

# Loops





# Types of Code

- SEQUENTIAL
  - a series of instructions
- CONDITIONAL
  - when decisions need to be made
- REPETITIVE
  - when you need to do it more than once
- REUSABLE
  - when you need to be able to do it again, without writing it again.



# Loops

They Go Around

- A loop is a tool used to execute a segment of code repeatedly for a specific number of times or while a certain condition is satisfied.
- Using a loop saves time and effort as the same code will not have to be typed multiple times for it to be executed repeatedly.



# While Loop

```
var i:uint = 0;  
while( i<10 )  
{  
    doSomething(i);  
    i++;  
}
```

- condition is evaluated to be boolean
- when condition is changed to be false, loop ceases.



# For Loop

```
for( var i:int = 0; i < 10; i++)  
{  
    doSomething(i);  
}
```

- Initialize your variable
- Loop while this condition is true
- Increment after each iteration
- Code to execute



# When To Use

- for
  - Workhorse, usually the for loop can do it, but you have to know how many times it will run.
- while
  - If you don't know how many times it is going to loop.
- for each
  - When looping over an array or object.