

Multimedia

Image: Image is a representation of the external form of a person or thing in art that can be displayed with the help of a computer. A computer image is a picture composed of an array of elements called pixels.

Types of Images: There are several types of images that are used in computer graphics on daily basis such as:

1. JPEG/JPG
2. PNG
3. AVIF
4. GIF
5. WebP
6. SVG and many more.

Raster Images: The images that are constructed with the help of pixels are called Raster Images. The quality of the image is changed when the number of pixels in the image are changed. The common tool for Raster Image generation is Adobe Photoshop.

Vector Images: The images that are constructed through lines, curves and fills are called vector images. Vector images are resolution independent and the image quality does not change when the image is zoomed in or out. Vector images can be exported as an Raster Image in any resolution. The common tool for Vector Image generation is Adobe Illustrator.

Color Model: Color model is the way in which we can specify or describe a color numerically. Some of the common examples of color models are:

1. RGB
2. sRGB
3. HSV
4. CMYK

Pixel: A pixel is the smallest unit of a digital image or graphic that can be displayed and represented on a digital display device.

Resolution: The resolution of the image is described as the sharpness or clarity of an image or picture. It is expressed in terms of the number of pixels that can be displayed both horizontally and vertically. For example:

1. HD Resolution of a Monitor: 1280x720
2. FullHD Resolution of a Monitor: 1920x1080

The resolution is written as pixel x pixel format. Where both the numbers show the length and the width of the image or video or any screen that can be measured in terms of pixels.

DPI: DPI stands for Dots Per Inch. It is a measure of spatial printing, video or image scanner dot intensity. The more the DPI, the better the quality. Modern mouse also has an option to change the DPI scaling according to the screen resolution it is used on.

Video: Video is a recording of an image or moving images. Videos are the compilation of various images referred to as frames with a playing audio in background. Frames Per Second is a unit of measurement of the number of images that will be displayed per second. The standard frame rate is 24 fps or 30 fps. More the fps of the video, smoother the content.

Types of Videos: There are several types of video formats that provide best quality in small file sizes. Some of them are listed below:

1. MP4 (Most Common Format)
2. MOV
3. AVI
4. MKV
5. FLV and many more.

HTML: HTML stands for Hyper Text Markup Language. HTML is the standard markup language for creating Web pages. HTML describes the structure of a Web page. HTML consists of a series of elements. HTML elements tell the browser how to display the content.

Hypertext: Hypertext is the text which contains links to other texts.

Website: A set of related web pages located under a single domain name, typically produced by a single person or organization.

Hosting: When a hosting provider allocates space on a web server for a website to store its files, they are hosting a website. Web hosting makes the files that comprise a website (code, images, etc.) available for viewing online.

AR: AR stands for Augmented Reality. The digital content from the virtual world on top of the real environment, providing information. Augmented Reality can be experienced using our mobile devices with the help of various applications.

VR: VR stands for Virtual Reality. The immersive virtual environments shout out the real world. Virtual Reality can be experienced using various ways such as a VR Headset.

MR: MR stands for Mixed Reality. The virtual and Real Environment mix and interact with each other. Mixed Reality is the mixture of both Augmented Reality and Virtual Reality.