IMAGE FILE FORMATS

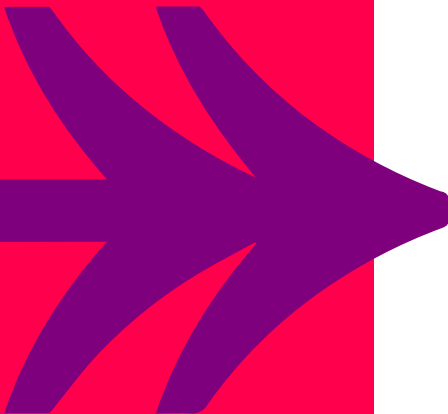**A very large number of graphics file formats**

- BMP, GIF, PCX, JPEG, TIFF, CGM...

Most browsers support a few well-known formats

- GIF (Graphics Interchange Format)
- JPEG (Joint Photographic Experts Group)
- Text-only browsers (e.g., Lynx) ignore all images
- Usually possible to disable images to reduce bandwidth

Some browsers support other image file formats

- PNG (Portable Network Graphics) format

- WebP – Modern image format that provides superior lossless and lossy compression

Inline Images: the <img> Tag

```
<html><head><title>Success!</title></head>
<body>
<h1>Well done!</h1>
Congratulations on completing your
course with flying colours!<br/>
<img src="scroll.gif" alt="Scroll" />
<br/>
We are confident that you won't find a
better training agency anywhere.<br/>
</body>
</html>
```
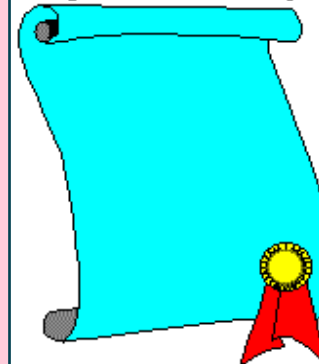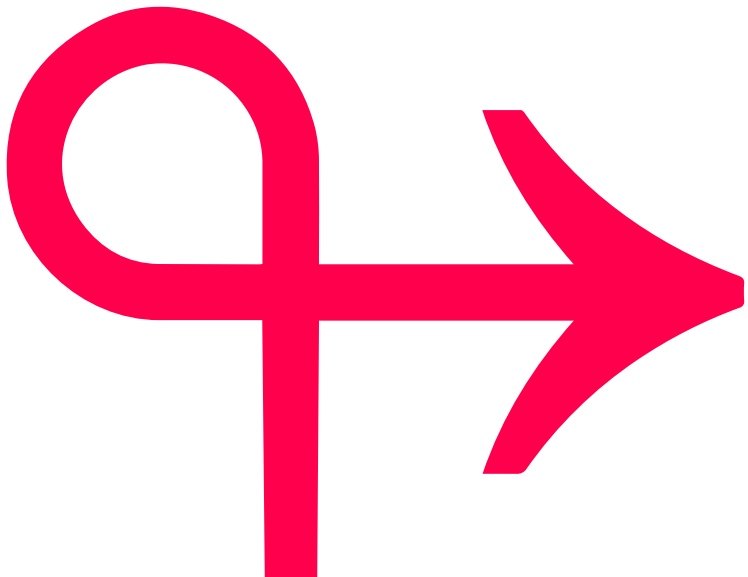
This text is shown when images are unavailable or disabled.

Image Height and Width

A picture's size is usually found from data in the file

- Can change this with WIDTH and HEIGHT attributes

Do not use WIDTH and HEIGHT attributes to reduce the display size of an image

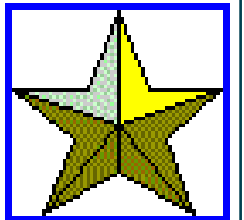- The browser will need to download the entire image

```html
<!-- Force the image to be 100x100 -->
<img
    src="scroll.gif"
    alt="Scroll"
    width="100"
    height="100" />
```

Graphical Hyperlinks

```html
<html>
<head><title>Graphical links</title>
</head>
<body>
<p>
<a href="http://www.microsoft.com">Microsoft home page</a>
<br/>
Alternatively, click on this star:
<a href="http://www.microsoft.com">
 <img src="star.gif" alt="MS Home Page"/>
</a>
<br/>
</p>
</body>
</html>
```

Thumbnail Images

Images can be large
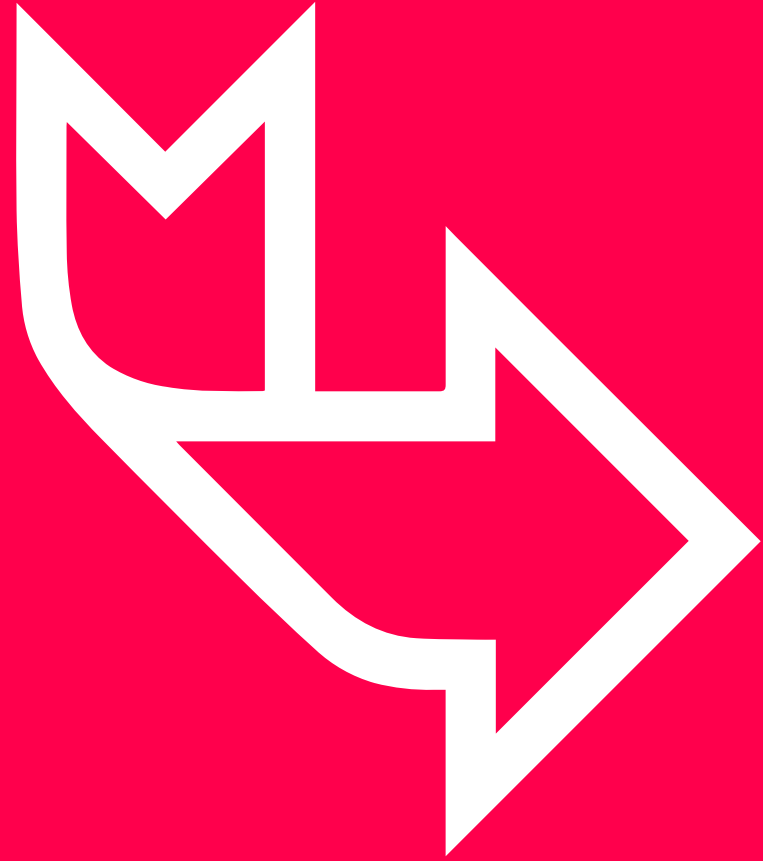
- An issue if the users' connection is slow

For larger images, provide a thumbnail image

- Acts as a preview
- Leads on via a hyperlink to the full image

Create thumbnail as separate image

Don't use WIDTH and HEIGHT attributes to shrink

```
<a href="pictures/monalisa.gif">
      <img src="thumbnails/monalisaSmall.gif" alt="Mona Lisa"/>
</a>
```

Quick Lab Chapter 4 – Images

Add some links to images to an HTML page and view them