HTML, CSS, HTML5, Responsive Design.

Duration : 2 days

Prerequisites

A basic understanding of HTML & CSS, including :

- Simple **markup** : paragraphs, headings, divs, spans.
- Simple hypertext : creating a link.
- Embedding images in pages.
- Basic styling (colour, fonts) using CSS.

On completion, delegates should be able to

- Define structure/meaning with HTML, style/presentation with CSS
- Understand how float-based grid layouts work.
- Be aware of the new HTML5 semantic tags
- Understand responsive design fundamentals : fluid layouts, media queries, flexible images, and responsive thinking.

HTML and CSS

HTML fundamentals

- HTML and CSS : **a separation of concerns**
- Defining **structure/meaning**; style/presentation.
- **Block** and **inline** elements
- **Tables** for tabular data, not markup.
- **Images**, image formats, adding links, accessibility

CSS fundamentals

- A rule based language.
- Simple selectors : IDs, classes.
- Contextual selectors : "div.history" , "div history"

- The **box model** and **box-sizing**.
- Working with floats.
- Using floats for grid layouts.
- Web typography : text and web fonts.

HTML5

Semantic markup

- Reasons for HTML5 : search, syndication, accessbility, software tools.
- **Semantic tags** : Article, section, nav, aside, main, footer, header.
- Heading systems
- Converting a page from HTML4 to HTML5
- Using **custom-data** attributes

Implementing HTML5

- polyfills
- Modernizr
- Browser support
- Tools and resources.

CSS in 2014

Review

- A rule based language. The cascade.
- IDs, classes, elements, contextual selectors
- block and inline elements
- The **box model** and **box-sizing**
- Vendor prefixes.

Pseudo and attribute selectors

- Attributes
- nth-of-type, first-child.
- Before, after

- Adding content in CSS.

Layout

- Understanding floats
- Using a float-based grid system.

Text

- Working with EMs and REMs
- Line-height, measure, web fonts, font-size.

Effects

- Transforms, animation
- Opacity, transparency

Responsive Web Design

Introduction

- Delivering the same content to multiple layouts
- Fluid layouts, flexible media, media queries, responsive thinking
- Mobile first
- Limitations

Layout

- Fluid grids, using floats.
- Media queries
- Responsive grids with media queries
- Build an example grid layout.

Text

- Combining EMs and media queries to create responsive text layouts.

Tables

- Creating responsive tables and calendars.

Images

- Responsive images
- Javascript solutions
- The PICTURE element
- PictureFill

Javascript

- An overview of the role JS plays in responsive projects.

- Course outline by John Coumbe, john.coumbe@gmail.com
- May 2014