can be entered!\n');
       quess = input('Guess a letter: ', 's');
       guess = upper(guess);
        if(length(guess) > 1)
            bad = 1;
       elseif(isletter(guess) == [])
            bad = 1;
       elseif(isletter(guess) == 0)
            bad = 1;
       else
            bad = 0;
       end
  end
  for(i = 1:length(gCheck))
       if(guess == gCheck(i))
           repeat = 1;
       end
  end
  while (repeat == 1)
      bad1 = 0;
     fprintf('You have already entered that letter!\n');
     guess = input('Guess a letter: ', 's');
     guess = upper(guess);
      for(i = 1:length(gCheck))
            if(guess == gCheck(i))
                bad1 = bad1 +1;
            end
      end
      if (bad1 >=1)
          repeat = 1;
      else
```

```
repeat =0;
      end
   end
   guess = upper(guess);
   for i = 1:length(word) %checks if guessed letter is similar to any letters in word. Will
change blank word accordingly
       if (guess == word(i))
           blankWord(i) = word(i);
            score = 1;
        end
   end
   if (score == 0) %If no letters are similar to word
       fprintf('Your guess was incorrect.\n');
       counts = counts + 1;
       wrongG(plays) = guess;
       wrongG(plays +1) = ' ';
       plays = plays + 2;
   else
       fprintf('Your guess was correct!\n'); %If one or more letters are similar to word
        rightG(plays1) = guess;
       rightG(plays1 +1) = ' ';
       plays1 = plays1 + 2;
   end
   gCheck(j) = guess;
   j = j + 1;
end
if(right == length(word))%Is true if player guessed the word
   correct = 1;
else
   fprintf('The word was %s\n',word); %Displays word if player never found the word.
end
end
```

Error using dbstatus

When specifying files that are not on MATLAB's current search path, a file extension is required.

Published with MATLAB® R2018b