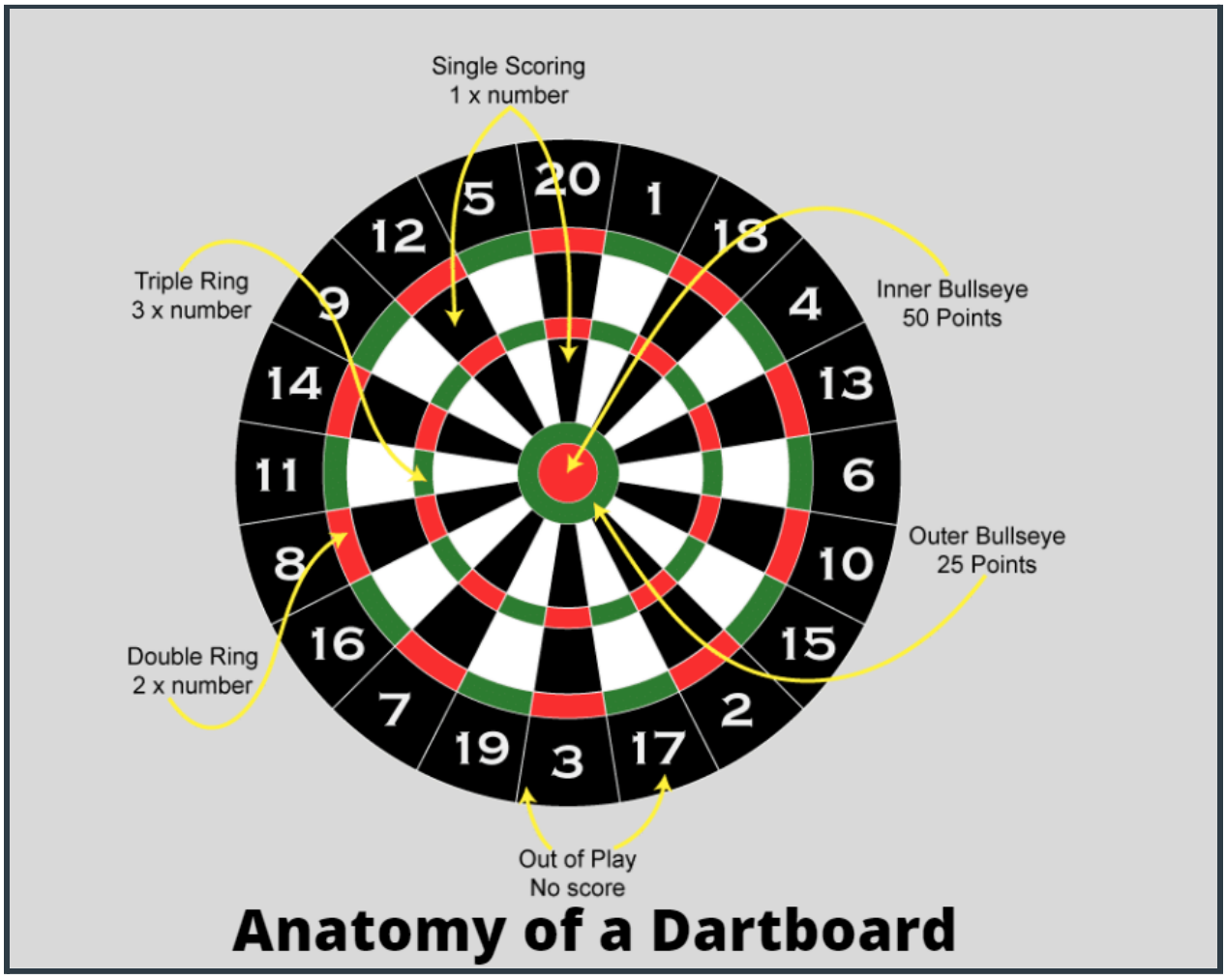
Group Lime
INST326

Dartboard Game

For our project we will attempt to recreate the dart game “501 Darts”. Although there is no visual aspect, the game will be played on a traditional dartboard. A human player will face a computer player with different difficulty levels (Easy, Medium, Hard). Each player gets to throw three darts per turn and the distance is chosen by the human player (between 5 and 20 feet). Each player starts off with 501 points and the objective is to get to 0 before the other player. Each dart thrown will earn you a certain number of points and it will be subtracted from 501. If you are at 5 points and throw a dart on 15 then it will not count. You must get to zero exactly.



James

- the problem the group member set out to solve
  - Assigning a score for a player based on which section their dart hit
- a few sentences about the main things you figured out (be concise)

    - The main things I figured out were that we would need to use if statements to tell the program which section the dart landed in. To get that section we would need a separate function. We would need variables for each of the different scores that a player can get that would be returned. We would also need a string variable for the section and an integer variable that represents the number on the outside of the dartboard to use as a multiplier when the dart lands on any of the rings.
- which file contains your solution and any instructions on how to run the solution: **final_project.py**
    - If your solution requires specific modules, please provide a complete list of these early in your instructions.
    - If your solution requires API keys, usernames, passwords, or other special access measures, please provide the necessary information so the instructional team can run your code. We will not create or provide access to accounts to grade your code. If we lack the appropriate access to run your code, you will lose points.

Ethan P.

- the problem the group member set out to solve
    - Dart class
    - shot method: How the user shoots the darts.
    - __init__() method
    - gravity method
- a few sentences about the main things you figured out (be concise)
    - User inputs
        - Distance to shoot from
        - Power of shot
        - Angle to shoot at (going up and down)
        - Angle to shoot at (going left and right - if there is wind going east or west)
    - One thing I figured out was that I needed to import the random module in order to add “randomness” to account for human error. For example if the user found the angle and power to shoot at to get a bullseye they would just input the same power and angle each time they play
- which file contains your solution and any instructions on how to run the solution: **final_project.py**
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    - If your solution requires API keys, usernames, passwords, or other special access measures, please provide the necessary

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Ikey

- the problem the group member set out to solve
  - How wind affects the dart's landing coordinates
- a few sentences about the main things you figured out (be concise)
  - The wind speed would be a float or integer. The direction would be a string like east, west, north or south. The wind would have an effect on where on the dartboard the dart landed.
- which file contains your solution and any instructions on how to run the solution: **final_project.py**
    - If your solution requires specific modules, please provide a complete list of these early in your instructions.
    - If your solution requires API keys, usernames, passwords, or other special access measures, please provide the necessary information so the instructional team can run your code. We will not create or provide access to accounts to grade your code. If we lack the appropriate access to run your code, you will lose points.

Ethan D.

- the problem the group member set out to solve
  - I set out to solve was determining which section the dart would land in and what output that would give us
- a few sentences about the main things you figured out (be concise)
  - I figured out that we needed to account for how big each respective section was. I also figured out that I needed to out a range on the sections because they each fall within a certain radius of the circle
- which file contains your solution and any instructions on how to run the solution: **final_project.py**
    - If your solution requires specific modules, please provide a complete list of these early in your instructions.
    - If your solution requires API keys, usernames, passwords, or other special access measures, please provide the necessary information so the instructional team can run your code. We will not create or provide access to accounts to grade your code. If we lack the appropriate access to run your code, you will lose points.