Part 8

Fast data fetching and grouping information

In the eighth part we recapped the content from parts 1-7 and learned how to use hash maps. HashMap and ArrayList are some of the most used data structures in programming. The benefit of HashMaps is that looking up information by key is really fast — this efficiency is really important for good user experience.

Hash maps are widely used in different kind of programs. For example, phonebook programs that can be used to look up information by phone numbers use Hash maps or Hash map like data structures for storing data and for efficient fetching of the data. Similarly, searching for user's bank account information when using a credit card is based on a data structure that is similar to hash maps.

What is more, we also learned that HashMap enables us to group data — for example one phone number or bank account can have many owners.

The eighth part also started the second part of this course. If you just jumped in, welcome aboard! Finally, please take a moment to answer a self-reflective survey on the learning goals of the eighth part.

Quiz:
Part 8 learning objectives

Points:
1/1

Below are some learning outcomes of the first part. Consider how well each of them applies to you. The scaling is 1 = entirely disagree, 7 = entirely agree.

I'm familiar with the content from parts 1-7	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ◉
I know what is a hash map and what it is used for	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ◉
I'm able to create a hash map and I can add information to it	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ◉
I'm able to fetch information from a hash map and I know what happens if the information is not found	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ◉
I'm able to use Hash Maps as instance variables	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ◉
I know what methods equals and hashCode are used for	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ◉
I'm able to use a list a list as an value in a Hash Map	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ◉

Submitted The number of tries is not limited

You have reached the end of this section!

Remember to check your points from the ball on the bottom-right corner of the material!

In this part:

Source code of the material

This course is created by the Agile Education Research -research group of the University of Helsinki.

Credits and about the material.



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