**Instructions:** Research common JavaScript 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.

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| **Front of Card** | **Back of Card** |
| What are the different data types present in JavaScript? | Primitive types include string, number, BigInt, Boolean, undefined, null, and symbol.  Non-Primitive types for all multiple, complex values such as an object.  The type of data can be found by using the typeof operator. |
| Explain hoisting in JavaScript. | Hoisting is the behavior within JavaScript that, by default, moves variables and functions to the top of the scope they are declared in without regard to where they were declared within the scope. This behavior is applicable on both global and local scopes. |
| Why do we use the word “debugger” in JavaScript? | A debugger will stop the execution of code at a point where there is a coding error. It is useful in JavaScript as it allows for identification of the error and analysis of the code in order to fix errors. |
| What is the difference between “==” and “===”? | Double = is an comparison operator that indicates that both the left and right side code are equivalent to each other in value. Triple = is a comparison operator that indicates the left and right side code are equivalent in both value and type. |
| What is the difference between var and let? | Var is function scoped and let is block scoped. |
| Explain implicit type coercion in JavaScript? | Implicit type coercion in JavaScript is the automatic conversion of a value of one data type to another when the operands of an expression are different data types. Some examples of this are using the + or –. When put in quotes between two values of any data type it will return a string. Another example is returning a Boolean value of either true or another value equivalent to false. Logical operators and equality operators are also examples of implicit type coercion. |
| Is JavaScript a statically typed or dynamically typed language? | JavaScript is dynamically typed as a variable can hold any data type value. |
| What is NaN property in JavaScript? | NaN is the not a number value. You can check this using isNan(). |
| Explain passed by value and passed by reference. | Passed by reference is where the caller and the callee use the same variable for the parameter. Passed by value is where the caller and the callee have two independent variables with the same value.  Example:Say I want to share a web page with you. If I tell you the URL, I'm passing by reference. You can use that URL to see the same web page I can see. If that page is changed, we both see the changes. If you delete the URL, all you're doing is destroying your reference to that page - you're not deleting the actual page itself.  If I print out the page and give you the printout, I'm passing by value. Your page is a disconnected copy of the original. You won't see any subsequent changes, and any changes that you make (e.g. scribbling on your printout) will not show up on the original page. If you destroy the printout, you have actually destroyed your copy of the object - but the original web page remains intact. |
| What is an immediately revoked function in JavaScript? | An immediately revoked function (IIFE) is a function that runs as soon as it is defined. |
| What is the difference between inheritance & composition? | Inheritance is having the properties from one class extended into another. In inheritance, if the properties are changed in the parent class, then the derived classes will be affected. Composition breaks properties into individual components so they can be configured into new combinations. In this case, when a parent class is changed it does not change all properties in a composition. |
| Explain higher order functions in JavaScript. | Functions that operate on other functions, either by taking them as arguments or returning them, are called higher order functions. |
| Explain “this” keyword. | “This” keyword refers to the object that the function is a property of. The value of the “this” keyword will always depend on the object that is invoking the function. |
| What do you mean by self invoking functions? | Without being requested, a self invoking function is initiated by using a function expression followed by (). This function will execute automatically. |
| Explain call(), apply(), and bind() methods. | Call() – invokes a function by specifying the owner object using arguments separately.  Apply() – invokes a function by specifying the owner object using the arguments in an array.  Bind() – returns a new function, the value of keyword “this” will be bound to the owner object that is provided as an argument. |
| What is currying in JavaScript? | Currying is a way of transforming a function of arguments n to n functions of one or few arguments. |
| Explain scope and scope chain in JavaScript. | Scope is the part of code in which variables and function can be accessed. There are 3 kinds of scope: global, block and local. Global scope indicates that functions and variables can be accessed throughout the entirety of the code. Local or function scope indicates that variables and functions can be accessed within a declared function but not outside of that function. Block scope indicates that variables and functions declared within an enclosed block of code can be used within that block but not outside of the block.  Scope chain is an engine in scope to find variables. |
| What are object prototypes? | Prototypes are the blueprints for an object. |
| What are callbacks? | A callback is a function that is used to call another function. |
| What is recursion in programming language? | Recursion is the iteration over an object by a function calling itself until it arrives at a result. |