

Introduction to Computer Animation

Lab 1 Instructions

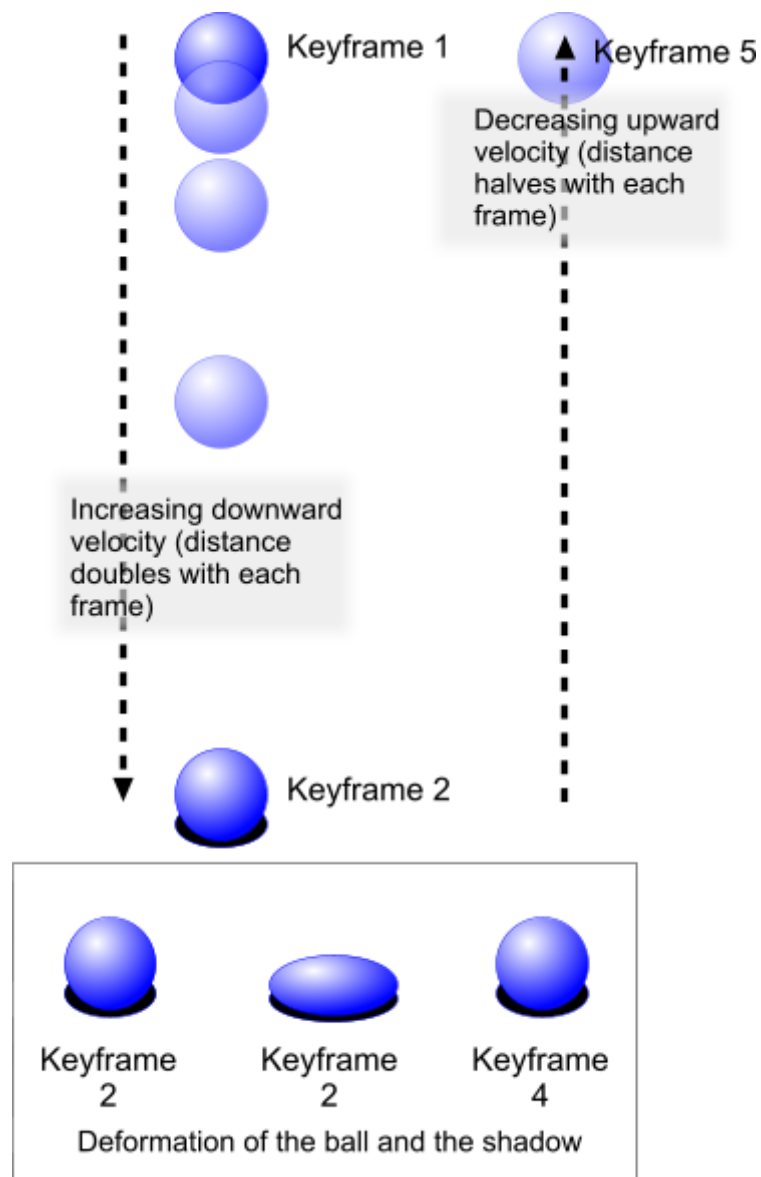
Watch the Video Tutorials first and use them as a guide while you carry out the three tasks below:

One

Create some simple shapes and experiment with the drawing tools. You should experiment with making selections, stroke and fill, and manipulating curves.

Two

Do a bouncing ball, both as a frame-by-frame animation and as a tweened animation. Use the illustration below as a guide.



Bouncing ball (frame-by-frame animation)

The sketch above illustrates how the ball is going to fall in our animation. There are five keyframes. The first in Frame 1 where the ball is at its maximum height and one in Frame 6 at the point where it first contacts the ground, this is the point where the ball falls to the ground. The next set follows on from the first and is used to plan the deformation of the ball when it has hit the ground. The first one is at the same point as the last one in Frame 6 and the last is in Frame 9 where the ball undergoes the maximum amount of deformation.

We now have to decide how the drawing is going to be translated to the computer screen. The first decision we should make is how great the distance should be between the balls in each frame. This can be done arbitrarily, based on the distance the ball moves when using the arrow keys.

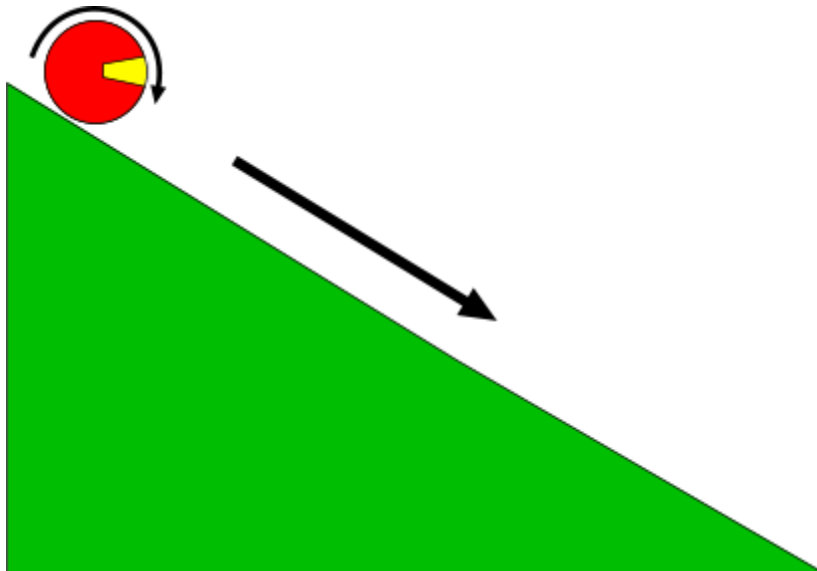
Movement of objects can be controlled quite precisely in Flash using the `Arrow Keys`.

- Pressing an `Arrow Key` will move an object a set distance depending on the magnification.
- Pressing `Shift+Arrow Key` will move an object to a greater degree than using the `Arrow Key` alone.

When you have completed the animation (both versions), show it to the person next to you, then show it to the lecturer/lab demonstrator.

Three

Create a ramp and a ball; get the ball to roll down the ramp over 24 frames. Try using Easing as described in the last Tutorial video (the one with the tweened bouncing ball) to get the ball to start off gradually going down the slope.



It is important that you become familiar with moving things around, manipulating curves and setting up keyframes and tweens before next week.