Topic/Title: Collections: Working with JavaScript Arrays

Adding Elements and Intermediate Array Techniques

Control Statements: While Loops Control Statements: For Loops



```
Keywords/Questions:
                              Notes:
array.length;
                                           var myEgg = eggs[1];
                                                                                                       -an array
      array.includes(item);
                              eggs.length;
                                      -tells you the length of an array
         array.push(item);
                                      -this returns the number 5 because there are 5 items inside the array
                                                                    eggs.inludes(item1)
                               eggs.includes(
   array.pop;
                                                                           -We get a boolean returned.
                                eggs.push(
                                                  );
                                       - .push(item1); :- adds an element to the end of the list.
                                eggs.pop;
     while(codition){//Do sth}
                                        - .pop; :-removes the last array element
                               jitbit.com/alexblog/249-now-thats-what-i-call-a-hacker/:- a Russian hacker who automated his life.
for(i=0; i<2; ++i{//Do sth})
                              while(condition){
                                                     _var i = 1;______
                                                      while(i<2) {
                                      //commands
                                                          console.log(i);
 for(var i=0; i<2; ++i){//Do sth}
                                                          <u>i++;</u>
Summary:
             array.length; :-used to find length of an array
             array.includes(item):-return a boolean after checking if the item is inside the array.
             array.push(item); :-adds an item to the end of an array.
             array.pop; :- removes the last item of the array
             while(condition){//Do sth} :- a while loop.
             for(i=0; i<2; ++i){//Do sth} === for(var i=0; i<2; ++i){//Do sth} - Both are equivalent for loops.
             draw.jo:- used to create flow charts.
```

For Loops

```
start end change

______
for (i=0; i<2; i++) {
   //Do something
}</pre>
```

```
while (something is true) {
    //Do something
}

for (i=0; i<2; i++) {
    //Do something
}</pre>
Iterate
```

-The above for loop is the same with for (var i=0; i<2; i++) {//Do sth}.

www.draw.io

- -good website for drawing up flow charts.
- -For example, let us draw a flow chart for a fibonacciGenerator function.

```
function fibonacciGenerator (n) {
    if(n==1){
        return [0];
    }else if(n==2){
        return [0, 1];
    }
    var output=[0, 1];
    for(i=2; i<n; ++i){
        output.push(output[i-1]+output[i-2]);
    }
    return output;
}</pre>
```

