

Animation

- ➔ Animation is the process of displaying still images in a rapid sequence to create the illusion of movement.
- ➔ Animation is especially useful for illustrating concepts that involve movement. Concept such as playing guitar or hitting a cricket ball is difficult to explain using a text or a single photograph. Animation makes it easier to portray these aspects of multimedia application.

Steps of Animation sequence Designing

The following are the four steps of animation sequence designing

1) Animation story layout

The animation story layout or storyboard layout defines the motion sequence of the object as a set of basic events. For example, for creating a scene of cricket playing, one has to define action and motion of batting, bowling, fielding, running etc. The storyboard layout consists of models, sketches or even some verbal description.

2) Animation object definition

After preparing the storyboard layout, all the objects, which are used in animation scene, are defined in detail. I.e. each object is described in terms of its dimensions, shapes, colors, movements etc and any other additional information which is needed to define that object. In cricket playing scene, the player's dimensions, colors of their uniform, dimensions of the ball, bat, stumps etc are defined.

3) Frame specification

The next step in the process of creating animation is the key frame specification. Here some of the important frames are defined and created in detail. In these frames, the position, color, shapes etc of all the objects at a particular point of time in animation are created in detail.

4) Generation of in-between frames

The in- between frames are then created after frame specification. These in-between frames may be created with the help of geometric transformation. Approximately 1500 frames are needed for a clip of one minute of film.

5 Types of Animation

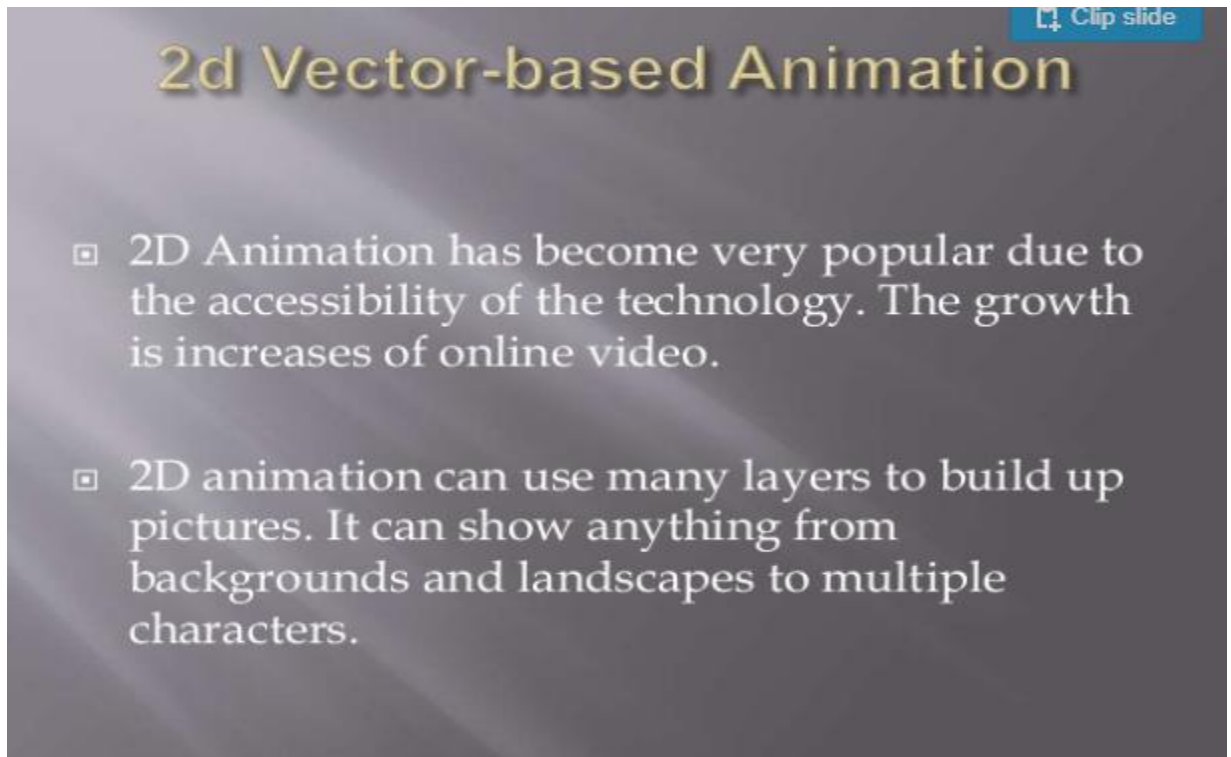
1. Traditional Animation
2. 2d Vector-based Animation
3. 3d Computer Animation
4. Motion Graphics
5. Stop Motion

Traditional Animation

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- ❑ Traditional Animation is one of the older forms of animation.
- ❑ Traditional Animation is sometimes referred hand-drawn or cel animation.

- ❑ In Traditional Animation, the animators draw images on a plain piece of paper fitted on a peg using a coloured pencil, one frame at the time.
- ❑ Sequential drawings screened quickly one after another creates the illusion of movement.



2d Vector-based Animation

- ▣ 2D Animation has become very popular due to the accessibility of the technology. The growth is increases of online video.
- ▣ 2D animation can use many layers to build up pictures. It can show anything from backgrounds and landscapes to multiple characters.

3D Computer Animation

- ▣ 3D Computer Animation is digitally modeled in the program and then fitted with a 'skeleton' that allows animators to move the models.
- ▣ 3D animation can be very realistic, and animators can be very artistically skilled to create a character.
- ▣ 3D animation, also referred as CGI or CG.

- ▣ Flash easy to use, as are other vector-based animation programs.
- ▣ 2D Animation can be created using software such as Flash, Cel Action, After Effects and TV Paint.

- ▣ It is made by generating images using computers.
- ▣ The series of images are the frames of an animated shot.
- ▣ In 3D Animation, they use programmes such as Maya to create animation.

Motion Graphics

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- ▣ It is the art of creatively moving graphic texts or elements, usually for commercial or promotional purposes.
- ▣ The process of creating Motion Graphics depends on different programs.

- ▣ An actor will be filmed doing actions, speaking, or even acting full scenes, while special sensors on body and face are 'captured' using a film camera.
- ▣ This is then translated into a digital character, which can be controlled by the animator.

Stop Motion

- ▣ The process of Stop Motion is done by taking a photo of an object, and then moving a little bit and then taking another picture.
- ▣ The process is repeated and when the photos are played one after another they give the illusion of movement.

- ▣ Stop-motion uses photographic materials to create the physical objects.
- ▣ Many animators work with stop-motion for artistic reasons, as it is still difficult to recreate stop-motion models digitally.