

# HTML5 development fundamentals

A 3 day **Hands on** training course



## Description

This three-day MTA Training course helps you prepare for Microsoft Technology Associate Exam 98-375, and build an understanding of these topics: Manage the Application Life Cycle, Build the User Interface by Using HTML5, Format the User Interface by Using CSS, Code by Using JavaScript. This course leverages the same content as found in the Microsoft Official Academic Course (MOAC) for this exam.



## Key outcomes

By the end of the course delegates will be able to:

- ✓ Manage the Application Life Cycle
- ✓ Build the User Interface by Using HTML5
- ✓ Format the User Interface by Using CSS
- ✓ Code by Using JavaScript



## Training Approach

This structured course uses Instructor Led Training to provide the best possible learning experience. Small class sizes ensure students benefit from our engaging and interactive style of teaching with delegates encouraged to ask questions throughout the course. Quizzes follow each major section allowing checking of learning. Hands on sessions are used throughout to allow delegates to consolidate their new skills.



## Details

### Who will benefit?

Anyone working with HTML5

### Prerequisites

None.

**Duration:** 3 days

**Overall rating:**



### Generic Training



Generic training compliments product specific courses covering the complete picture of all relevant devices including the protocols "on the wire".

*"Friendly environment with expert teaching that teaches the why before the how."*  
G.C. Fasthosts

### Small Class Sizes



We limit our maximum class size to 8 delegates; often we have less than this. This ensures optimal interactivity between delegates and instructor.

*"Excellent course. The small class size was a great benefit..."*  
M.B. IBM

### Hands On Training



The majority of our courses use hands on sessions to reinforce the theory.

*"Not many courses have practice added to it. Normally just the theoretical stuff is covered."*  
J.W. Vodafone

### Our Courseware



We write our own courses; courseware does not just consist of slides and our slides are diagrams not bullet point text.

*"Comprehensive materials that made the course easy to follow and will be used as a reference point."*  
V.B. Rockwell Collins

### Customise Your Course



Please contact us if you would like a course to be customised to meet your specific requirements. Have the course your way.

*"I was very impressed by the combination of practical and theory. Very informative. Friendly approachable environment, lots of hands on."*  
S.R. Qinetiq

# HTML5 development fundamentals

## Course Content

### Managing the Application Life Cycle

#### Platform fundamentals

Packaging and the runtime environment: app package, app container, credentials/permission sets, host process, leverage existing HTML5 skills and content for slate/tablet applications.

#### Manage the state of an application

Manage session state, app state and persist state information; understand states of an application; understand the differences between local and session storage.

#### Debug and test a HTML5 touch-enabled application

Touch gestures; gestures you test on a device.

### HTML5 UI: Text, Graphics, and Media

#### HTML5 tags for text content and graphics.

When, why and how to use Canvas; when, why and how to use scalable vector graphics (SVG).

#### HTML5 tags to play media.

Video and audio tags.

### HTML5 UI: Organization, Input, and Validation

#### HTML5 tags to organise content and forms

Tables, lists, sections; semantic HTML.

#### HTML5 tags for input and validation

### CSS Essentials: Content Flow, Positioning, styling

#### Core CSS concepts

Separate presentation from content (create content with HTML and style content with CSS); manage content flow (inline versus block flow); manage positioning of individual elements (float versus absolute positioning); manage content overflow (scrolling, visible and hidden); basic CSS styling.

### CSS Essentials: Layouts

#### Arrange UI content by using CSS

Use flexible box and grid layouts to establish content alignment, direction and orientation; proportional scaling and use of "free scale" for elements within a flexible box or grid; order and arrange content; concepts for using flex box for simple layouts and grid for complex layouts; grid content properties for rows and columns; use application templates.

### Managing Text Flow by Using CSS

Regions and using regions to flow text content between multiple sections (content source, content container, dynamic flow, flow-into, flow-from, msRegionUpdate, msRegionOverflow, msGetRegionContent); columns and hyphenation and using these CSS settings to optimise the readability of text; use "positioned floats" to create text flow around a floating object.

### Managing the Graphical Interface by Using CSS

Graphics effects (rounded edges, shadows, transparency, background gradients, typography and Web Open Font Format); 2-D 3-D transformations (translate, scale, rotate, skew and 3-D perspective transitions and animations); SVG filter effects; Canvas.

### JavaScript and coding essentials

Manage and maintain JavaScript, Create and use functions; jQuery and other third-party libraries. Update the UI by using JavaScript Locate/access elements; listen and respond to events; show and hide elements; update the content of elements.

### Animations, Graphics, and Accessing Data

#### Code animations with JavaScript

animation; manipulate the canvas; work with images, shapes and other graphics.

#### Access data access by using JavaScript

Send and receive data; transmit complex objects and parsing; load and save files; App Cache; datatypes; forms; cookies; localStorage

### JavaScript coding for Touch Interface, Device and Operating System Resources, and More

Respond to the touch interface, Gestures, how to capture and respond to gestures, Code additional HTML5 APIs, GeoLocation, Web Workers, WebSocket; File API, Access device and operating system resources, In- memory resources, such as contact lists and calendar; hardware capabilities, such as GPS, accelerometer and camera.

