Week 07 Notes

* Call is a function method that can be used to assign an object to a this in a function. It allows us to have this and change what this actually is
* You can access the length of a function’s parameters by simply using the length method and it will tell you how many arguments it takes.
* Use () to invoke a function immediately
* You can declare temp variables inside function scope to avoid it messing with any other code in your program.
* When invoking a function immediately there is no need to write reusable code since you are only running it once.
* You can have a function define and rewrite itself
* ­­With a recursive function, set up the stopping condition first in the inside if statement.
* Call back functions help us to run code out of order.
* If a function needs to wait on an event, use a callback to just run the function when the even happens, rather than just waiting on the event which would stop the code altogether.
* A promise can be used to represent the result of an asynchronous function. The code can then either decide to resolve or reject the promise.
* Closures are like lambdas in python
* Closures are often used in filter map and reduce
* What is special about a closure is that they return but then the function is kept alive, it maintains state.
* Functional programming is a programming technique that ensures nothing is ever mutable and therefore not modifiable.
* AJAX is asynchronous JavaScript and XML
* Ajax allows us to receive and send information between APIs
* It even allows us to send data from forms.