COS221a_Fundamental_Data_Structures

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Extracurricular Activities Database - User Guide

The purpose of this program is to display information about the various clubs and sports that are active in our university. Such a platform, which includes all the information about them, has not yet been implemented. This is why 4 instances of the actual clubs/sports are taken, to demonstrate how the database works.

When the program runs, the user only needs to follow the instructions that are being given by the console. The program will continuously prompt the user to enter numerical values or strings and depending on what the user input is, it will display the required information.

This is the header which will be displayed as soon as the program runs.

Moreover, the user will be faced with a set of choices that he/she has to make. They can search for clubs/sports, see the budget allocation or exit the program.

```
1.Search.
2.Highest budget.
3.Exit.
Choice:
```

```
Choice: 1

Please select one of the options below.
1.Clubs.
2.Sports.
Choice:
```

First case- Choice: 1

The program will prompt the user to select one of the options: Clubs or Sports, and the user has to input a numerical value, either 1 or 2. Depending on what the user chooses, the following will be displayed:

```
Choice: 1

Search for a club (StartUP or TedX) :
```

```
Choice: 2

Search for a sport (Griffins or Olympics) :
```

Now, the user needs to input a string, which will correspond with the name of one of the clubs or sports. This part is not case-sensitive, so the user can input string in lowercase or uppercase, and the result will be the same.

After the input of a name, a string searching algorithm (BM String Pattern Matching) will find the corresponding club/sport and this will be displayed on the screen.

```
Search for a club (StartUP or TedX) : startup

----------------------------------------------------------------
What do you want to know about StartUP@Blagoevgrad ?
1.Name of president
2.About the club
3.Number of members
4.Departments
5.Back to main menu.
Choice:
```

```
Search for a sport (Griffins or Olympics) : griffins

----------------------------------------------------------------
What do you want to know about AFC Griffins ?
1.Name of president
2.About
3.Number of members
4.Departments (for Olympics) or number of players (for Griffins)
5. Type of sport
6.Back to main menu.
Choice:
```

All the data is retrieved from text files, and the user is able to get information about the activity itself, president's name, departments, number of members, number of players (in the case of AFC Griffins). The user needs to only input a number and the information will be displayed. If the user selects 5 (6 in the case of sports), he/she will be faced with the initial choices.

```
Choice: 5

1.Search.
2.Highest budget.
3.Exit.

Choice:
```

Second case- Choice: 2

Allocation of the budget between clubs was an issue concerning students that were involved in these kinds of activities this year, and this is why in the text files, there is information regarding

the budget that the clubs get from sponsors or/and from the student government. Moreover, an algorithm offers a ranking of the clubs/sports based on their total budget, which is accessible by the user.

```
Choice: 2

AUBG'S clubs and sports, sorted according to their total budget, from lowest to highest:

AFC Griffins  : $ 1000
StartUP@Blagoevgrad  : $ 5300
TedXAUBG  : $ 6500
AUBG Olympics  : $ 6700
------------------------------------------------------------------

1.Search.
2.Highest budget.
3.Exit.
```

Third case- Choice: 3

After the sorted budget is displayed, the user is prompted to choose again. They can either continue to explore the database or exit.

```
Choice: 3

Goodbye!

C:\Users\perdorues\Desktop\FDS Project\FDS Project_FatmaXhafa\Debug\FDS
Project_FatmaXhafa.exe (process 13028) exited with code 0.
Press any key to close this window . . .
```

Generally, the entire purpose of the program is transparency, efficiency and accessibility. The extracurricular activities make up a good part of the student life, and this program offers the users the opportunity to access information electronically, without having to spend time checking the website of every such club or sports team.