Immediately Invoked Function Expressions (IIFE)

An IIFE (Immediately Invoked Function Expression) is a function that runs the moment it is invoked or called in the JavaScript event loop.

Having a function that behaves that way can be useful in certain situations.

IIFEs prevent pollution of the global JS scope. In a traditional function, if you create a variable within the function, it is accessible in the global object. If you define a variable in an IIFE, it is accessible only directly within the function.

For example, the library jQuery has the object $. If you have another module that also imports this object, you may run into some confusion and errors. An IIFE eliminates those errors. You can use an IIFE to create a scope for only jQuery and its methods.

Another benefit of using IIFEs is performing asynchronous operations such as the setTimeout() method. You will have a chance to use this later in the tutorial in the section about closures.

IIFEs can also be used to create private variables. These variables are useful in cases where you may need to prevent accidental modifications or changes to important values.

You can name your IIFEs or leave them anonymous. Be aware that naming them does not mean that they will be invoked after they are executed. Naming can be useful especially if you have several IIFEs that perform different operations close to each other.

**Examples.**

Consider the example greeting() function from earlier:

|  |  |
| --- | --- |
| 1  2  3 | function greeting() {   return "Hello";  } |

To convert greeting() into an IIFE, we wrap the entire function in parentheses, then add another set of parentheses () to invoke it:

(function greeting() {

 return "Hello";

})();

// "Hello"

In the above example,  "Hello" is returned because the greeting() function is invoked immediately after it is defined, as a result of having the second set of parentheses () at the end.

This second set of parentheses is also the place to enter any arguments that the function may need as well.