For my project, my specific design goal was to create a fully functional Hangman game with a visually appealing user interface with as many categories that I can code in on time. In my opinion, I successfully implemented this. Using effective spacing and visual diagrams, I made my program easy to the eye and not just a block of text aligning to the left. In my final product, my program worked with 18 categories plus a random category. To conduct background research I looked up python programs that also were about hangman. Some scientific concepts were influenced from existing programs. I also looked up various python functions that we did not learn in class, including the function that read today’s date.

For my design criteria, I cleared the screen using 100 new lines after every turn. This made it less confusing for the user, because if I hadn’t done this, the user will see their previous turn along with their current turn. Whenever I faced a problem in programming my code, I looked it up on Google and found solutions. I had a tough time on implementing the random category, so I watched several videos on YouTube and improved it. I also looked up other existing code to further fix my program.

When I made the program, I first made the basic, core design and added details later. My core design was based off of my pseudo code and I used basic functions like if and while. I then adjusted it and added functions like define to make it work. Then, I added details like visual effects. That was my test plan to developing my code.

To improve the product, I debugged the program a lot. After many fails, I researched my problems or tried to fix them myself. I ran the code endlessly and adjusted the code each time to make my program better until my design criteria for a visually effective game was met. I didn’t want to use Tkinter or use any images, so I created my own using text. Problems that I came across included the spacing between the underscores, the random function, printing the date, and implementing lives. It would print out error after error. Sometimes, the game wouldn’t even start. To make my game have more improvements then the existing programs on the web, I made my program visually effective, with effective spacing and appealing text-based images. I also wanted to implement as many categories and words as I could, with a random category.

I targeted the game at your everyday person. I wanted my game to be very straight forward and I wanted everyone to be able to use it. To accomplish this, I centred the entire game on the screen, vertically, and I printed instructions on the screen. The meaningful need that my project fulfills was a good-looking game that anyone could enjoy endlessly, and a game that anyone would want to play more than just once. To make my program clear enough so that others can replicate it, I added comments on every function in my program, to make it easy to understand.