C# Quiz (20%) in labs week starting 18/4/2017

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C# Assignment 2 (20%)

Issued March 20/3/2017

You must demonstrate your program in lab class during week of 24/4/2017. You will be asked questions about the code.

Upload to moodle link on demo day

**Marks will be awarded for**

* Correctness
* Following our naming standards
* Inclusion of banner comment/inline comments
* Programming Style
* Best use of programming statements
* Program structure/ Design – methods
* Robustness

A games company maintains high score records for its game players in a comma delimited sequential file “scores.txt” with the record structure outlined below.

An example file. It contains the following sample data:

G001,Florence Ryan, Spanish,280

G002,Sebastian Jones,Irish,650

G003,Isabella Kelly,French,720

## scores.txt record structure

|  |  |
| --- | --- |
| **Field Name** | **Type** |
| Player Number | String |
| Player Name | String |
| Nationality | String |
| High Score | Integer |

A menu driven program is required to allow the user create reports and/or search the file..

**Menu Format**

**Menu**

1. **Player Report**
2. **Score Analysis Report**
3. **Search for a Player**
4. **Exit**

**Enter Choice :**

The user shall be able to create report and search as often as they like. The program will terminate when exit is selected.

Note. Name format

**Report Format (for sample data)**

Player Name Score Star Rating

F. Ryan 280 \*

Ref your maths notes

S. Jones 650 \*\*\*

I. Kelly 720 \*\*\*\*

**Note :** player with highest score.

Also just their initials

Average Score 550

Pop Standard Deviation 193.04

Top Player I.K.

Alongside the scores, you must display the appropriate star rating for each player, use the table below do to determine the citation.

## Table 1

|  |  |
| --- | --- |
| **Score** | **Star Rating** |
| Less than 400 | \* |
| between 400 and 599 | \*\* |
| Between 600 and 699 | \*\*\* |
| Between 700 and 999 | \*\*\*\* |
| Greater than 999 | \*\*\*\*\* |

**Score Analysis Report**

This report will detail the number of players that are achieving scores in the specified score categories and also the number of Irish and Non-Irish within these ranges (Hint use arrays here)

Score Range Count Non-Irish Irish

Under 400 1 1 0

400-599 0 0 0

600-699 1 0 1

700-999 1 1 0

1000 + 0 0 0

Totals 3 2 1

**Search**

Allow the user enter a player number, the program will then search the file, and display the player name, and the score for this player. If the player is not found display a message stating “No match found”.

Example dialogue

Enter Player Number: G002

Employee name : Sebastian

Score : 650