Breaking Javascript

Functions

Function: series of statements that are grouped together to perform a specific task or calculates a value.

Advanatges: Reuse, readability and encapsulation

they are **defined with the function keyword**

you can use a function **declaration or **expression**** **Regular functions**

#can return anything and always runs to completion after been invoked

```
function name( parameter1, parameter2) {
    // code to executed
}

function greeting() {
    document.write('Good Afternoon');
}

greeting(); // Good Afternoon

Good Afternoon

Good Afternoon
```

```
function getArea(width, height){
  document.write (width * height);
}
getArea(3, 5); // 15

Functions
15
```

```
function getArea(width, height){
   document.write (width * height);
}
wallWidth = 4;
wallHeight = 5;
getArea(wallWidth, wallHeight);
// 20
Functions
```

Anonymous function

a function without a name stored inside a variable

Arrow function

an updated, modern, shorter syntax for functions

Immediately Invoked Function Expression (IIFE)

a function that executes immediatley after its defined # also known as a self-executing anonymous function

It contains two major parts:

- 1. function expression enclosed in parentheses () so that it can be parsed correctly
- immediately calling the function expression.Arguments provided, though its common to not have

```
let getVolume = (function() {
    let x = 10;
    let y = 5;
    return x * y;
    })();

document.write(getVolume);// 50
```

Callback Function

a function passed as an argument to another function

```
function greet(fname, callback) {
    document.write('Good afternoon, ' + fname);
    callback();
}
function sayBye() {
    document.write('Goodbye!');
}
greet('Bob ', sayBye);
// Good afternoon, Bob Goodbye!
Good afternoon, Bob Goodbye!
```

Check out the link below at W3Schools for more about functions

