

Web Gallery Using Flash



Title: Web Gallery Using Flash
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Chapter 2 Introduction to Flash

Learning Outcome

Objectives of this chapter are: -

- Introduction to flash
- Adobe Animate
- Animate keyboard shortcuts

Introduction to flash

Flash is an incredibly powerful program that has seemingly endless potential. Flash can be used for creating games, making presentations, animations, visualizations, webpage components, and many other interactive applications. Some of the Flash interface components will look familiar to you, as they have the same functionality as other Adobe applications. However, Flash requires a certain mindset to work in it properly, especially when animating with vector graphics and coding with ActionScript 3.0.

It is essential to know some basics of Flash since it is the environment in which ActionScript is embedded. Most of us have seen animations on the web that were created in Flash, the web is full of them. Flash is a great tool for making all sorts of cool web content. We first learn enough Flash to make some simple drawings and animation as this will greatly help our ability to make games.

A Bit of History

Animate began its journey as a simple vector graphics drawing program called SmartSketch, which was intended for use on stylus-based devices developed by a company called FutureWave. It soon gained such popularity that it was made available on both Windows and macOS with added motion capabilities and given the name FutureSplash Animator. The rising popularity of the World Wide Web during this period led to the software pivoting to target this young medium through the use of a browser-based runtime.

This was the beginning of both the authoring software that we still use today and what eventually became the Flash Player browser runtime. The idea behind this pairing was that you could author your content using FutureSplash Animator and play back the content through a web browser using an installed extension – often referred to as a plugin. The capabilities of web browsers at the time were such that HTML was a simple markup language for semantic text declaration and hyperlinks. Technologies such as CSS and JavaScript didn't even exist yet – even image files were barely supported! If you wanted a rich media experience on the web, you had to rely on browser plugins.

Macromedia acquired FutureWave (and FutureSplash Animator) in 1996 and rebranded the software as Flash – sort of a combination of the two names! They made huge investments in both the authoring software and web browser plugin, renaming the extension to Flash Player. Macromedia was also responsible for the ActionScript programming language and the expansion of the Flash platform across a number of areas, which included both web and server implementations, and it even took small steps into mobile.

From FutureWave to Macromedia and now to Adobe, animate has changed a lot over the years!



Figure 1 Flash History from Macromedia to Animate

In 2005, Adobe Systems acquired Macromedia and all of their properties (including Flash!) and have been holders of this technology ever since. In the years under Adobe Animate has seen great strides, but also some missed opportunities over the years.

On the one hand, the Flash Platform was greatly expanded upon under a number of proprietary and open-source initiatives – ActionScript 3.0 was released, and MXML/Flex was made much more accessible to many developers. We even had Flash Platform technologies integrated into nearly every piece of creative software Adobe distributes – for example, directly within the workspace panels of software such as Photoshop and Illustrator.

On the other hand, the push for Flash Player on mobile was so bungled that the platform could never recover from the fallout.

While Adobe did release a number of versions of Flash Player for Android and RIM/BlackBerry devices, they were never able to get the runtime on Apple devices such as the iPhone and iPad. Adobe eventually gave up on Flash Player on mobile altogether and decided to refocus their efforts on Adobe Integrated Runtime (AIR) – which allowed iOS, Android, and even Windows and macOS applications and games to be developed with Flash technologies. However, Adobe did continue to focus on Flash Player for desktop browsers and took a renewed interest in 3D and gaming technologies in the form of Stage3D.

Adobe made huge efforts with Flash Player at one point, developing Stage3D, concurrency, and other options designed to create a blazing-fast experience for the user that appealed to game developers.

During this time, Flash Professional (the authoring software) was neglected quite a bit. The focus on mobile and developers left creative software such as Flash Professional

with fewer resources, and once Adobe lost the war for mobile, the association of Flash Player with Flash Professional was one that even they had trouble justifying. Many expected Adobe to abandon the software entirely. But while Adobe was focused on developers during these years, animators were still making heavy use of Flash Professional to produce content for television, web, and film projects.

What is animation?

Animation is a rapid display of a sequence of images of 2-D artwork or model positions in order to create an illusion of movement. It is an optical illusion of motion due to the phenomenon of persistence of vision.

What is flash?

Flash is a vector animation software, originally designed to create animations for display on web pages. Vector graphics are ideal for the web because they are so lightweight. Flash is a multimedia graphics program specially for use on the Web. Flash enables you to create interactive "movies" on the Web.

Why flash?

- Flash uses vector graphics, which means that the graphics can be scaled to any size without losing clarity/quality.
- Flash does not require programming skills and is easy to learn.
- Macromedia has made Flash more and more controllable via programming, where they have it positioned as a competitor to HTML to build interactive web sites and applications such as an e-commerce store.
- Macromedia argues that Flash is the way to go instead of HTML because of the following reasons: -
 - ❖ Flash movies load faster and save on download time because Flash is vector based whereas HTML is not.
 - ❖ Flash intelligently 'caches' it's movies so they don't have to be reloaded.
 - ❖ Flash gives the user (the person viewing/using the Flash movie) a more responsive 'rich-client' like experience.
 - ❖ Flash pages can be made to load faster, but most of the time, the way they are designed in the real world, they do not. That is not a Flash problem, it is more an issue of the Flash developers going nuts with fancy and heavy Flash movies.
- HTML caches pages as well, once images are downloaded, they are held in your browser's cache. The cached images are then used instead of downloading them from the server again.
- With new technology like ASP.net and Java Server Faces, HTML now can react just like a 'rich-client' application. Even without these new tools, properly designed HTML for most dynamic sites can provide a good user experience.

Conclusion: -

- Flash loads much faster than animated images.
- Flash allows interactivity, animated images do not.
- Flash does not require programming skills, java applets do.

This was flash but now we need to concentrate new version is called Animate

Adobe Systems acquired Macromedia and all of their properties (including Flash!) and have been holders of this technology ever since. Now we know flash as Adobe Animate. Let explore animate interface.

ADOBE ANIMATE

Adobe Animate is an authoring tool that allows you to design, animate, add interactivity and publish for multiple platforms - including HTML5.

Adobe Animate interface consist of the following panels; -

- Stage panel
- Tools panel
- Timeline panel
- Properties panel
- Library panel
- Assets panel

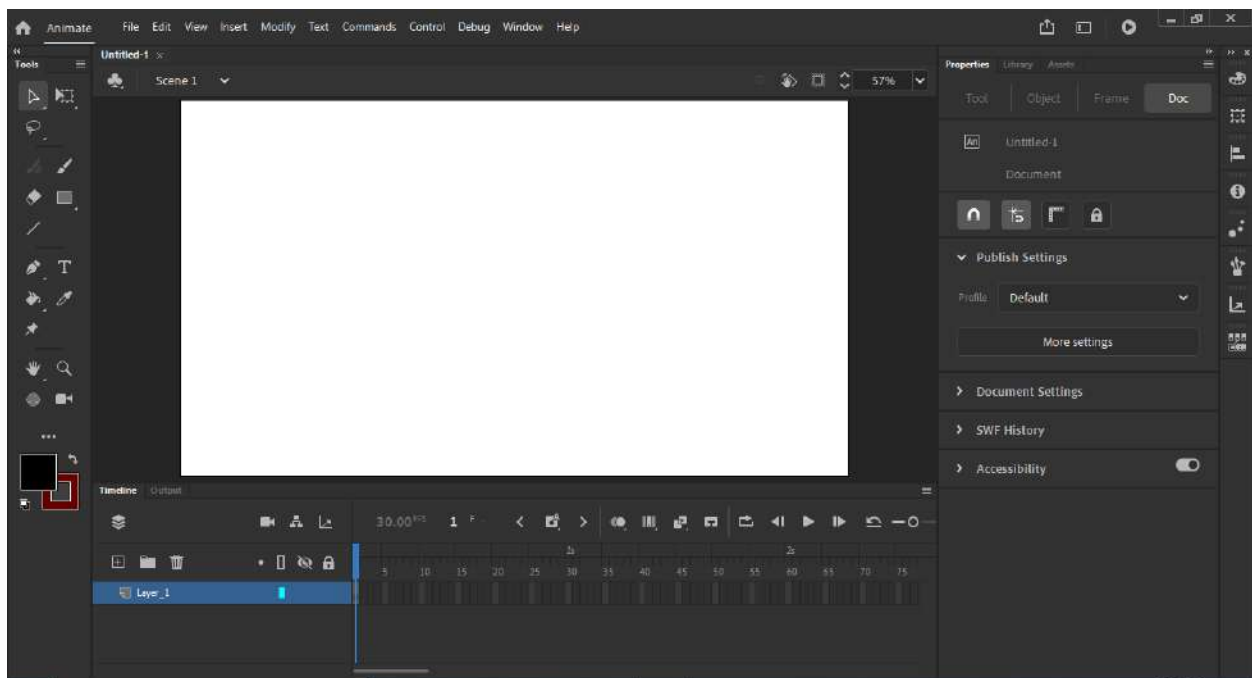


Figure 2 Animate Interface

Stage

The Stage is the rectangular area where you place graphic content when creating Animate documents. The Stage in the authoring environment represents the rectangular space in Flash Player or in a web browser window where your document appears during playback. A default black outline represents the outline view of the stage.

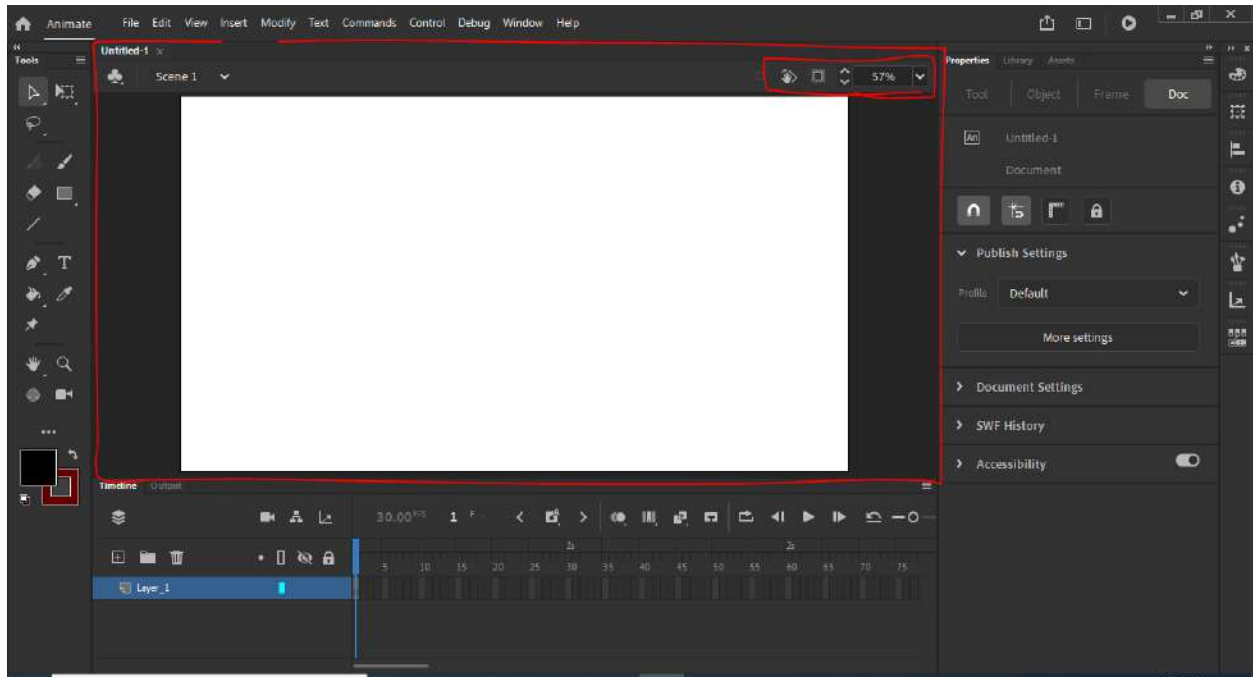


Figure 3 Animate stage area

The Stage has several contexts which are indicated along the top bar of the stage. It can present content that is in a Scene or can present sub-content such as objects from the library.

Tools

The tools in the Tools panel let you draw, paint, select, and modify artwork, as well as change the view of the Stage.

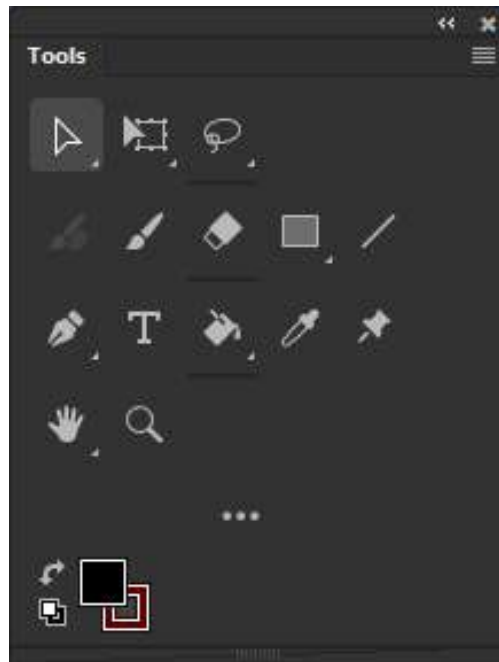


Figure 4 Tools Panel

The Tools panel is divided into four sections: -

- The tools area contains drawing, painting, and selection tools.
- The view area contains tools for zooming and panning in the application window.
- The colors area contains modifiers for stroke and fill colors.
- The options area contains modifiers for the currently selected tool. Modifiers affect the tool's painting or editing operations.

Timeline

The Timeline in Adobe Animate **organizes and controls a document's content over time in layers and frames**. Like a movie film, Animate documents divide lengths of time into frames. Layers are like multiple filmstrips stacked on top of one another, each containing a different image that appears on the Stage.

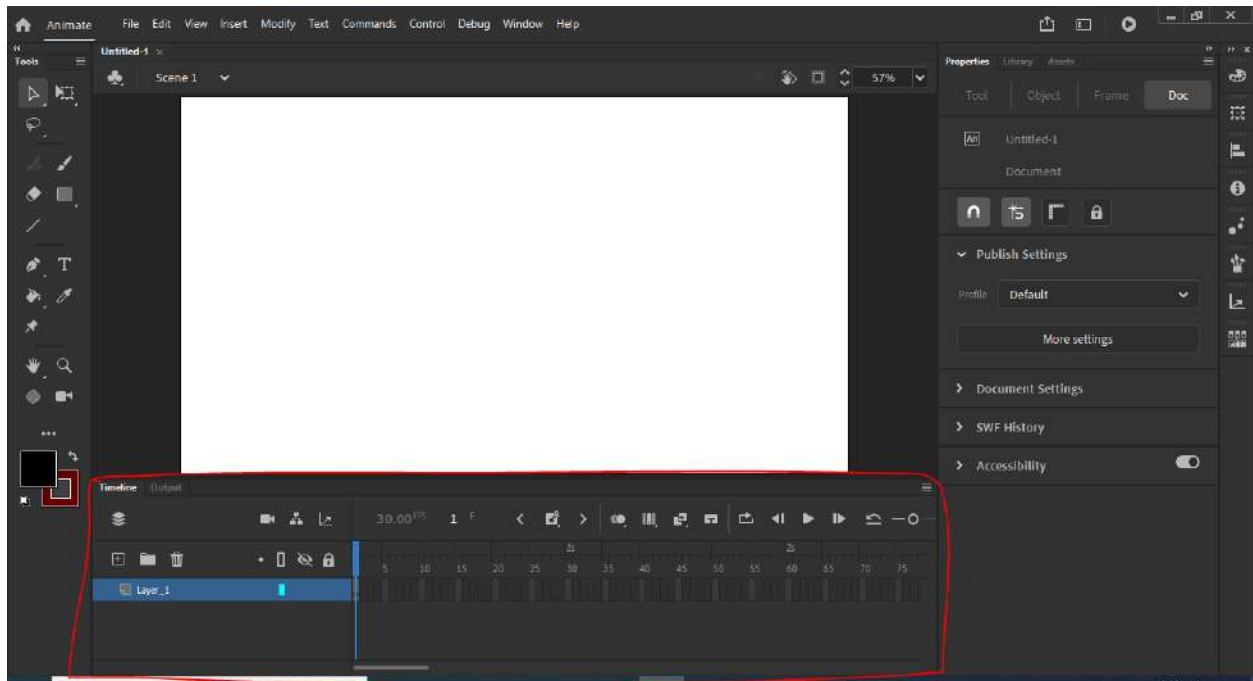


Figure 5 Animate Timeline area

Properties

The Property inspector provides easy access to the most commonly used attributes of the current selection, either on the Stage or in the Timeline. You can modify the object or document attributes in the Property inspector without accessing the menus or panels that also control these attributes.

Depending on what is selected, the Property inspector displays information and settings for the current document, text, symbol, shape, bitmap, video, group, frame, or tool. When two or more different types of objects are selected, the Property inspector displays the total number of objects selected.

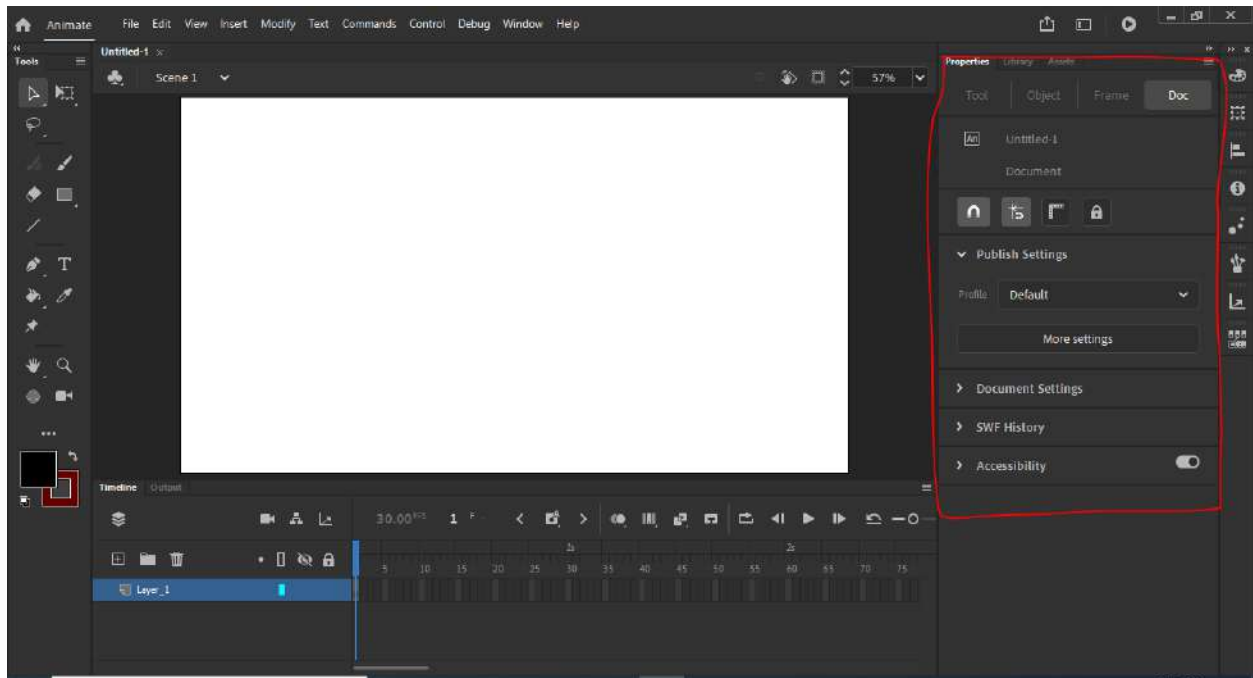


Figure 6 Animate Properties area

When you have the Selection, Tool selected and click the background of the stage, the Properties tab shows the Document Properties. Here you can set the size of your Flash file, background color, frame rate and exporting settings.

Library

The Library panel is where you store and organize symbols created in Animate. You can also store imported files, including bitmap graphics, sound files, and video clips. The Library panel lets you organize library items in folders. Also, see how often an item is used in a document, and sort items by name, type, date, use count, or ActionScript® linkage identifier. For example, when you import an animated GIF, it creates a folder named GIF under the root folder and places the file. You can also search the Library panel by typing in a symbol name or linkage name in the search field. You can also set properties on most multiple-object selections.

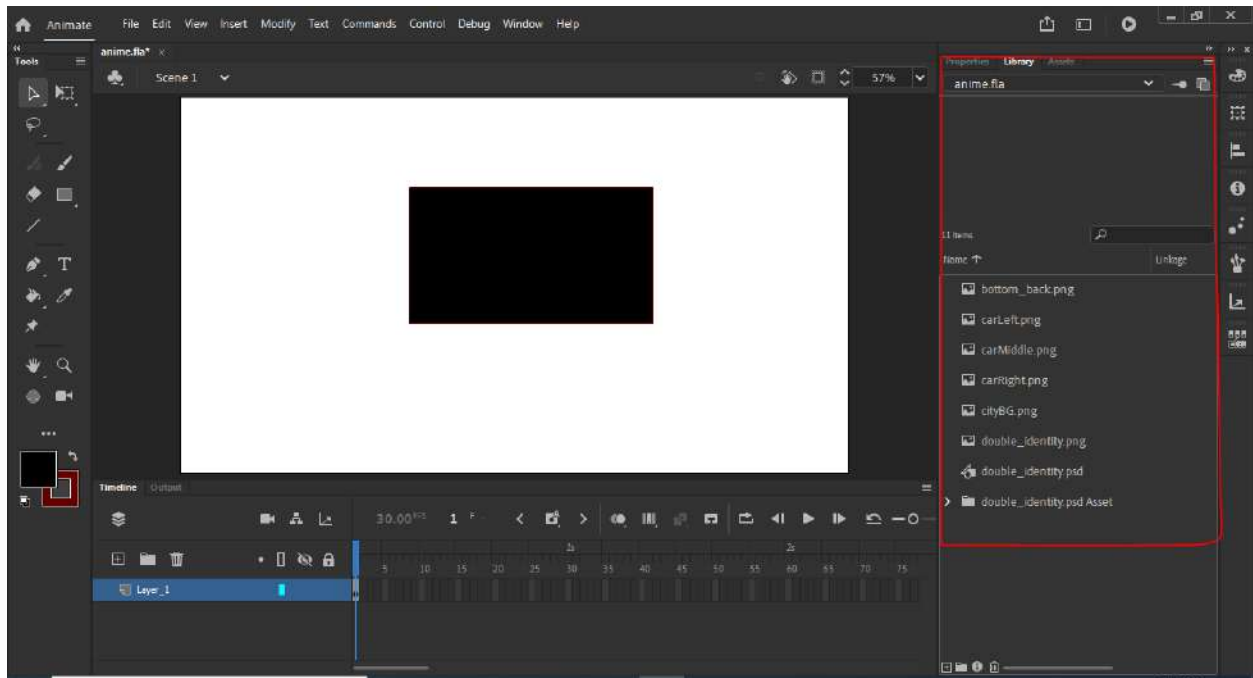


Figure 7 Animate Library panel

Assets panel

Assets panel contains ready to use assets, which can be used in your animation projects. You can find Assets Panel in the tab group at upper-right corner in most workspaces, along with Properties Panel. If Assets Panel is not visible, you can enable it by selecting Windows>Assets.

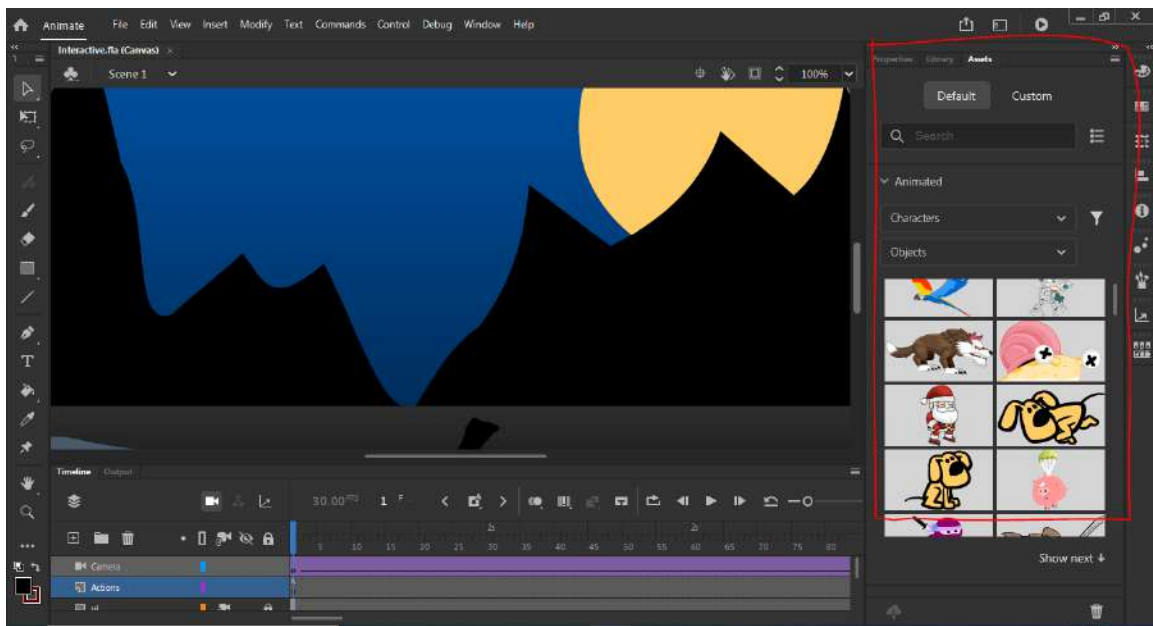


Figure 8 Assets Panel

ANIMATE KEYBOARD SHORTCUTS

The below figures are the Animate keyboard shortcuts.

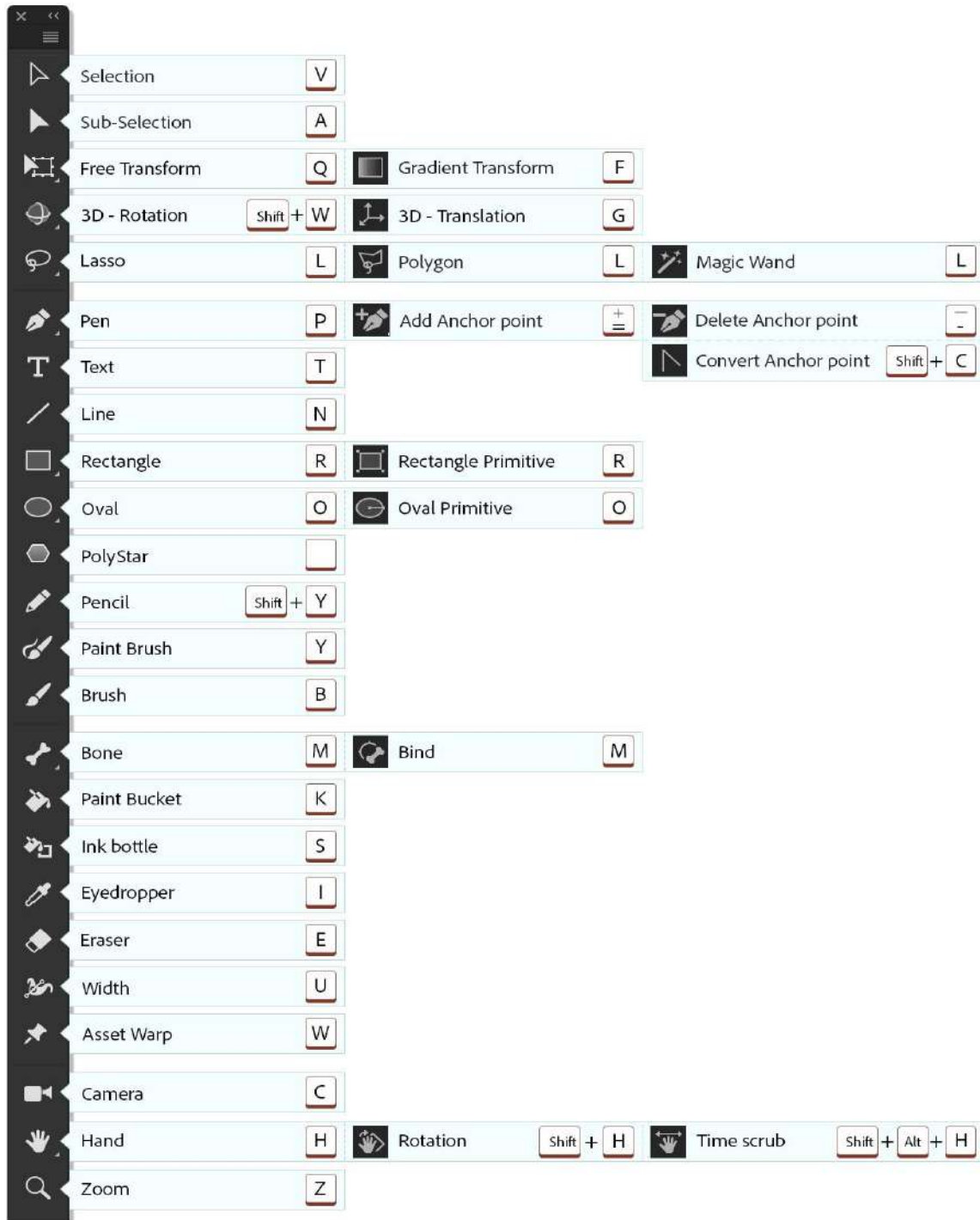
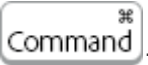





















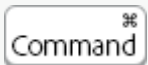









Figure 9 Animate tools Shortcuts



















File shortcuts

Action	Mac	Windows
Import Image/Sound/etc.	 + 	 + 
Export Movie	 +  +  + 	 +  +  + 
Open as Library	 +  + 	 +  + 









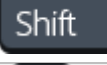









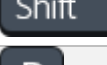













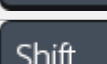

















View shortcuts

Action	Mac	Windows
View movie at 100% size	 + 	 + 
Show Frame	 + 	 + 
Show All	 + 	 + 

Windows shortcuts

Action	Mac	Windows
Show/Hide Library	 + 	 + 
Comment selection	 + 	 + 
Toggle between Edit Movie and Edit Symbol Mode	 + 	 + 
Show/Hide Timeline	 +  + 	 +  + 

Edit and modify

Action	Mac	Windows
Group	 + 	 + 
Ungroup	 +  + 	 +  + 
Break Apart	 + 	 + 
Paste in Place	 +  + 	 +  + 
Duplicate	 + 	 + 
Select All	 + 	 + 
Deselect All	 +  + 	 +  + 
Import Library	 +  + 	 +  + 
Align Window	 + 	 + 
Save As	 +  + 	 +  + 

Scale and Rotate	Command [⌘] + Alt [⌘] Option + S	Ctrl + Alt + S
Remove Transform	Command [⌘] + Shift + Z	Ctrl + Shift + Z
Move Ahead	Command [⌘] + ▲	Ctrl + ▲
Move Behind	Command [⌘] + ▼	Ctrl + ▼
Bring to Front	Command [⌘] + Shift + ▲	Ctrl + Shift + ▲
Send to Back	Command [⌘] + Shift + ▼	Ctrl + Shift + ▼
Show or hide Transform Panel	Command [⌘] + T	Ctrl + T
Narrower letterspacing (kerning)	Command [⌘] + Alt [⌘] Option + ◀	Ctrl + Alt + ◀
Wider letterspacing (kerning)	Command [⌘] + Alt [⌘] Option + ▶	Ctrl + Alt + ▶