### **ABOUT ME**



# Thomas Owens BA Hons

 I am Tom Owens, I have 10 years industry experience with web development and internet entrepreneurship

- I formerly set up and ran my own successful eBay and Amazon eCommerce Business and achieved eBay and Amazon certified Partnership during that time.
- I worked as a Freelancer for many years and also gain solid studio experience.

### Introduction to Scripting, Variables and Primitive Data Types

SESSION TYPE : LESSON WBD4300

#### Scripting

Programming Basics & Scripting Architecture (curly braces techniques) Variable (& Constants) types

Variables

Variable and Constant types

Primitive Data Types

A focus on Javascript and advanced CSS.

"Pixel perfect" web design and web design etiquette

Principles of Screen design Vertical rhythm and proportions in web design (Golden ratio) UI Design and Usability

Self Directed Practice on Fundamentals

# My Commitment

My Commitment to you

A focus on commercial application.

ROI for your fees.

Freelancer (The Self Employed professional in not new but 100s of years old and a very sensible and lucrative form of employment)

Studios, recruiters

**Groups and Collectives** 

Blogging and Lead Generation

### Freelancer.net



Freelancers.net has been helping freelancers find work and clients find freelancers since 1999. Freelancers.net is UK focused and lists many jobs and projects open to UK freelancers, however clients from across the globe use Freelancers.net regularly to source freelancers outside of the UK.

### Freelancers Freelance projects & contracts > Find collaborators Q SEARCH PROJECTS

#### Latest ads see more...

#### eCommerce Content and Blog Writing - Vape related

We are looking for a experienced content writer for regular blog posts and articles. We are an a...

#### Internet Researching Project : Challenging Work

I need a web researcher for my current project I need a skilled freelancer for this task I pro...

#### Code template needed for file access in Phonegap / Cordova

Hello, I still need a base Phonegap template developing to illustrate file IO using Cordova

### **Employers** > Post a project or contract Search our freelancers Q

#### I atest freelancers see more...

SEARCH FREELANCERS

#### Ian Vince

Salisbury, Wiltshire, United Kingdom Copywriting, Content Writing, Editor, Blogging, Sub-editing, Microsoft Office, Quarkxpress, CMS

#### Jonathan Tucker

Bournemouth, Dorset, United Kingdom Networking, Apple IOS, Windows 10,8,7, LINUX, Microsoft SQL Server, Microsoft Exchange, Microsoft Server



### Scripting

Programming Basics.
Scripting Architecture.
Visual Site Maps

SS JAVASCRIPT SQL PHP BOOTSTRAP JQUERY ANGULAR MORE ▼ REFERENCES ▼ EXAMPLES

### JavaScript Tutorial

Vext >

JavaScript is the programming language of HTML and the Web.

JavaScript is easy to learn.

This tutorial will teach you JavaScript from basic to advanced.

### **Examples in Each Chapter**

### Programming Basics

```
<!DOCTYPE html>
<html>
<body>
<h2>My First JavaScript</h2>
<button type="button"</pre>
onclick="document.getElementById('demo').innerHTML = Date()">
Click me to display Date and Time.</button>
</body>
</html>
```

### My First JavaScript

Click me to display Date and Time.

Thu Dec 07 2017 11:32:01 GMT+0000 (GMT Standard Time)



### Programming Basics | JavaScript Introduction

</html>

What Can JavaScript Do?

JavaScript can change HTML attributes.

https://www.w3schools.com/js/js intro.asp

In this case JavaScript changes the src (source) attribute of an image.

JavaScript Can Change HTML Content One of many JavaScript HTML methods is getElementById().

```
<!DOCTYPE html>
<html>
<body>
<h2>What Can JavaScript Do?</h2>
JavaScript can change HTML attributes.
                                                             Turn on the light
                                                                                Turn off the light
In this case JavaScript changes the src (source) attribute of an image.
<button onclick="document.getElementById('myImage').src='pic bulbon.gif'">Turn
on the light</button>
<img id="myImage" src="pic bulboff.gif" style="width:100px">
<button
onclick="document.getElementById('myImage').src='pic bulboff.gif'">Turn off
the light</button>
</body>
```

### Programming Basics

JavaScript Variables

JavaScript Identifiers

All JavaScript variables must be identified with unique names.

These unique names are called identifiers.

Identifiers can be short names (like x and y) or more descriptive names (age, sum, totalVolume).

The general rules for constructing names for variables (unique identifiers) are:

Names can contain letters, digits, underscores, and dollar signs.

Names must begin with a letter

Names can also begin with \$ and \_ (but we will not use it in this tutorial)

Names are case sensitive (y and Y are different variables)

Reserved words (like JavaScript keywords) cannot be used as names



### Primitive Data

A primitive data value is a single simple data value with no additional properties and methods.

The typeof operator can return one of these primitive types:

string number boolean undefined

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript typeof</h2>
The typeof operator returns the type of a variable or an expression.
JavaScript typeof
<script>
document.getElementById("demo").innerHTML =
typeof "john" + "<br>" +
                                                  The type of operator returns the type of a variable or an expression.
typeof 3.14 + "<br>" +
typeof true + "<br>" +
                                                  string
typeof false + "<br>" +
                                                  number
typeof x;
                                                  boolean
</script>
                                                  boolean
                                                  undefined
</body>
</html>
```



### Site Architecture

The Index file

File Structure

Folder separation

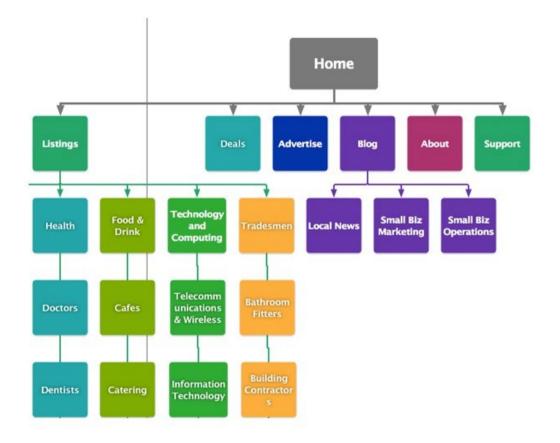
**Best Practice** 



## Visual Site Maps

What are they?

The advantages of using one first; improve quality, team understanding,





# Variable and Constant Types

What is a Constant Type?

Variables change, constants don't

Example: Var = 3

Elements tags are constants.



# Primitive Data Types

Primitive types are the most basic data types available within the Java language. There are 8: boolean, byte, char, short, int, long, float and double.

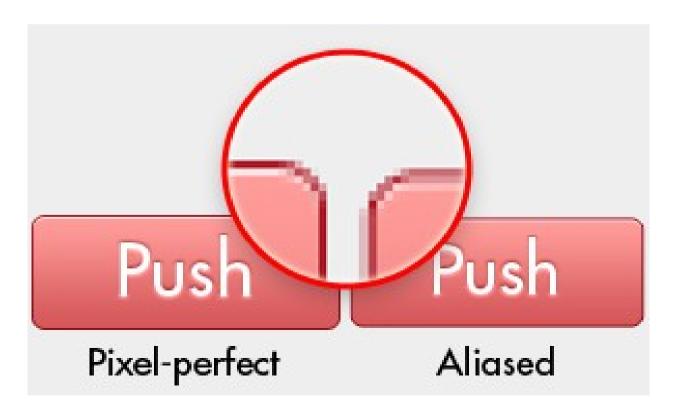
These types serve as the building blocks of data manipulation in Java. Such types serve only one purpose — containing pure, simple values of a kind.



### PIXEL PERFECT DESIGN

Pixel-perfect means you've considered every detail, down to individual pixels, as opposed to designing things with all kinds of anti-aliasing and compression artefacts

Let's say you draw a button in Photoshop. It's "pixel perfect." Then you scale it, up or down, even just a tiny bit. It now has a lot of anti-aliasing and interpolation between pixels that may muddy the colours and make it appear generally not as sharp as it could (or even should) be.





### Web Design Etiquette

Sometimes called Netiquette, its related to W3C compliance and accessibility, and is a serious consideration.

Privacy Policy, terms and conditions.

Copyrights and Criminal Codes.

EU standards regarding tracing Cookies

Google Standards that determine SERP position

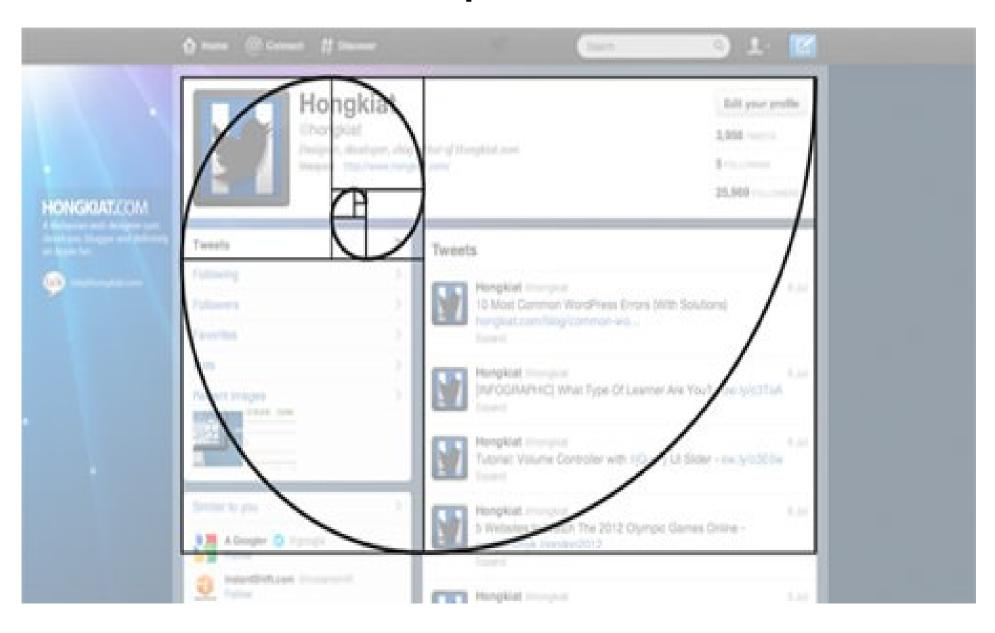


# Principals of Good Screen Design

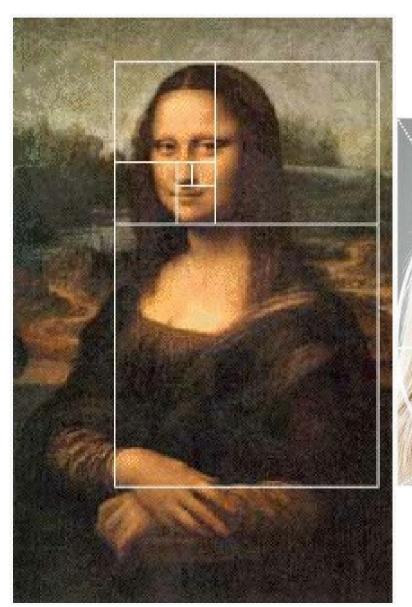
# Vertical Rhythm

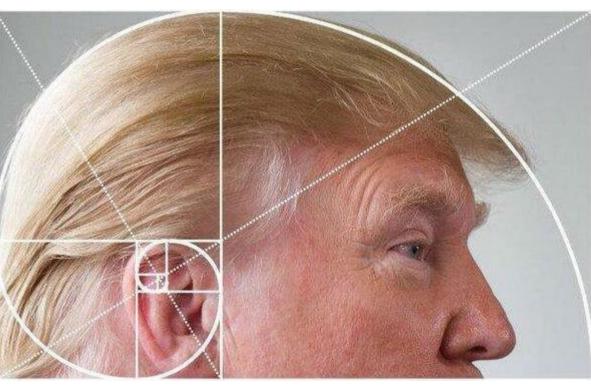
In Vertical Rhythm, we try to keep vertical spaces between elements on a page consistent with each other. This is often done with the help of a baseline – A common denominator used to create the consistent spaces.

# UI Colden Ration and The Fibonacci Spiral



# Fibonacci Spiral in Art





# Overview of Course Sequence

Some of this is reiteration but bear with me I will go over it again.

#### Aims

This module aims to introduce the web technologies and basic principles of design for web as well as the basic principles of development for the web. This introductory module will help the student to understand how the web works. This module also aims to give foundation in best practices and industry standards, as well as to develop basic aesthetic abilities, and lay out theoretical foundations required for professional work in the web industry.

#### Learning Outcomes

On successful completion of this module students will be able to:

#### Knowledge

- K1 Explain how the internet and web works;
- K2 Recognise basic markup languages and web standards;
- K3 Summarise basic design principles;
- K4 Explain what elements are required to create a professional web site.

#### Skills

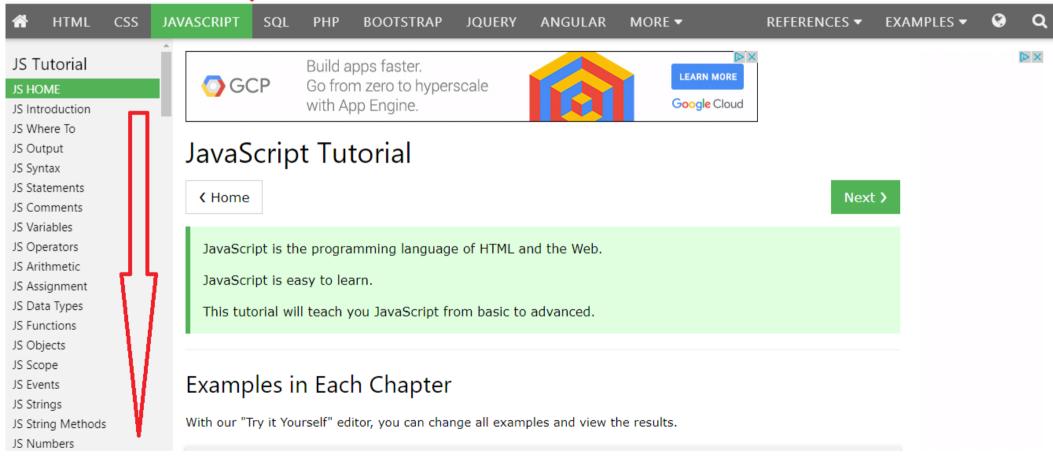
- S1 Create a standards compliant static web site;
- S2 Apply basic principles of design to create aesthetically pleasing and contemporary looking web sites;
- S3 Employ with confidence the tools to design and develop a static web site;
- S4 Create and present a realistic web site project proposal.

# Course Sequence- Front End Development

#### Name

- 001.0-SAE-IntroductionToScripting
- 002.0-SAE-ControlStructures
- 003.0-SAE-ControlStructures II
- 004.0-SAE-FunctionEventsScope
- 005.0-SAE-ComplexDataTypesArraysLoops
- 006.0-SAE-ComplexDataTypesObjectsIter...
- 007.0-SAE-DOMmanipulation
- To 008.0-SAE-AJAX
- 009.0-SAE-LibrariesJQUERYframeworks
- 010.0-SAE-JQueryAnimation
- 011.0-SAE-ThirdPartyAPIs
- 012.0-SAE-FrameworksIntro





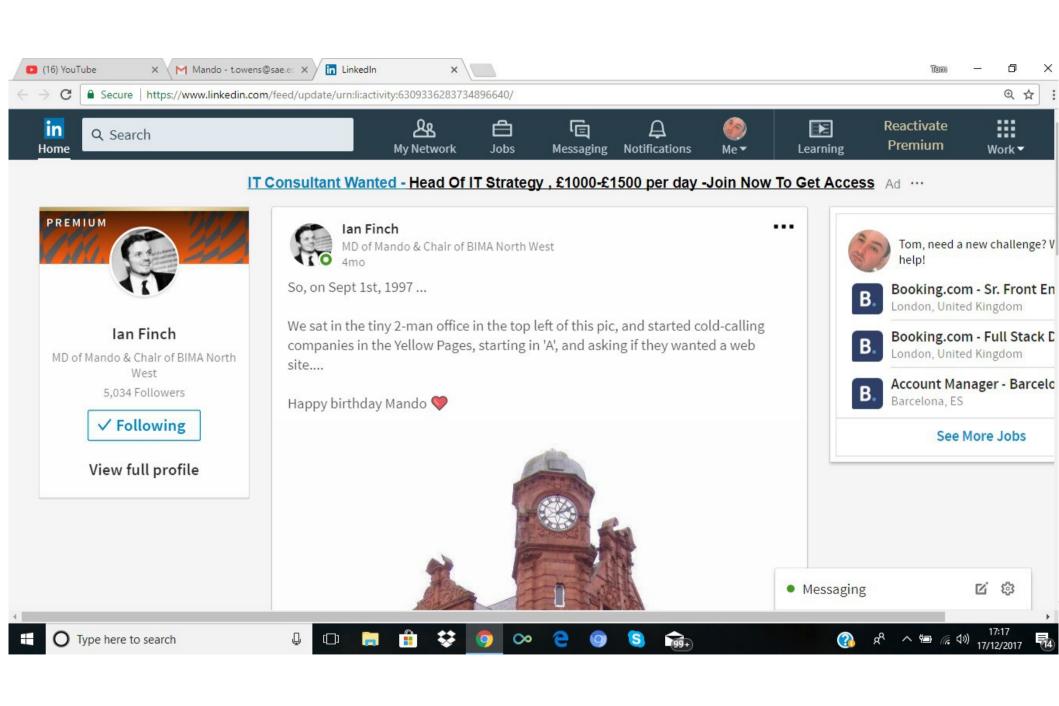
### Curriculum map for BA / BSc (Hons) Web Development

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

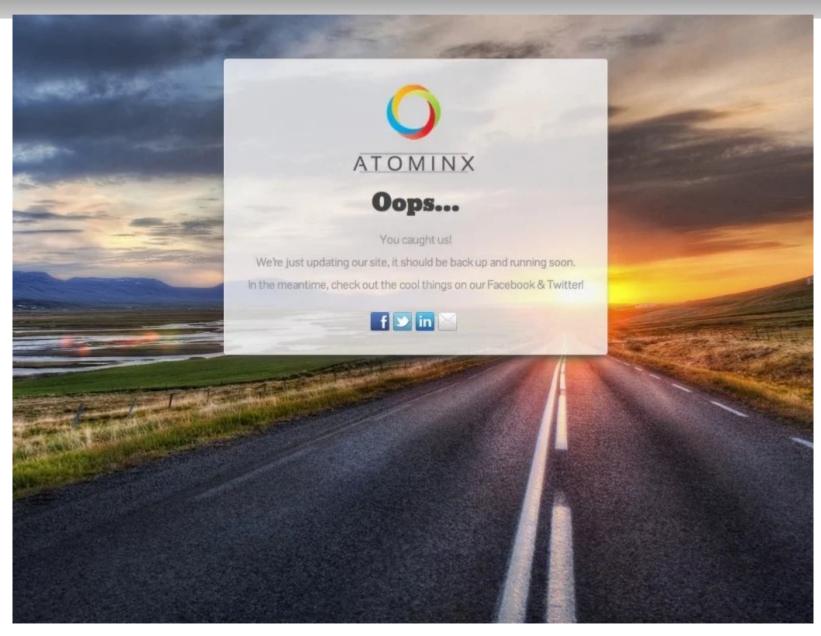
### Programme learning outcomes

Know	rledge and understanding	Practical skills								
A1	All aspects of web design and development	C1	Apply appropriate design, user interface, and graphical attributes to a variety of web based digital platforms							
A2	The historical course of the web development industry and relate it to current trends and future development	C2	Evaluate the most appropriate technology to develop a complex web application							
А3	The most important theories of the Creative Media and their impact on the industry developments	Сз	Operate key items of hardware and software employed in web design and development for a variety of devices and operative systems							
A4	The roles and the dynamics of a modern business operating in the web development industry	C4	Produce and present business plans for small startup companies							
Cogn	Cognitive skills		uate Skills							
B1	Systematically plan web design and development activities	D1	Personal and career development							
B2	Identify the most appropriate research methodology to develop a critical argumentation by analysing and evaluating the most relevant information	D2	Effective learning							
В3	Apply analytical and evaluation skills to develop a strategic plan	D3	Communication							
		D4	Teamwork							
		D5	Information technology							
		D6	Numeracy							

Programme outcomes																												
A1 A	A2	А3	A4	A5	A6	A7	B1	B2	В3	В4	В5	В	6	C1	C2	Сз	C4	C	5 (	26	D1	D2	D3	D	4 [	05	D6	D7
Highest level achieved by all graduates																												
6 6	6	6	6				6	6	6			6		6	6	6	6			-	6	6	6	6	6	3	6	
Module Title							ule Co	-	Programme outcomes																			
								by Le		_	A1	A2	A3	Α4	B1	B2	B3	C1	C2	C3	C4	D1	D2	D3	D4	D5	D8	
Web Essentials								WBD4100			Х	Х		Х	Х		Х	Х	Х	Х					Х	Х	Х	
Introduction to Academic and Professional Practice								CMN4200			Х	Х	Х		Х	Х			-	Х	Х	Х	Х	-	Х	Х		
Front-end Development								WBD4300		Х				Х		Х	Х	Х	Х					Х	Х	$\sqcup$		
Interactive Design							WBD4400			Х				Х		Х	Х	Х	Х					Х	Х	$\sqcup$		
Database and Back-end Development								WBD5100			Х				Х		Х	Х	Х	Х					Х	Х	Х	
Creative Production									CMN	CMN5201		Х	Х	Х		Χ	Х	Х	Х	Х	Х					Х	Х	Ш
Practical Mobile App Design								CMN	CMN5202						Χ			Х				Х		Х		Х	Х	
Creative Media Production									WBD5203			Х	Х	Х		Χ		Χ	Х	Х	Х					Х	Х	Ш
Web Applications									WBD5204			Х				Χ		Χ	Х	Х	Х				Х	Х	Х	Х
Online Marketing and Project Management								WBD	5300		Х				Χ	Х	Х	Х	Х	Х	Х			Х	Х	Х		
Marketing, Business Planning and Law								CMN	5400					Х		Х	Χ				Х	Х	Х	Х		Х	Х	
Research Practice and Society							CMN	6100			х	Х	х		х	Х				х	х	Х			Х	х		
Industry Engagement (30 credits)								CMN	16201		Х			Х	Х			Х	Х	Х		Х		Х	Х	Х		
Industry Engagement (60 credits)								CMN	16202		Х			Х	Х			Х	Х	Х		Х		Х	Х	Х		
Object-Web Interaction Design and Development								CMN	16203		Х				Х		Х	Х	Х	Х				Х	Х	Х	Х	
Advanced Specialised Project								CMN6204			Х	х	Х		Х		Х	Х	х	Х		х	Х	Х	Х	Х		
Advanced Artistic Team Project									WBD6203			Х	Х	Х		Х		Х	Х	Х	Х				Х	Х	Х	Х
Advano	ced <sup>-</sup>	Techn	ical T	eam P	roject				WBD6204			Х				Х		Х	Х	х	Х					Х	Х	Х
Native Mobile Development									WBD6205			Х				Х		Х	х	х	Х					х	Х	х
Major Project (BA)									CMN6301			Х	Х	Х		Х	Х	Х	Х	х	Х		Х		Х	Х	Х	
Major Project (BSc)									CMN	16302		Χ	Х	Х		Х	Х	Х	Х	х	Х		Х		Х	Х	Х	



## Holding Page Project



# Structure of Your Portfolio Holding Page

Background image a touch of CSS Cover 100% 100%

Email address

H1 Element

**Test** 

Phone number

Contact form if your feeling brave.

### Introduction to Javascript

Using inline Javascript

Slide in menus and onmouseover events

**Event Handlers.** 

Listeners.

### Front End Developer Liverpool £35k



Recruiter: Exposed Solutions Ltd

Listed on: Yesterday, 5:14pm

Location: Liverpool

Salary/Rate: £30,000 - £35,000

Type: Permanent

Start Date: 2017-12-06





#### Skills & Experience:

Significant experience working in a digital development role, including comprehensive quality examples of responsive front-end development work

A good understanding of project process with evidence of delivering projects effectively against scope, cost and timescale

Expert in HTML5 and CSS3

Strong in JavaScript fundamentals and popular JavaScript libraries such as jQuery

Adobe Photoshop and/or other Creative Suite programs

Experience in designing sites mobile first and responsive techniques

Familiar with coding PHP would be of benefit but non-essential

Knowledge of frameworks e.g. Bootstrap, but ability to build website layouts to match given designs without them An understanding of web standards, accessibility, SEO best practice application and semantic mark-up

Experience developing for/with open source CMS - specifically Umbraco - but also Wordpress and other (e.g.

Drupal) will be of benefit

Strong use of preprocessors such as SASS/SCSS

Modular approach to development with techniques such as BEM

#### The Package:

A competitive salary **(£30k - £36k) dependent on qualifications and experience**, and a company wide annual bonus scheme. Our benefits package includes a pension scheme, 23+ days holiday, flexible working, regular social events, a cycle to work scheme, childcare voucher scheme and more!

### Java Developer (multiple roles) - New Employer to Manchester

£40k - £65k pa + Pension, health, Life | Manchester | Permanent

Java Developer (multiple roles) - New Employer to Manchester

Java Developers that are looking to work in small-close knit team, that value clean coding, love micro-services architectures & want to help shape the culture of new office in the City - this one is for you!

#### Required skills:

- · Very strong object oriented programming
- Java
- Design patterns
- · API / Web application development experience
- JaxR9
- · Spring Boot (practical experience not hello world)
- · Amazon Web Services
- · Elastic Search
- SQS / RabbitMQ / ActiveMQ
- Hadoop
- NoSQL / MongoDB / Cassandra (practical experience not hello world)

Oscar Technology Limited is acting as an Employment Agency in relation to this vacancy.

These are full time positions, rates are higher for day rate contracts and Freelance due to market forces.

#### **UX** Designer

Salary: £35000.00 - £45000.00 pa + Benefits

Location: Manchester Job Type: Permanent

#### <u>JavaScript Developer - £35k - £45k - Burnley</u>

Salary: £35k - £45k pa + bens

Location: Burnley
Job Type: Permanent

#### Part-time Web Designer - Remote working

Salary: £20-28,000 pro rata Location: Home Based Job Type: Permanent

#### Senior Digital Designer / Creative Designer / Web UI Specialist

Salary: £25k - £30k pa + DOE

Location: Burnley
Job Type: Permanent

# Full Stack Java Developer - Remote Working £55,000| Home Based| Permanent

Full Stack Java Developer – Java, Spring, JavaScript, Angular, React.js – Remote Working - £55k

This development team based are looking to add a **Full Stack Java Developer** to their software delivery team. [..]They offer a clearly defined career path with an excellent benefits package.

Ideally you will have a **Computer related degree** and will have a demonstrable commercial experience of Java Development,[...], from initial concept right through to delivery. The Full Stack Java developer (Java, Spring) will be working within an Agile team.

Core skills & experience including:

- Java, Spring, JDBC, JUnit
- SQL Server or MySQL, ideally No-SQL i.e. MongoDB
- REST API
- JavaScript, Node.js, Angular, React.js and Aurelia
- The ability to work within established coding standards
- Demonstrable experience of working on the full development lifecycle within an Agile team
- Proven experience of building fully functional web applications

This is an excellent opportunity for a Java Developer looking to take the next step up in their development career with an organisation that will fully support and encourage your career aspirations. Please send your cv for consideration as they are looking to move quickly.

Senior Java Developer – Full Stack Java, Spring, JavaScript, Angular, React.js, Remote Working

Send your CV to Alex for immediate consideration

Please follow us on twitter @erinassociates for similar roles

Erin Associates Ltd is acting as an Employment Agency in relation to this vacancy.

# Practice on Scripting Fundamentals

Practice the first 2 tutorials on w3 schools

Time and Date

&

Light Bulb on and off

Using onmouse over Events etc.

### **ETHOS**

- 1. We have conviction to our purpose and potential.
- 2. We demonstrate drive by achieving and advancing together.
- 3. We are adventurous in mind and spirit.
- 4. We demonstrate rigour in enhancing our professional reputation and credibility.
- 5. We are genuine in the way we behave and deliver.
- 6. We show respect by celebrating, valuing and caring for people and the environment

