

## Career Services Assignment 3 – Java Flash Cards

**Points possible:** 50

Category	Criteria	% of Grade
Completeness	All requirements of the assignment are complete.	100

**Instructions:** Research common Java interview questions online and create 20 flash cards from the information you find. Study your flash cards regularly to better prepare for interviews. Fill out the table below with the information you put on each of your flash cards.

Front of Card	Back of Card
What is Java?	A High level programming language and is the most commonly used language to develop many applications, websites, and games.
What is a Class?	Java codes are defined in a class and is used to create objects and define data types and methods.
What is an Object?	Instance of a class with a state and behavior
What are the OOP's concepts	Inheritance, Encapsulation, Polymorphism, Abstraction, Interface
Name of the Java IDE's	Eclipse and NetBeans
What is Inheritance?	One class can extend to another class so code can be reused from one class to another class
What is the purpose Encapsulation?	The purpose of encapsulation is to protect the code from others and to maintain your code
What is Polymorphism?	When a single object can refer to a super class or sub class depending on the reference type
What is the meaning of Collections in Java?	A framework designed to store objects and manipulate the design to store objects
What are all the Classes and Interfaces that are available in the collections?	Interfaces: Collection, List, Set, Map, Sorted Set, Sorted Map, Queue Classes: Lists, Array List, Vector, Linked List Sets: Hash Set, Linked Hash Set, Tree Set Maps: Hash Map, Hash Table, Tree Map, Linked Hashed Map Queue: Priority Queue
What is meant by Ordered and Sorted in collection?	Ordered: based on the values that are added to the collection Sorted: The group of objects sorted in a collection is based on the properties of the objects

What is meant by Exception?	A problem that can occur during the normal flow of execution. Throwing an exception will continue your code even with the error.
What are the types of Exceptions?	Checked Exception and Unchecked Exception
What is Multi-threading?	When multiple threads are executed simultaneously
What is Synchronization?	Makes it so that only one thread can access a block of code at a time
What are the features of Java?	OOP concepts, Platform independent, High Performance, Multi-threaded
How does Java enable high performance?	Java uses Just in Time compiler. It is used to convert instructions into bytecodes
What is meant by Local variable and Instance variable?	Local variable: defined in the method and scope of the variables that exist inside the method itself. Instance variable: defined inside the class and outside the method and the scope of the variable exists throughout the class.
What is meant by Method Overriding?	Happens if the sub class method satisfies certain conditions with the super class method: Method name is the same, argument is the same, and return type is the same
What is meant by Overloading?	Happens for different class or in the same class. Conditions with super class method or methods in the same class itself: same method name, different argument types, and possibly different return types.