

Computer-based midterm test

Create a C++ object-oriented solution for the problem given below. The solution must fulfill all of the following requirements:

- all the loops have to be based on the learnt algorithmic patterns,
- use a class to read the file,
- the input file can be opened once and you cannot store the data of multiple lines in the variables,
- the program has to be user-friendly,
- the program has to give correct results for any input, including the empty and the non-existing files.

Prizes of a shooting gallery are stored in a textfile. Each line of the file starts with the customer's nickname (unique string without whitespaces) who has won the prizes listed in that line. Then the name of a shooting gallery comes (string without whitespaces), after that the prizes a listed (strings without whitespaces) that are won by the customer in that gallery. The file is ordered by the customers' nickname.

Sample file:

```
Luigi Star teddy_bear matchbox
Luigi Chicago plush_dog
Zoe Star ball
```

Accepted level (for grade 3): In average how many prizes are shot by one customer in one shooting gallery?

Excellent level (for grade 5): Is there a customer who has shot at least 2 prizes in all of the galleries where he/she has played in?

You do not have to create the solution for the Accepted level if you want to get grade 5, though, it is worthy to start with that one.