

Hangman



PREPARED BY

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What is Hangman?

Hangman is a most popular guessing game, which has been playing by children since 1894. Although Alice Gomme didn't collect any pictures related to hangman from children's notebooks at 1894's, he got some relaying identities like scores and dashes. In past years, which has been played using papers and pencil. First player tells the word and category of the word (ex: Car is a category of 'Maruti suzuki'). The word is represented as dashes (ex: 'Maruti suzuki' is represented as _ _ _ _ _ _ _ _ _ _ _). The Second player suggests a letter that occur instead of hidden letters (_ _ r _ _ _ _ _ _ _ _). Now Second player (guessing person) having two ideas, category of the word and length of the given word using number of dashes. After each correct guess, first player will write the letter on the dashes. If the letter would be wrong the player will start to draw a hangman picture. If second player wouldn't reach the correct answer using given chance another person will complete the picture.

Hangman is a paper and pencil game for two or more players, now we are going to convert the game for single player also. How is it possible? Computer will play with us.

0. Layout

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1. Introduction

Purpose

The purpose of this documents is to describe the implementation details of Hangman. The Hangman is a game developed to guess word.

Scope

This documents describes the implementation details of Hangman. The objective of the project is to develop the game using python.

2. Requirements

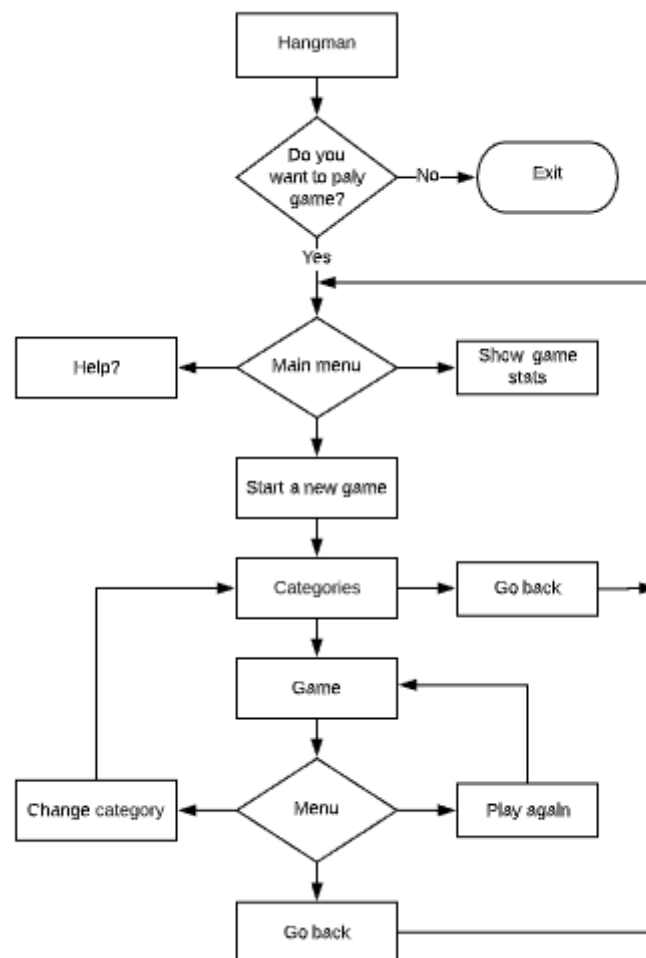
Hangman is a simple console based game. Our objective is to implement the game using Python Language.

- Develop a shell script to run the game.
- Develop a constant module to store constants.
- Develop a picture module to control pictures.

- Develop an io module to provide standard input and output methods.
- Develop a color module to improve player interaction with game.
- Develop a menu handler to handle menus.
- Develop a category module to load own categories.
- Develop a game module to control game.

3. The Architecture

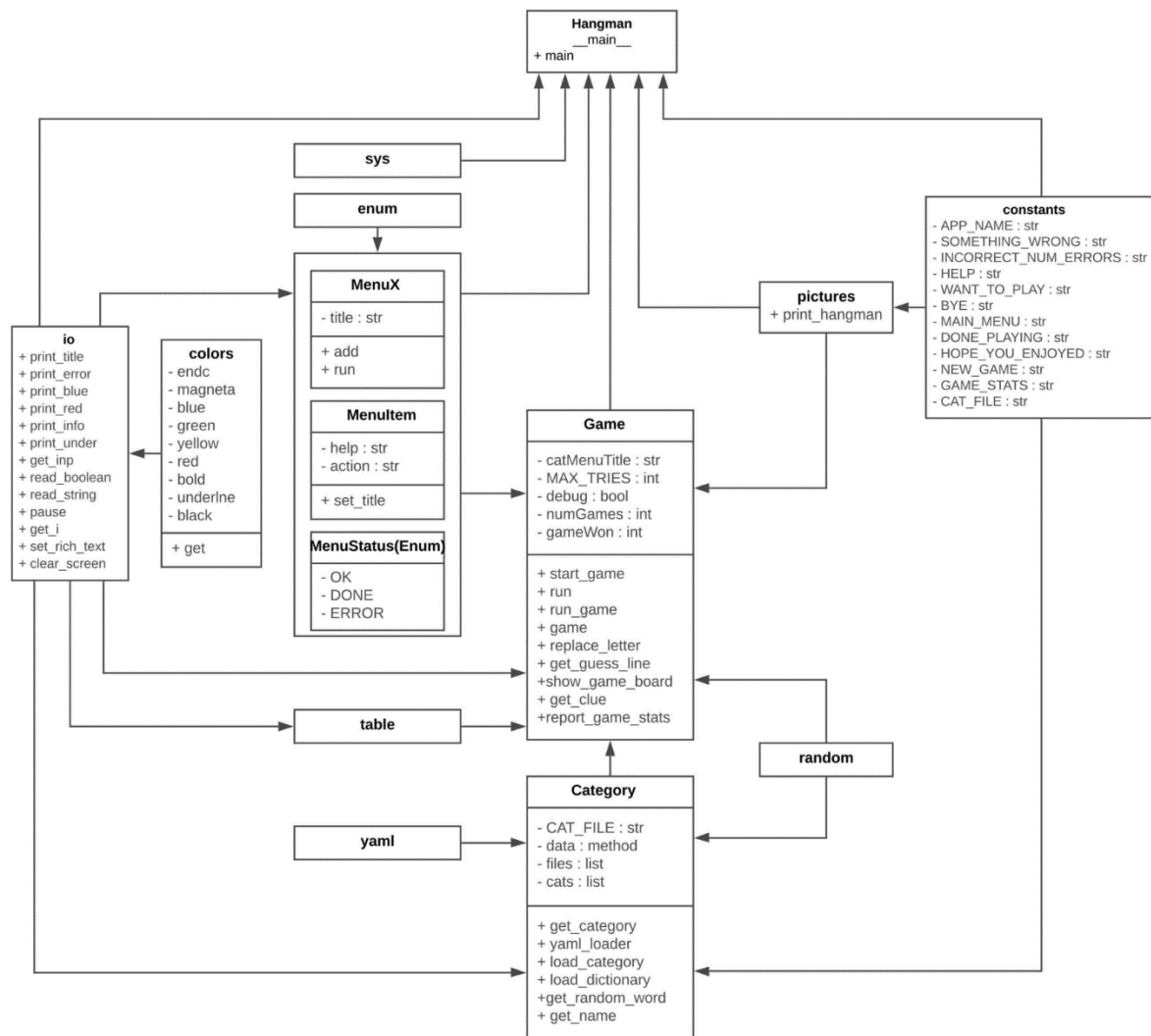
Solution Architecture



Hangman is the starting point of architecture. The program will ask the player ‘Do you want to play Hangman’ if the player enters ‘no’, the game will exit. If yes, will take the player to the further process. After, the main menu will be open, that has three options ‘Help’, ‘Game Stats’ and ‘Start a new game’. when player selecting ‘start a new game’ will take the player to the category. There are many categories listed on the category menu in which the player has been added. If the player chooses the ‘Go back’ option will take the player to the main menu. When

the player selects a category will take the player to game. After completion of each game will show a menu that will ask the player three options that are 'Change category', 'Play again' and 'Go back'. The 'Go back' is common to all, when players choose the 'Go back' option will take the player to the main menu. If you want play the category again, you can choose 'Play again'

4. The Class Diagram



- Attributes
- + Methods
- Relationships

The class diagram describes the static structure of a project and shows modules, class, methods, attribute and relations.

Hangman

Sys is a module needed to get 'richText' requests from the command line and sends the request to the main method. If the player enters '-rt' into the command

line, the main method will activate the clear screen method in the 'io' module. 'io' is a module that provides standard input/output methods to the project.

Menu

Menu is needed to handle the menu of the project. That is a combination of three classes. While processing, the 'MenuItem' class loads helplines and actions and sends it to 'MenuX' class, after which makes the process to handle the menu. The 'Enum' module is used to create constants.

Category

Category is a class needed to download words from '.txt' file with help of 'categories.yaml' and stores the words in the temporary list. it will load the words of that category into the game.

Game

Game will run with help of io, category, picture and table modules.

Data format (YAML)

Syntax

<file name> :<Category name>

Example

Districts	: TN Districts
States	: IND states
Car	: Top 10 cars
Biryani	: Biryani Varieties
Avengers	: Avenger series

5. Result

Below result has been came using python

```

Hangman
+---+
|   |
|   O
|  / \
|  / \
|     |
|_ _ _|
|_|_|_|_|
Do you want to play Hangman?>

```

```
Hangman: Main Menu
1. Start a new Game
2. Show game stats
3. Help?
4. Done playing Hangman for now

Enter option >
```

```
Categories
0. Go Back
1. TN Districts
2. IND states
3. Top 10 cars
4. Biryani Varieties
5. Avenger series

Select a category >
```

