

I created a hangman project. My game starts with a simple set of instructions and then the computer randomly generates a word for you to guess. Each guess is either successful, which shows where your letter falls in the word; or it is a failure where your little stick man gets closer to hanging.

I started my design by looking at the outline we made in week 3 and followed it to make sure I covered my bases. I then looked up a list of hangman words. Once I found a list of 200 hangman words I put them into list form. Then I looked up the ascii art necessary for the hangman project in each phase. Next, I determined that based on the art you could fail 6 times at guessing before you were out of lives so I set a variable "chances = 6" to represent that. Then I knew I was going to need a while loop so I created an "end\_game = False" element to ensure that I could use this to exit the while loop when necessary. After that, I used randrange to choose a random word from my word list. I then created a variable named word\_length to measure the length of my chosen\_word. Last above the while loop was my display blanks for the letters.

At first, I had my while loop starting before the display blanks, thinking I wanted new blanks to populate with each guess. However, that led to some odd errors where multiple lines of blanks kept printing. However, once I moved the while loop past the display block of code I was able to just display the letters once with no errors. I gave simple instructions that let the player know how to start and how many letters the word has so they don't have to count tiny lines on a screen. I then ask the player to guess a letter. For each guess, I have a different block of code.

The first block figures out if the player's guess is in the word. The next block decides what to do if the guess is wrong, by reducing their number of chances and finally what to do if they lose. Then a block of code that prints the correct letters in the blanks if they are guessed. And finally, a block of code that shows what to do when the player wins.

What I ran into the most was making sure I put things in the right order. I learned how easy it is to cause errors by not paying attention to where your code goes. At one point I had to re-write out my week 3 outline in the order in which the game is actually played because I kept getting stuck on when things should happen. Once I re-wrote the outline in the order the game is played it mostly seemed to fall into place after that.

My favorite part of the project is the ascii art. I had to watch a 10-minute video on how to make it happen in the right way but I really like the result. It is such a simple thing but I think it makes the entire game more fun. I wish I had thought of more scenarios for what to do if someone types in something wrong. But honestly having people punished by adding to their hangman for typing a 1 instead of a q seems fitting so I decided to leave it alone. I think in the future I would like to learn how to make it two players with each competing with the other to complete their word with the fewest failures.