COURSEWARE

Professional Skills			
Agile Fundamentals			
Jira	a e		
Git			
Da	tabases Introduction		
Java Beginner			
Ма	ven		
Tes	sting (Foundation)		
Jav	<i>r</i> a Intermediate		
НТ	ML		
CS	S		
Jav	vascript		
0	What is JavaScript		
0	Getting started with JS		
0	Variables		
0	Data types		
0	ASI		
0	Strict mode		
0	Iteration		
0	Conditionals with Truthy / Falsey		
0	Objects, Arrays + JSON		
0	Structuring JS Code		
0	Destructuring		
0	Scope		
0	Functions, function expressions and arrow functions		
0	The ECMAScript 6 Specification		
0	OOP in JavaScript		
0	Best Practices		
0	Closures		
0	Callbacks and Promises		
0	Cookies		
0	Hoisting		
0	Prototypes		
0	Query Parameters		

Higher Order Functions

ASI

Contents

- Overview
- <u>Tutorial</u>
- Exercises

Overview

ASI is Automatic Semi-Colon Insertion and can be a fiddly aspect of Javascript. Code termination is optional in JavaScript meaning that semi-colons aren't required at the end of each statement.

Best code practise states that we must insert semi-colons where necessary because if not, they are automatically inserted for you; we will explore how this might not work in our favour...

Tutorial

In JavaScript a semi-colon is automatically inserted when:

- 1. Two lines are seperated by a line terminator
- 2. Two statements are seperated by a closing brace ('}')
- 3. Line terminator follows a BREAK, RETURN, THROW or CONTINUE

Although in principle, ASI is trying to do us a favour; most times it leads to bugs in our code which can make debugging difficult if you don't know what to look for.

Entered Code	Interpreted as	Correct syntax
return	return;	return 2a*1;
2*a+1;	2a*1;	
let foo	let foo;	let foo, bar;
bar;	boo;	
<pre>console.log(foo);</pre>	<pre>console.log(foo);</pre>	<pre>console.log(foo);</pre>
<pre>console.log(bar);</pre>	<pre>console.log(bar);</pre>	<pre>console.log(bar);</pre>
let a	let a;	let a,b=3;
b	b=3;	
=3		

Note: Writing code without semi-colons is acceptable as long as you understand the concept of ASI and its process.

As a general rule of thumb, it is good practice to terminate your code with a semi-colon - ;

Exercises

- 1. Declare a few variables / code blocks and terminate the code appropriately.
- 2. Remove the semi-colons from the variables / code-blocks that you've written and see if there is an affect on the output.
- 3. Have a look at the below code and try to spot where there might be an error:

_	-			
0	Web Storage			
0	DOM Manipulation			
0	Handling Events and Timed Events			
0	Asynchronous Programming			
0	HTTP-Requests			
0	XMLHttpRequests			
0	Fetch API			
Spring Boot				
Selenium				
Sonarqube				
Advanced Testing (Theory)				
Cucumber				
MongoDB				
Express				
NodeJS				
React				
Express-Testing				
Networking				
Security				
Cloud Fundamentals				
AW	AWS Foundations			
AWS Intermediate				
Linux				
DevOps				
Jenkins Introduction				
Jenkins Pipeline				
Markdown				

IDE Cheatsheet

```
function sayHello() {
  return
  {
    "Someone says hello";
  }
}
```

▶ Solution