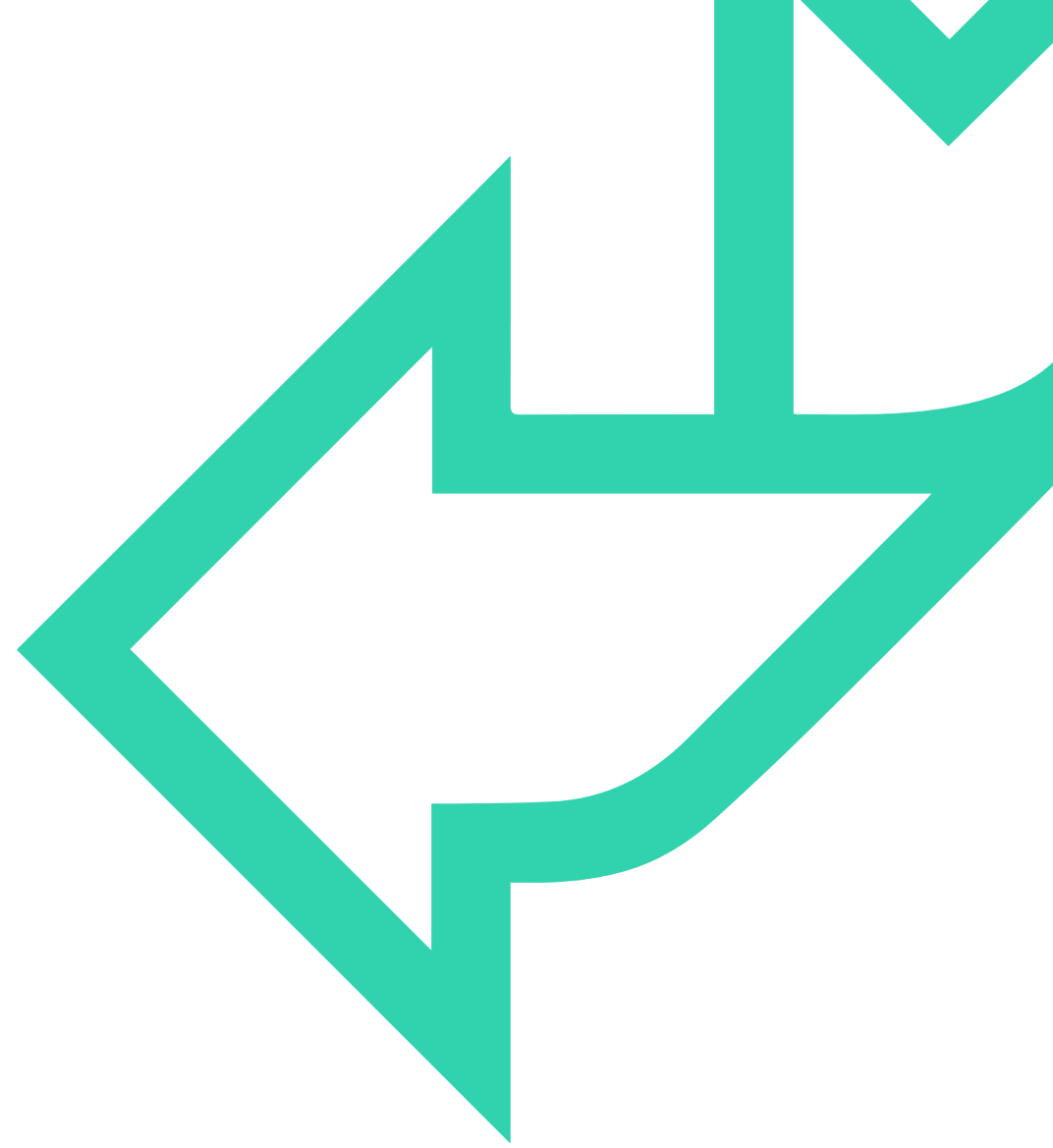




# HTML

Basics and Syntax





# LEARNING OBJECTIVES

## Basic HTML

- HTML History and Syntax





# HTML Standards

## HTML 2.0

- Application of Standard Generalized Markup Language (SGML)
- Attempted to update the standard

## HTML 3.0 (Obsolete)

- Netscape and Microsoft ad-hoc extensions

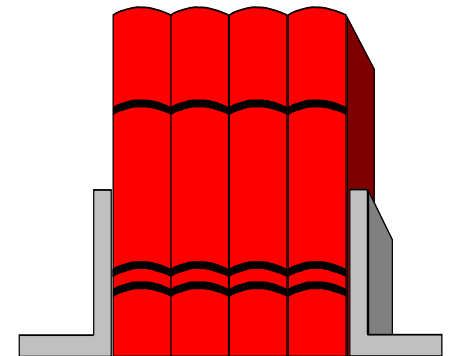
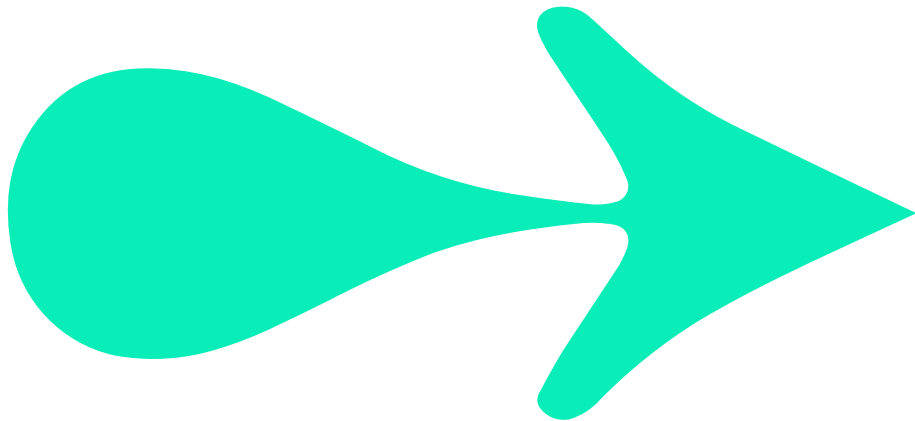
## HTML 3.2

## HTML 4.01

- Includes Cascading Style Sheets(CSS), DOM, scripting, XML and many other features

## HTML 5

- The current W3C standard
- 5.2 now a recommendation available at <http://www.w3.org/TR/html5/>



# QA A Simple HTML Page

## Three sections to an HTML document

- Prolog (document type declaration), head and body

## HTML tags appear in angle brackets (< and >)

- Many tags appear in pairs, acting as containers
- Names are not case sensitive (convention is lower-case)
- Carriage returns are not significant

```
<!DOCTYPE html>
<html>
<head>
    <title>Success!</title>
</head>

<body>
    Congratulations on completing
    your QA Training course.
</body>
</html>
```

# QA HTML versions & DTDs

## The different versions of HTML have their own DTD

- The appropriate DTD should be included in the HTML prologue

### HTML 4 Strict

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0//EN" "http://www.w3.org/TR/html4/strict.dtd">
```

### HTML 4 Transitional

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN"
"http://www.w3.org/TR/REC-html4/loose.dtd">
```

### HTML 5

```
<!DOCTYPE html>
```

# QA Attributes of Tags

## Many tags have additional attributes

- Some are required

```

```

- Some are optional

```
<h1 title=".....">.....</h1>
```

## Attribute values should be enclosed in quotes

- Not necessary if one word attribute value
- Good practice

# QA Comments

- Use `<!--` and `-->` to enclose comments
- Not displayed by browser
- Can be used to hide scripts/styles from older browsers

```
<html>
<head><title>Success!</title></head>
<body>

<!--A demo that comments can be used
to clarify HTML -->

Congratulations on completing
your <strong>QA Training</strong>
course.<br>

</body>
</html>
```

# QA Container Tags

- Containers may be nested but may not overlap

```
<!-- This is correct -->
```

```
<p>This text is a paragraph containing <b>bold</b> and  
<i>italic</i> text. Some words are both <b><i>bold and  
italic</i></b>.</p>
```

```
<!-- This is incorrect -->
```

```
<p>The <b>quick brown <i>fox</b> jumps over the</i> lazy  
dog.</p>
```

A diagram consisting of two red curved lines that cross each other, illustrating the error in the 'incorrect' example where the closing tags for bold and italic are not properly nested. The first line starts under the opening bold tag and ends under the closing italic tag. The second line starts under the opening italic tag and ends under the closing bold tag. Their crossing indicates that the tags overlap rather than being properly nested.



# QA Special Characters

- How can we express characters like “<” and “>”?
- Use character entities

Character	HTML Name
<	&lt;
>	&gt;
&	&amp;
“	&quot;
(non-breaking space)	&nbsp;

If the relative density &gt; 1.0 then  
&quot;you have a problem!&quot;

If the relative density > 1.0 then "you have  
a problem!"

# QA Syntax Errors and Non-Standard HTML

## Browsers never say “syntax error”

- May respond in different ways to incorrect HTML

## Browsers ignore unrecognised tags and attributes

## Allows updating of HTML standards

## Non Standard HTML:

- Blink

```
<blink>Blinking text</blink> can be annoying,
```

- Marquee (Still works in many browsers)

```
<marquee>This message will scroll</marquee>.
```

- Not recommended as they could be removed at any time



# Quick Lab 1 – Visual Studio Code

Demonstration

- Open files in VS Code
- Install Live server