Glossary: Working with Collections in Java

Estimated time: 3 minutes

Welcome! This alphabetized glossary contains many terms used in this module. Understanding these terms is essential when working in the industry, participating in user groups, and participating in other certificate programs.

Term	Definition
ArrayList	Uses a dynamic array to store elements. ArrayList allows fast random access but accesses the elements more slowly when adding or removing elements from the middle.
Breadth-First Search (BFS)	Fundamental algorithm in computer science used for traversing or searching tree or graph data structures. It explores nodes level by level, starting from the source node and moving outward.
Collection	Group of objects in Java that store, retrieve, manipulate, and communicate aggregate data.
containsKey()	Checks if a key exists.
Dequeue	Removes an item from the front of the queue.
Enqueue	Adds an item to the back of the queue.
First-In-First-Out (FIFO) principle	Means that the first element added to the queue will be the first one removed.
get() method	Used to retrieve values.
HashMap	Allows null values and the data exists without a guaranteed order.
HashSet	Does not maintain any order and allows null values.
Java Collections Framework (JCF)	Powerful Java tool that allows developers to work with groups of objects. The JCF provides a set of classes and interfaces to handle data collections based on developers' needs.
keySet()	Used to iterate keys.
LinkedList	Uses a doubly linked list to store elements. This array type efficiently adds and removes elements but operates slowly when accessing elements by index.
List	Ordered collection that allows duplicate elements and maintains order.
Map	Unordered collection of key-value pairs where each key is unique.
Print spooling	Process wherein print jobs are placed in a queue and processed in order.
put() method	Used to add entries.
Queue	Collection of elements that offers two main operations, enqueue and dequeue.
remove() method	Used to remove entries.
Set	Unordered collection that does not allow duplicate elements.
TreeMap	Allows null values and maintains keys in a sorted order.
TreeSet	Maintains a sorted order of elements, and does not allow null values.

