**M2 – Comparison of different animation formats**

**HTML5**Hyper-Text Markup Language is used to display static content on webpages. It holds the content of the webpage (text, links, images, etc), and can determine how they look (the style).  
HTML5 is the latest version of HTML, and adds many new features that previously required JavaScript to accomplish. Because HTML is static, one the page is downloaded, nothing else can happen. Nothing moves or interacts with the user. To get around this, CSS and JavaScript were used to make websites interactive, but now the same can be done with HTML5, particularly animation.  
Webpages have a DOM (Document Object Model), which is like a map of all the content on a webpage, and for client-side scripts (code in a webpage that runs on the user’s computer) to access the page, it must use the DOM. In HTML5, the HTML itself can access the DOM, allowing elements on the page to be updated.  
For example, a webpage could contain an animation of a bouncing ball, by creating a circle (which would be done in the webpages code), and then adding a piece of code that moves it up and down.  
HTML5 is a relatively new technology, and once it becomes more powerful and versatile, will likely replace JavaScript for many applications. This is because it simplifies webpages (only one type of code in the document), runs faster/less resource-intensively than JavaScript, and is optimized for mobile.

**Flash**Flash is one of the oldest digital animation tools, having been around since 1996. Animators create animations by drawing individual frames, using either the mouse, or more commonly, a drawing tablet. It is faster than using paper, as animators can create keyframes in addition to regular frames, and for short animations, such as movement or a quick change shape, the software can fill in frames between keyframes. Also, all frames after a keyframe don’t change until the next keyframe, so static content only needs to be drawn once.  
In addition to this, drawing utilities include shapes, lines and colour fill, reducing several minutes of drawing into a few seconds.  
Flash animation can be combined with code to create games.

**QuickTime**QuickTime is the default media player for MacOS (formerly OS X). It supports several animation formats that other media players don’t, such as .swf (flash animation) and .GIF (often used to show short videos online).  
It can’t be used to create animations, but is useful for artists to preview work, and consumers to watch content.

**RealPlayer**

RealPlayer is another media player. It includes features such as the organisation of media, playback of uncommon formats (such as .SVG, .obvs, and some proprietary formats). It also runs on a wide range of hardware, including Windows PC’s, Macs, Linux PC’s, iOS, Android, Symbian (the OS of old ‘brick’ phones) and even DOS (the first version of what is now Windows).  
Like QuickTime, RealPlayer can’t create animations, but it useful for playback, and organizing collections of media.