



Career Services Assignment 3 – Java Flash Cards

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 a constructor?	A constructor is used to initialize an object. It can be used to set initial values as well.
What is meant by the Local variable and the Instance variable?	Local variables are defined within a method and only exist within the method. Instance variables exist within the class and can be used throughout the entire class.
What is a Class?	Classes have variables and methods. They are blueprints used to create objects.
What is an Object?	A single instance of a class is called an object. It stores individual information (except for static variables) and is separate from other instances of the same class.
What is Abstraction?	Abstraction hides complex functions from the user so that the code is easier to work with and understand.
What is Inheritance?	Inheritance allows several different classes to inherit the same code while. This helps to keep from rewriting the same code multiple times.
What is Encapsulation?	Encapsulation bundles the code and only exposes the other users are intended to interact with. It helps protect the internal workings of complex tasks.
What is Polymorphism?	Polymorphism allows classes to change methods. This allows better grouping of classes as they can inherit similar methods and changed them based on how each sub class differentiates.
What is meant by Method Overriding?	This allows a sub-class to override a method on a parent class. This allows the method to change based on local data from the sub-class.
What is meant by Overloading?	Method Overloading allows you to create multiple methods with the same name. They are differentiated based on their signatures. A



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	common use it to create many methods that do that same task with different parameters,
What is the difference between Array and Array List.	An array is fixed in length. You have to select the index to access specific elements. An array list allows you to clear variable-length lists. You can also add to the end of an array without an index. You can't put primitive types into an array list.
What is the difference between String and String Builder.	A string is an immutable constant. When you change a string, it makes a new string in memory. String builder creates a string that can be edited. When you change the string, it modifies the existing string.
Explain about Public and Private access specifiers.	The public access modifier allows the method/properties to be accessed from anywhere that has a reference. The private access modifier only allows the method/property to be accessed from within the same class.
What is the difference between Default and Protected access specifiers.	The default access modifier is used when an access modifier isn't specified. It allows methods from the same package to use it. The protected modifier only lets classes that extend the base class to use the method/property.
What is the difference between Abstract class and Interface.	Abstract classes do not require all methods to be implemented. Only abstract methods have to be implemented. You are able to implement non-abstract methods from within the abstract class. Interfaces require all methods to be implemented. You can't implement any of the methods directly within the interface.
Explain what are Sets.	Sets are a collection that enforces uniqueness. It discards duplicates. It also doesn't maintain order.
Explain what are Maps.	Maps use keys to access their values. Instead of using an index, you can use alternative data types to reference the data within the map.
What is an Exception?	An exception is an error thrown by code. It is how the program marks that something has



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	gone wrong. If the exception isn't handled within a try block, it will terminate the program.
What are the Exception handling keywords in Java?	Try, Catch, Finally. The try block contains the code that may throw an exception. The catch block is code that runs if an exception is thrown in the try block. The finally block is code that runs regardless of whether an exception is thrown.
What is the final keyword in Java?	The final keyword creates a constant. Once the variable is initialized, it can't be changed anymore.