ICC Rankings

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OOM PROJECT

♦ Introduction:-

This project is based on ICC ranks of players and team. It contains the ability of player   or ranks from name of player or team or rank from names and ratings from name but only for most recent top 10 teams or players for ODI, T20 and

test matches. It also can show the factors on which the rankings and ratings depends

♦ Advantages:-

- **Encrypted data:** Data cannot be directly accessed by outsider
- **Presentable:** A user friendly code that asks for options
- **Easy to handle:** It's easier to find mistakes and bugs
- **Data Redundancy:** A data is used at many places declared only once

♦ Conclusion:-

This project is designed to store only the top 10 ranks of the respective category but with some minor changes we can store additional ranks as well. Thus, using the concepts of OOM, we have designed a project that stores and displays the ranks of teams and players in an organized fashion.

PROJECT REQUIREMENTS

- Store and display the stats (rank and rating) of top teams in the following formats:

- T20
- ODI
- Tests

- Store and display the stats (rank, rating and jersey number) of the top players (batsman, bowler and all-rounder) in the following formats:

- T20
- ODI
- Tests

- Option to search for a specific team
- Option to search for a specific player
- Show the best batsman, bowler and all-rounder of a particular team along with the stats of the respective players.
- Option to search the rating of player in top 10
- Option to search for rating of team in top 10
- Option to search the rank of a player

- Option to search for rank of a team

Project structure

OBJECTS	CONVENTION NAME
CLASS	pODI, pT20, ptests, playerranks, tODI, tT20, ttests, teamranks, display
FUNCTION	displayplayer(int,int,int,str,int), displayteam(int,int,str,int), displayfactorsplayer(int), other(), assignp(), displayfactorsteam(), assignt(), assignp1() ,assignp2(), assignp3(), assignt1(), assignt2() ,assignt3()
HEADER FILE	display.h, playerranks.h, teamranks.h, tODI.h, tT20.h ,ttests.h, pODI.h, pT20.h, ptests.h
PROGRAM FILE	display.cpp, playerranks.cpp, teamranks.cpp, tODI.cpp, tT20.cpp, ttests.cpp, pODI.cpp, pT20.cpp, ptests.cpp, main.cpp

PROGRAM VARIABLE	map<string,int> tmrnk2;
	map<string,int> tmrat2;
	map<int,string> rnktm2;
	map<string,int> tmrnk3;
	map<string,int> tmrat3;
	map<int,string> rnktm3;
	map<string,int> nmrnkbt3;
	map<string,int> nmratbt3;
	map<int,string> rnknmbt3;
	map<string,int> nmrnkbw3;
	map<string,int> nmratbw3; map<int,string> rnknmbw3;
	map<string,int> nmrnkar3; map<string,int> nmratar3;
	map<int,string> rnknmar3;
	map<string,int> tmrnk1; map<string,int> tmrat1;
	map<int,string> rnktm1;
	map<string,int> nmrnkbt1; map<string,int> nmrnkbw1;
	map<string,int> nmrnkar1; map<string,int> nmratbt1;
	map<string,int> nmratbw1; map<string,int> nmratar1;
	map<int,string> rnknmbt1; map<int,string> rnknmbw1;
	map<int,string> rnknmar1;
	map<string,int> nmrnkbt2; map<string,int> nmratbt2;
	map<int,string> rnknmbt2; map<string,int> nmrnkbw2;
	map<string,int> nmratbw2; map<int,string> rnknmbw2;
	map<string,int> nmrnkar2; map<string,int> nmratar2;
	map<int,string> rnknmar2;
	int count,int a,int f,int y,display d,int x,int rank,string name

PROCESS LOGIC

System will provide the information about the teams and players in cricket.

→ First the user has two options whether he want to know about Teams or players as 1 or 2.

➢ If user chooses 1(teams) then:-
▪ He will get three option to select: -

   1)ODI

   2)T20

   3)TEST MATCH

− User will select one option eg:- 2) T20
− He will get four options

   1)TEAMS

   2)RANK

   3)RATING

   4)FACTORS

− User will get the information accordingly to his choice

➢ If user chooses 2(players) then:-
▪ He will get three option to select: -

   1)ODI

2)T20

3)TEST MATCH

- User will select one option eg:- 1) ODI
- He will get five options
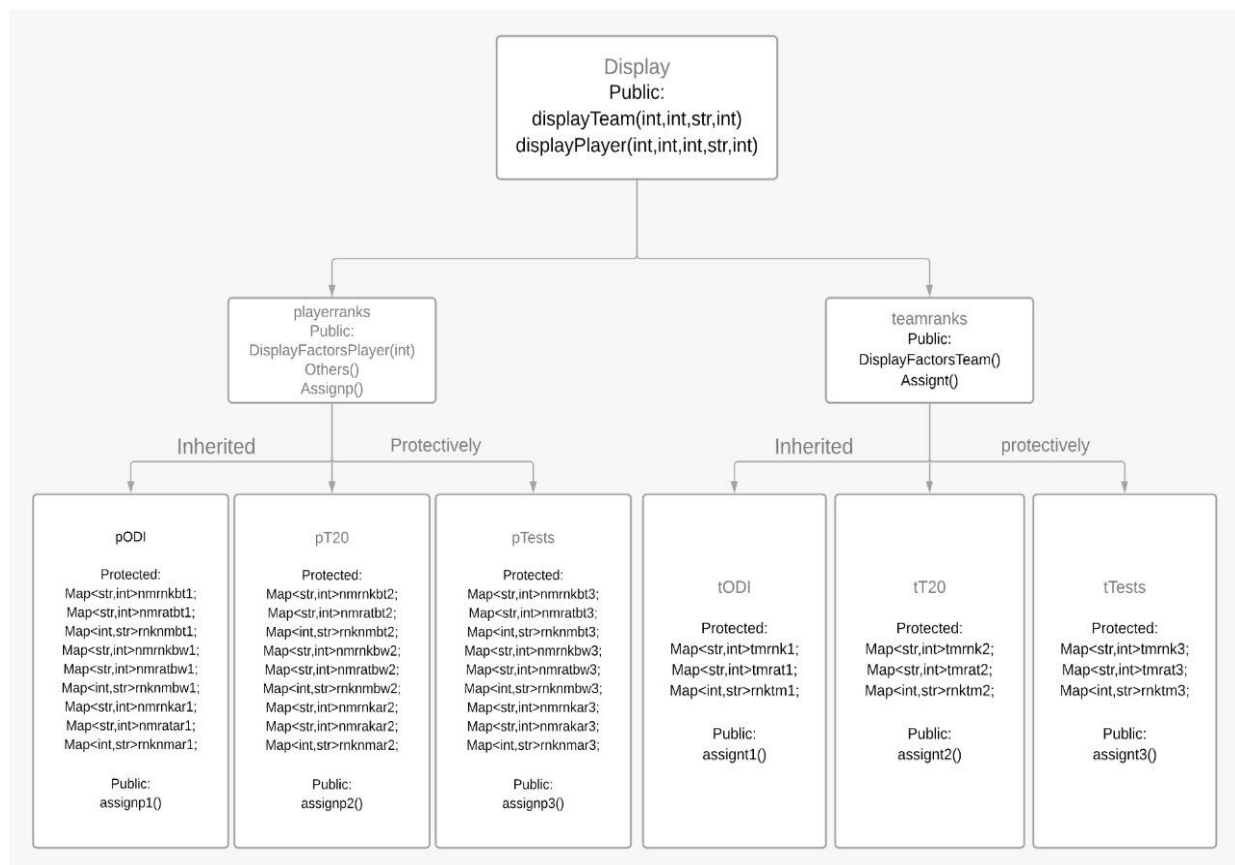
    1)TEAMS

    2)RANK
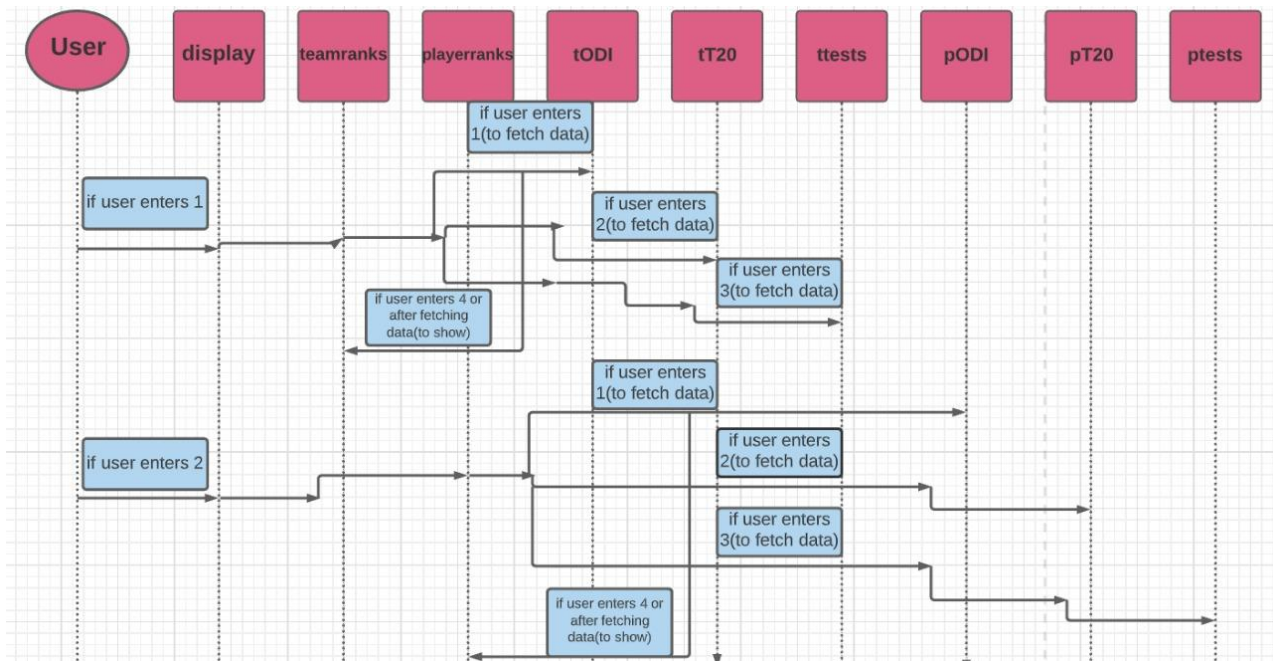
    3)RATING

    4)FACTORS

    5)OTHERS

- User will get the information accordingly to his choice
- If user will select 5

    >Player retires, removed from ranking list

    >new rating at end of match

    >new ranking at the end of each series of ODI and T20

    >person should appear in match for(12-15 for test and 9-12 for ODi an T20)

    for qualifying to be included in ranking lists.

SYSTEM ANALYSIS

1) CLASS DIAGRAM

2) SYSTEM DIAGRAM

OUTPUT RESULT

```
ubuntu@ubuntu-VirtualBox:~/Desktop$ cd .vscode
ubuntu@ubuntu-VirtualBox:~/Desktop/.vscode$ make
g++ -c display.cpp
g++ -c main.cpp
g++ -c playerranks.cpp
g++ -c teamranks.cpp
g++ -c pODI.cpp
g++ -c pT20.cpp
g++ -c ptests.cpp
g++ -c tODI.cpp
g++ -c tT20.cpp
g++ -c ttests.cpp
g++ display.o main.o playerranks.o teamranks.o pODI.o pT20.o ptests.o tODI.o tT20.o ttests.o -o output
ubuntu@ubuntu-VirtualBox:~/Desktop/.vscode$ ./output
This project contains info only about the top 10 players,ranks,ratings
Enter 1 for team.2 for players search:
1
Enter
1.ODI
2.T20
3.tests
3
Enter
1.display team for given rank
2.rank of a team
3.rating of a team
4.display factors on which ratings depend:
1
Enter rank:
5
Pakistan
Do you want to see again?
1.Yes
2.No:
1
Enter 1 for team.2 for players search:
2
Enter
1.ODI
2.T20
```

```
1
Enter rank:
5
Pakistan
Do you want to see again?
1.Yes
2.No:
1
Enter 1 for team.2 for players search:
2
Enter
1.ODI
2.T20
3.tests:
2
Enter
1.batsman
2.bowler
3.allrounder:
3
Enter
1.name for a rank
2.rank for a name
3.rating for name
4.factors on which rating depends
5.others:
5
player retires,removed from ranking list
new rating at end of match
new ranking at the end of each series of ODI and T20
person should appear in match for(12-15 for test and 9-12 for ODi an T20) for qualifying to be included in ranking lists

Do you want to see again?
1.Yes
2.No:
2
ubuntu@ubuntu-VirtualBox:~/Desktop/.vscode$ make clean
rm *.o
rm output
ubuntu@ubuntu-VirtualBox:~/Desktop/.vscode$
```

GROUP MEMBERS

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