Project Report: Anmolpreet Singh Basi

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The project is about a FIFA world cup game.

The game starts with a welcome sign and has 4 teams- America, Canada, Russia, Portugal with 3 customisable players in each of the teams. When the game asks for input and user inputs 1 then the match starts and asks performance of each team and then each player after that. The performance of overall team is calculated by a formula which evaluates the performance of the team and also team with highest overall performance plays better and scores more.

The structure of game is:

* Choose 1 for game or 2 for shoot out.
* User chooses 1.
* Team performances comes up.
* Individual player performance is inputted.
* According to performance the team scores goals
* Scores are counted.
* Winners of semi-finals move to finals
* Output file is generated.

The skill level and the aggression are stored using the structure in c++ which makes them easy to access. Even the performance chart is made using for loop by extracting the data from arrays. The program uses if else conditioning after getting the values stored in arrays and then evaluates which team will win the game. Then a while loop increases goals of each team by using a fixed limit integer for all teams so the team with max performance will have more goals.

Then another array is used to store the goals and after every match the array is updated.

No function was used to make the game as it would be difficult writing the various variables that are used in every possible functions.

Also, the for loop that displayed the performance chart the alignment of each element of the chart was difficult it could be easy with simple cout’s but to make it easier to store I used arrays and then used for loop to display them.

Although the structure variables are not used in program, but they could be used in some way like evaluating overall team performance but in this program/game the user itself inputs it for overall team.

I made an header file but then as I went through writing code I could not figure out what stuff to put in it I kept on writing code and once I was finished writing the whole code it was a bit difficult to move code to header file but I did not expect this.

Also, I did not use any comments as I had a layout made on a paper for the project so it did not fell necessary.

Text

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This is for making the performance chart.

Text

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As it was not predictable which team would win semi-finals so I stored the winner team in an array and then used array index to print the name of final match teams and then considered that every team could win the match and so used conditionals to update the overall scores for teams.

For the shootout game it’s just penalty kicks that the user makes by choosing 1, 2 or 3.

The mechanism is like this:

First, we generate a random number 1 to3 using:

int shooter = (rand() % 3) + 1;

Then ask user for input if the input is same as the generated number, then the goal is saved meaning no goal is scored.

If both are different then the goal is made and it prints goal scored and adds 1 to goals.

The overall program basically consists of arrays, loops and conditionals some functions could be added, classes were not necessary, but a structure was used.

UML DIAGRAM

A picture containing text, screenshot, sign

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