## NMAM Institute of Technology

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#### **PYTHON PROJECT SYNOPSIS**

ON

# A Game Of "Hangman"

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#### **ABSTRACT**

**Hangman** is a guessing game for two or more players. One player thinks of a word, phrase or sentence and the other(s) tries to guess it by suggesting letters within a certain number of guesses. Was originally a Paper-and-pencil game, there are now electronic versions. The word to guess is represented by a row of dashes representing each letter of the word. Rules may permit or forbid proper nouns, such as names, places, movies, brands, or slang. If the guessing player suggests a letter which occurs in the word, the other player writes it in all its correct positions. If the suggested letter does not occur in the word, the other player removes, or either alternatively, adds one element of a hanged stick figure as a tally mark. Generally, the game ends once the word is guessed, or if the stick figure is complete - signifying that all guesses have been used. The player guessing the word may, at any time, attempt to guess the whole word. Eventually if the word is correct, the game is Over and the Guesser wins. Otherwise, the player may choose to penalize the Guesser, by adding an element to the Stick Figure.

#### **INTRODUCTION**

This is a Hangman game using the Python Programming Language, by implementing a Simple GUI using the Python Package, 'Tkinter'. We also include a standard python library known, 'random' which has the in-built function, to select a random word from a Pre-built '.txt' file which contains the list of all the words, which will be the Word To Be Guessed.

The GUI of this Application contains Tkinter widgets like Entry, Label, Canvas, Button, Messagebox.

Here below, is a Basic Methodology used for the Working of the Application:

- The Program randomly selects a Word from the, already predefined Text File which has Varieties of words in it.
- Initially, the word will be represented with Dashes, corresponding to the number of Letters in them. Also, a pictorial representation of the Stick Figure without any Part(s) is placed.
- The User/Player is made to input Random guessed letters one-by-one.
- When the guessed letter is right, the dash corresponding to the letter guessed gets filled with the letter, and the game is continued.
- If the guessed letter is incorrect, the number of Remaining Attempts Decreases by one, and the Stick Figure gets a Part of its body.

#### **System Requirements:**

#### Languages:

Python

### Operating System:

Windows / Ubuntu / MacOS

Visual Studio Code or PyCharm [JetBrains], with an up-to-date operating system, whichever is Flexible & Compatible. Also, Python Interpreter (Version 3.9 or above), with installed libraries/packages according to the needs.

#### **References:**

- https://en.wikipedia.org/wiki/Hangman\_(game)
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- https://www.codespeedy.com/hangman-game-with-gui-in-python-using-tkinter/