Members:

- Erick Jean Reyes
- Harrison Fernandez

Responsibilities:

- Client.py written by Harrison Fernandez
- Server.py written by Erick Jean Reyes

Directions:

- 1. Place the client.py, server.py, words.txt and the game.py files in a folder
- **2.** Open two Terminal/Command Line window and "cd" your way to the folder created in Step 1.
- **3.** In one of the windows, type "python3 server.py" followed by "-r" for a random word, or a word of your choice. Wait for this window to output a port number.
- **4.** In the other window, type "Python3 client.py X Y" where X is your server name (it might be "localhost" in Mac and Linux machines) and Y is the port number outputted by the Server in Step 2.
- **5.** The Client window will ask you for a name. Please enter "start" and then type "start" once more to start the game.
- **6.** The Client will output the instructions for the game. In order to start guessing, you can type "guess 'x'" or "guess 'xyz'", where x is a single letter/character and xyz is the whole word. If you guess a word, and it doesn't match, the game will end.
- 7. The client can also exit at any time when you type "quit" or "end".

Sample output for Server and Client below

Sample Server Interface:

```
Python — Python server.py -r — 80×30
[ericks-mbp-2:Python erickjeanreyes$ Python3 server.py -r
Server is running...
Creating TCP socket...
Server is listening on port 50712
Waiting for a client...
Creating UDP socket...
Sending UDP port number to client using TCP connection...
Hidden Word: though
Starting game...
Correctly guessed char
Attempts left: 5
Win status: False
Incorrectly or already guessed char
Attempts left: 4
Win status: False
Incorrectly or already guessed char
Attempts left: 3
Win status: False
Incorrectly or already guessed char
Attempts left: 2
Win status: False
Correctly guessed char
Attempts left: 2
Win status: False
Correctly guessed char Attempts left: 2
Win status: False
Guess was more than 1 char - win/lose only
Win status: 1
```

Sample Client Interface:

```
Python — Python client.py localhost 50712 — 103×30
[ericks-mbp-2:Python erickjeanreyes$ Python3 client.py localhost 50712
[ericks-mop-2:Python erick]eanreyes$ Python3 cli
Client is running...
Remote host: localhost, remote TCP port: 50712
Please enter your name: start
The server address is localhost:50712
Received UDP port#: 60994
('localhost', 60994)
Setart
>start
This is hangman. You will guess one letter at a time. If the letter is in the hidden word, the "-" will be replaced by the correct letter. Guessing multiple letters at a time will be considered as guessing the entire word (which will result in either a win or loss automatically - win if correct, loss if incorrect). You win if you either guess all of the correct letters or guess the word correctly. You lose if you run out of attempts. Attempts will be decremented in the case of an incorrect or repeated letter guess.

Word: ----- Attempts leff: 5
 Word: ----- Attempts left: 5
 >guess h
  Word: -h---h Attempts left: 5
 >guess a
Word: -h---h Attempts left: 4
 >guess e
  Word: -h---h Attempts left: 3
 Word: -h---h Attempts left: 2
 >guess o
  Word: -ho--h Attempts left: 2
  >guess u
  Word: -hou-h Attempts left: 2
 >guess though
  You win!
```