

THE HANGMAN GAME



Hangman is a paper and pencil guessing game for two or more players. One player thinks of a word and the other tries to guess it by suggesting the letters. The word to guess is represented by a row of dashes, giving the number of letters. If the guessing player suggests a letter which occurs in the word, the program writes it in all its correct positions. If the suggested letter does not occur in the word, the other player draws one element of the hangman diagram as a tally mark. The game is over when:

The guessing player completes the word, or guesses the whole word correctly.

Our code will generate a word which has to be guessed by the player. So, at the output screen will exist marked out blanks (short lines) for each letter of a word. Then the player will guess a letter. If that letter is in the word(s) then the project will write the letter at every place it appears, and cross out that letter in the alphabet. If the letter isn't in the word then we cross out the lifelines (which are usually a finite no. of chances) from the list. The player will continue guessing the letters until he can either solve the word (or phrase) or he will end up losing all the lifelines and he will be declared a LOSER.

So, it is basically a TWO PLAYER game. But in our project a single player plays the game and the rules are strictly followed by the programme.

SOLUTION DESIGN

We used tkinter toolkit for GUI. we incorporated some widgets which better the result screen, so that, the user can proceed in the game with no confusion. The overall architecture can be thought of having *four* main parts which consist of the following functionalities:-

- 1) Formulating a word list (with or without a hint) and store them in a data structure with the list of all 26 alphabets of English Language.*
- 2) The actual method which does the logical reasoning, whether the letter exists or not, if yes, write it down at all the places else strike off a lifeline. This forms the main part of the code.*
- 3) Finally, the GUI coding, user interactive screen which will mainly prevail during the code output.*

Implementation Plan

We have decided to use PYTHON language and specifically Tkinter toolkit for the GUI package. Initially we were confused between Tkinter and wxpython. But then, thought of utilizing the classes and modules of this package for my gaming environment. This game will mainly play with the 26 letters of the English language, so the input data will be just letters and as output the player comes to know whether he has won, or else if lost, what was the word which he missed to guess correctly. Thus, there will be a list of words in store with the program from which a player will be asked to guess a word.

Utility of Hangman Games

Hangman is used often by teachers to practice spelling, vocabulary and just for fun.

FUTURE SCOPE:

- 1) Final word to be displayed if guessed wrongly else, interactive message saying that "The Player is the winner"*
- 2) Adding url of image so that the user doesn't have to download image and change path before playing the game*