

Siqi Wen

HW4: The Picnic Game

This program acts like the host of the picnic game. It will ask players what they will bring to the picnic. If a player responds with an item that has the same first letter as their first name, they can come to the picnic. Otherwise they can't come.

Here are things I did to develop this program and how it works:

1. I created a variable called "player_number" which takes an input from user for the number of players and stores it as an integer;
2. Created a list called "player_names", the program will use the for loop to fulfill the "player_names" list with the names that user will type in one by one;
3. Created a while loop. In the while loop, there is another for loop that iterates over the "player_names" list and asks each "player_name" what they will bring. In this for loop, I created a variable called "answer" and assigned it with the answer each "player_name" will type in each time;
4. If the "answer" has the same first letter as the corresponding "player_name", then the program will print out "You can come!". If not, then " Sorry, you can't come." will be printed out.
5. Created a variable called "stop_question" and set it equal to False initially;
6. Created another while loop that will keep running until it reaches to a specific condition. In the while loop, there is a variable called "more_rounds" which takes an input from user claiming if they want to try more or not. If user types "yes", then "stop_question" will be set equal to True which means this while loop will stop when user wants to try more; if user types "no", then it will exit the program; if user types anything that is not "yes" or "no", the program will keep prompting user to type in either "yes" or "no".

The program worked pretty well as I tried out a lot of different scenarios, and the outcomes all seemed accurate. Comparing with the previous homework, I do feel this one is more complicated. In previous homework, I didn't really encounter any problems, however, this time I did. Here are the two problems I encountered and how I solved them:

1. I got stuck at how to access every "player_name" in the list or how to loop through the "player_names" list — I rewatched Professor Bart's lecture for lists, and I found out the way to solve this problem;
2. I had some trouble figuring out how to prompt user to type in "yes" or "no" when they don't in the while loop that is inside of another while loop — I tried out many different ways to make it work (which involves changing the if/elif/else statements, adding a variable called "stop_question" and set it equal to False initially).

I was very happy when I finally made my program work, and I gained a great sense of achievement from this homework as I was able to solve all the problems that I encountered! Again, thank you, Mike, for the detailed instructions that you wrote, it helped me a lot with sorting thoughts out. I resubmitted my homework again, because I wanted to make my program more perfect: I changed my first while loop from "while True" to "while player_number > 0", so that when there is 0 player, the program would just end.