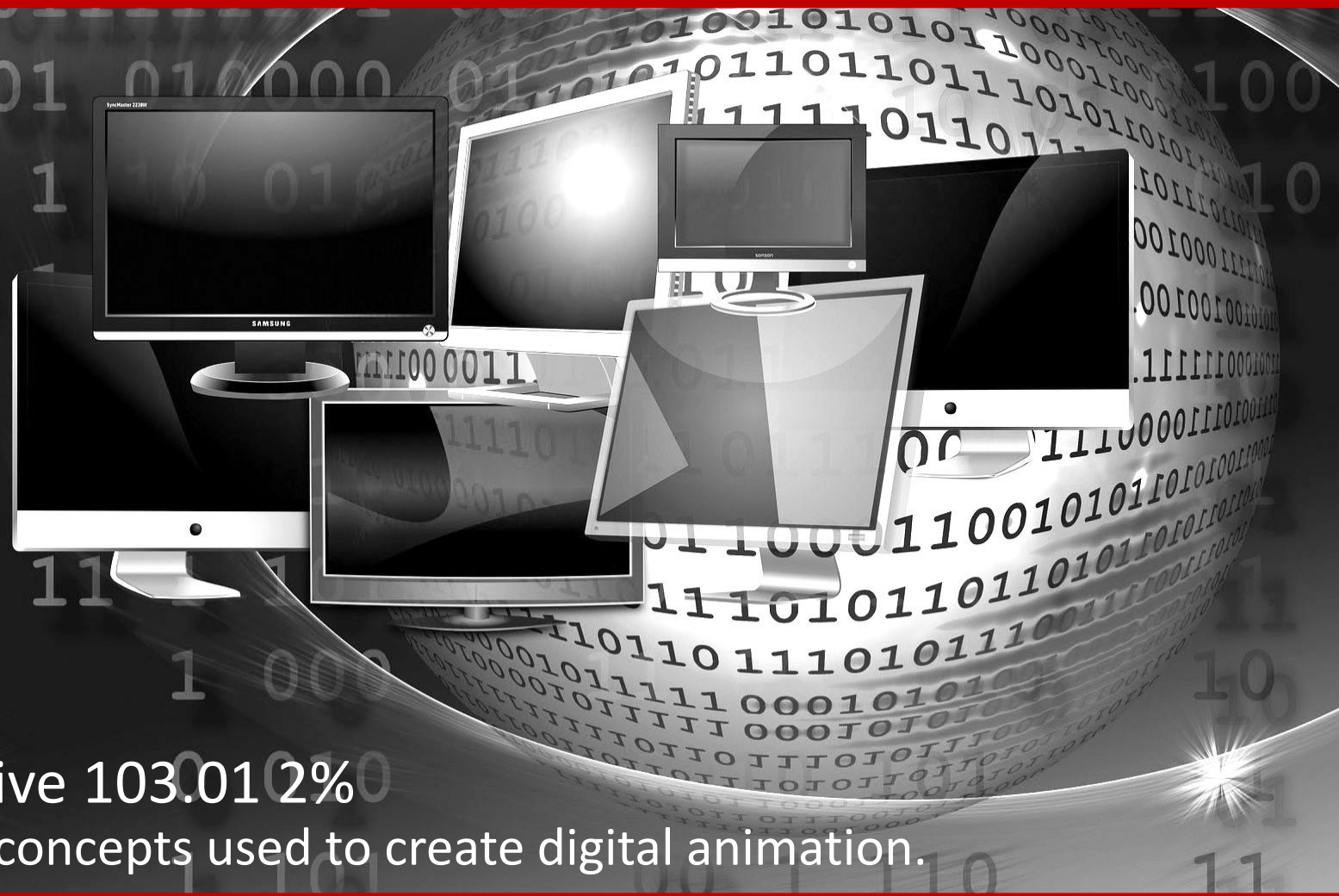


ExplorNet's Digital Media I

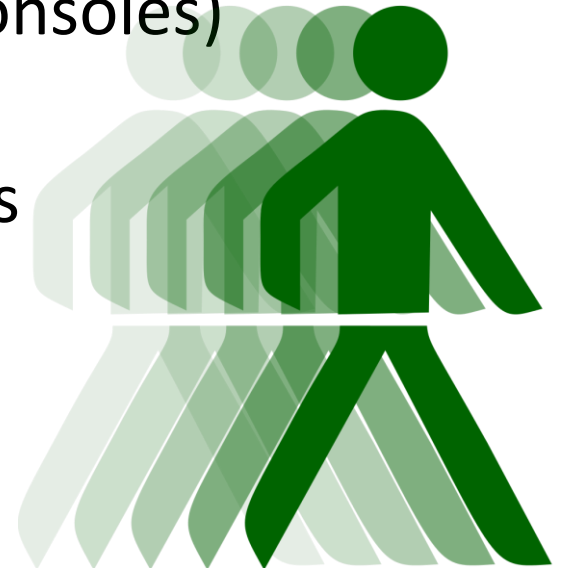


Objective 103.01 2%

Explain concepts used to create digital animation.

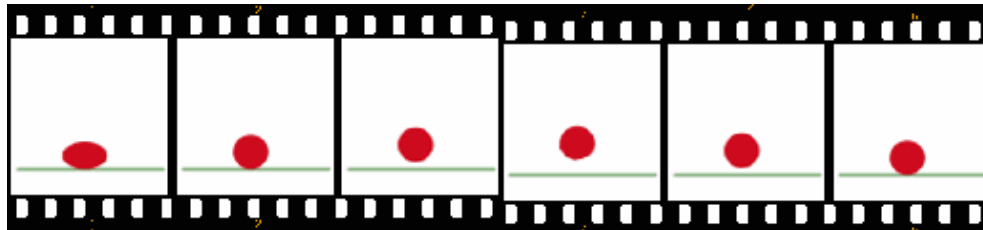
Digital Animation

- Creating the illusion of movement of graphic(s) and/or text.
- Used in:
 - Interactive/Dynamic Advertising
 - Games (Online or Standalone Consoles)
 - Clickable Tutorials
 - Animated Visual Demonstrations
 - Film/Television



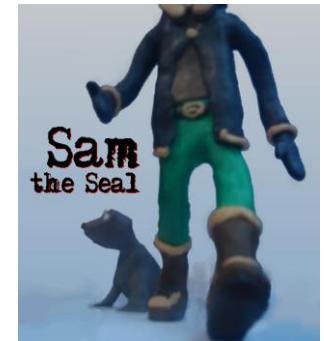
Frame-Based Animation (Cel)

- ❑ A series of individual still frames that create the illusion of animation when viewed continuously (flip book).
- ❑ The graphic(s) in each frame have slight changes in position from the previous frame.
- ❑ Frame-based techniques are commonly used with digital photographs to create stop motion animation.



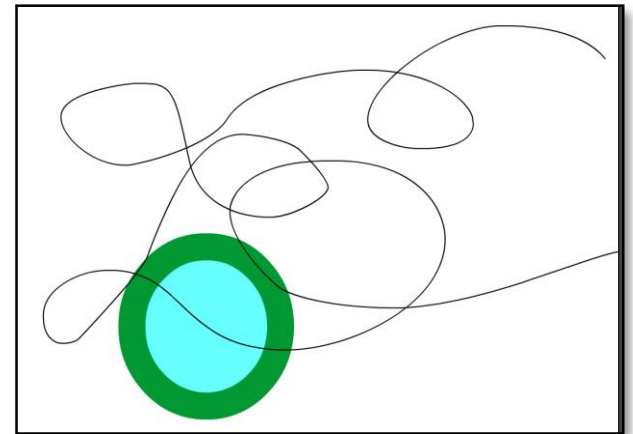
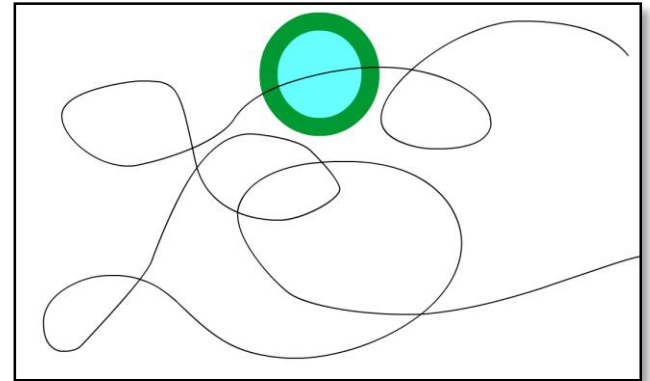
Frame-Based Animation

- Traditional animation
 - Each frame and background hand drawn (not typically covered in this course).
- Rotoscope
 - Traced photographic or video images with a hand-drawn appearance.
- Claymation (Stop Motion)
 - Clay characters or moquettes moved in small increments between still photographs.
- Paper cut out animation (Stop Motion)
 - Similar to claymation, but with cut out shapes



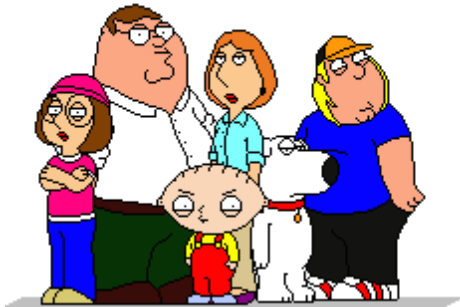
Vector Animation (Path)

- Uses computer generated formulas to make objects in the animation move along a path.
- Utilizes tweens between keyframes.
- Result is a relatively smaller file size with clearer images, smoother movement, and loads more quickly on the internet than frame-based animation.



2D Animation vs. 3D Animation

- Uses two dimensions of movement
- Has a flat look in appearance
- Examples include cartoons like *Family Guy* and *The Simpsons*



- Uses three dimensions of movement
- Has more depth and realistic appearance
- Examples include video games like *Halo* or movies like *Toy Story* and *Frozen*.



Animation File Formats

.GIF

- Supports only frame-based animation.
- Supports only 256 colors.
- Commonly used for web.
- Only animation format that cannot play audio

.SWC

- Contain the project Adobe Animate components.
- Contains a compiled movie clip, ActionScript code, and any assets that the component requires.

Animation File Formats

.FLA

- Native project file used by Adobe Animate (Flash).
- Preserves the project's layers, scenes, and library for future editing.
- Can only be opened or edited by Animate (Flash).

.SWF

- Flash animation format for use on the Internet because it loads quickly
- Can support frame-based or vector animation.
- Supports ActionScript coding, user interactivity.

Animation File Formats

.FLV

- Adobe Flash Player video format for animation playback.
- Common format for embedded video on the Internet.

.MOV

- Quicktime proprietary format
- Converts an animation to a video file.
- Can be imported and edited by a video editing software.