Final project

Football league

1) General idea of the project:

It is about a database of a league where you can handle the teams and the players there.

At the beginning you have the details of a given league or a team in a file and using that file you will control the data there.

2) Structure of the project:

**There are many classes:**

❶the basic one is league:Graphical user interface, text, application

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The attributes of our league

Are the name, year of start,

Number of teams, and an

array of teams.

The method can be seen in

The picture bellows.

Graphical user interface, text, application

Description automatically generated❷ Team:

Everything is detailed

In the picture bellows

Graphical user interface, text, application

Description automatically generated❸Human:

A class human which we need

It later to create an array of

Humans where we can

Store coaches and players.

❹player and ❺coach which are two classes inherited from human:

Graphical user interface, text, application

Description automatically generatedGraphical user interface, text, application, email

Description automatically generated

2) Some techniques used in the project

Graphical user interface, text, application

Description automatically generated ❶ file handling:

❷ Dynamic memory allocation:

Text, letter

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A picture containing graphical user interface

Description automatically generatedGraphical user interface

Description automatically generated with medium confidence❸ Exception handling:

When we compile and we enter a league which does not exist here is the result.

Text

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❹Inheritance:

Text

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❺Polymorphism:

Text

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❻Type casting:

Text

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❼Operator overloading:Text

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2) Program execution:

Text

Description automatically generated ①At the beginning we get this in the screen

Here is the file of Tunisia league which we will be working on next :

Text

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There is also this file which is empty in the beginning:

Graphical user interface, text, application, email

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It is empty now.

By the end of the program, we will find here the ranking of teams after all the modification made to our league.

② Then we choose one and we write Tunisia super league

Text

Description automatically generated

③We can verify that our league object was created succefully from the file

Text

Description automatically generated When we press on 2) display teams’ information.

④Text

Description automatically generated We can now create team to add it to our league

If we press on 5 now We will see this in the screen: the available teams are ranked succefully.

A picture containing graphical user interface

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⑤If we press on 4 two times and we choose 24 and then 20 then both teams

Which have 20 and 24 points will be deleted in our case Madrid and Bayern will be deleted. After that we press on 5 and see our new rank

Text

Description automatically generatedText

Description automatically generatedIf we take a look in our empty file, we find this:

A picture containing text, black, screenshot

Description automatically generated⑥Now We just click on 8 and we will go back to the first menu so we can choose the option 2 and basically, we will go throw the same process as in league.

Thank you for your time Don’t forget to play