Hang Man

Assignment:

You are to program the classic game of hangman. The computer should select a random word from an input file, loaded into a string array and then the user tries to guess it by suggesting letters. The word to guess is represented by a row of asterisks (the mask) giving the number of letters of the word. (example: the word function would be *******)

To begin the game, you should display the gallows and the mask. The user then guesses a letter. If correct, ask for the next letter. If incorrect, count the miss and ask for the next letter. After each guess show the current man and gallows. The game is over when the user makes 6 incorrect guesses or correctly guesses the word.

You can use ascii art to display the man and gallows (the board) – remember a "\" indicates an escape sequence so you will have to use two ("\\") to get one ("\").

Sample of a game in progress with 5 incorrect guesses:

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That is incorrect.  You may miss 1 more time(s).

Previous incorrect guesses were: a b c d

 __________
|        |
|        O   <------ First incorrect adds the head
|       / | \       Second the right arm, third the torso, forth the left arm
|       /           fifth the right leg, sixth the left leg and the game is over

The word is: f**c*ion Enter your next guess:
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You program should:

- Check for missing input and take appropriate action
- Check for an empty file and take appropriate action
- Use a string array to hold the input file of words, and then select one word at random for the game.
- When the game is over, you should offer to play again.

- Make good use of OOP design to
    - Display the board before each guess
    - Process each guess and update the mask (word), to report the results
    - Check to see if the game is over (inspect the mask for any character not yet guessed (*))
- Display the updated mask
- Report correct and incorrect guesses with the number of missed guesses remaining
- Let the user know if he/she is a winner or a loser