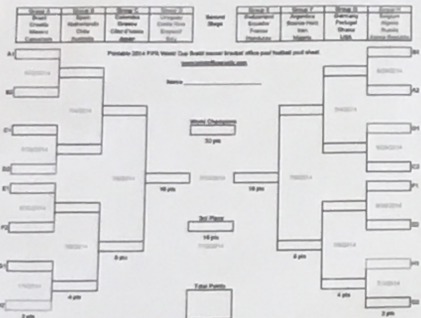


World Cup 2018 Hub



FIFA WORLD CUP RUSSIA 2018

World Cup 2018 Bracket Picker: This part of the program lets the user fill out a complete bracket of the World Cup from start to finish. It first asks users to input which teams will advance from each group, and then takes that input and formats it how the World Cup actually works. This program relies on loops as well as carrying variables forward to work.



My program is illustrated well by this figure

World Cup Champion Percentage Likelihood

This piece of the project calculates the Likelihood of a team participating in the 2018 World Cup to be the champion. By using a well-known sports analytics equation called the Pythagorean Expectation (shown below), we have calculated the Likelihood of a certain team to win it all. We placed every team and their percentage chances of winning into a Pandas Dataframe. The program itself allows one to input a certain team, resulting in an output of that certain team's percentage to be the champion.

Pythagorean Expectation

Champion Likelihood Percentage =

$$\frac{\# \text{ of goals scored by team during 2018 season}}{\# \text{ of goals scored by team during 2018 season} + \# \text{ of goals scored against team during 2018 season}}$$

$$\frac{\# \text{ of goals scored by team during 2018 season}}{\# \text{ of goals scored by team during 2018 season} + \# \text{ of goals scored against team during 2018 season}}$$

2018 World Cup Quiz: This part of the project is designed to be an interactive program for the user. It asks the user a series of questions about football and preferences. It then categorizes the response into certain lists and then the computer randomly picks a certain team of that said category. The goal of this program is to help a user determine what team they might want to cheer on in the upcoming 2018 World Cup. This program relies heavily on if, else, and, or statements to provide the final answers. With each team that is chosen you receive a description of what to know about the national team.



OUT ADVANCE

Brazil
Mexico
Croatia
Cameroon

1
2



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