

## Portfolio Project: Hangman Game

### Intro

For my portfolio project I decided create a Hangman Game using OOP in Python. The game displays the classic “Hangman” image along with a masked phrase that the player takes turns guessing the letters that it contains. Each time the player makes a wrong guess, the Hangman image updates to display more of the hangman character. The player only has 6 incorrect guesses before the image is completed and they lose the game. If they can complete the phrase before the image is completed, they win the game.



### Design

The game is composed to 3 different files: app.py, hangman.py, and phrases.py. Hangman.py contains the Hangman\_Game Class that is used to initialize all variables and call methods for each instance of the game. There are methods for printing parts of the game to the screen, accepting and validation player guesses, and responding to the win or lose events in the game. The phrases.py contains a list of random movie phrases that is used by the Hangman\_Game Class to randomly select a single phrase from the list every time a game object is created. The app.py is the main app that runs the game my creating the initial game object from the Hangman\_Game Class and calling the appropriate class methods for the game to function within a while loop.

## **Conclusion**

I really enjoyed taking the OOP approach to designing this game. It made keeping the main app's code very simple and easy to follow since all of the needed variables and methods could be contained within the class object. This is a design approach I will maintain as I code going forward. Some additional features I would love to add in the future are a better GUI interface, a running timer to record how long it takes a player to win, and the ability for the user to enter in the entire phrase is they would like to take a guess. These are features I plan on implementing as I continue on through the course.