

## ⇒ Multimedia Building Blocks

Media Composition involves editing single media, i.e. changing its objects, such as characters, audio sentence, video frames and attributes such as the font of character, recording speed of an audio sentence or color of an image.

⇒ Text and Graphics Editors :-

→ Text Editors :-

Text editors provide writing and modifying facilities to compose text in a document. When editing text, one must deal with the issues of font selection, text style and text effects:

→ Fonts :- The exact description of each character of text is determined by its fonts. Font files contain these descriptions either in bitmap or vector form.

Vector fonts are mathematical descriptions of the characters, which can be rendered in wide range of sizes. Bitmap fonts are stored as bitmaps in predefined sizes.

→ Text Styles :- Text can be presented in different styles, such as italicizing, bolding, etc.

possible text styles. Therefore, a writer of a document should make a careful choice for its uniform use.

→ Text Effects: - More advanced text processing systems provide text effects such as shadowing, extrusion, textured fills, text on curve etc. Such possibilities are offered in CorelDRAW.

Text editors are also beginning to be enhanced through other media. Such as graphics objects. This is the same trend we see in expansion of graphical tools with text manipulation capabilities. An example of advanced word processor with graphical capabilities is MS-Word. This tool provides, in addition to text capabilities, in Microsoft Word for the creation of tables, envelopes, bullet and more etc.

→ Graphics Editors: -

Graphics editors use facilities of the user interface for editing structural representations of graphical object (structure level editing)

or graphical objects (object level editing).  
These two levels of editing are possible because the graphical system stores object primitives and their structural representation, which can be manipulated.

ex. of a graphical editor - an X windows drawing program running on Unix machines.  
This drawing application, also called a layout editor or graphical illustrator.

→ Image Editors:-

Image editors are suitable for applications when neither the application nor the underlying software package keeps a record of the primitives (as is typical in most painting programs).

Scaling (one of the functionalities of an image editor) cannot be implemented by respecifying the primitives with scaled end point coordinates. All that can be done is to scale/edit the contents of the image frames (also called canvas), using read-pixel and write-pixel operations.

resolution, change of intensity, modification of RGB (Red, Green, Blue) colour, colour editing etc. These facilities can be found in an image editor.

An example of a graphical image editor is Adobe's Photoshop™. This tool allows one to draw, edit and paste objects on several layers.

### → Animation Editors:-

Animation editing is based on graphical editors with respect to 2D or 3D spatial graphics objects. The additional component in animation is time, which can also be edited (4.5 editing). The functionalities of such editors include cutting frames from an animation (clip

The most advanced animation tools already provide the animator with the capability to draw only the key frame. The intermediate frames are then drawn by the computer animation program. This process is called tweening.