



Spritesheets

Multimedia Programming

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Sprite Animation

A sprite is a small image that you can draw quickly to the screen.

A sprite is actually cut out of a larger image called a sprite sheet or master image multiple sprites of different things, like the different characters in a game also called an atlas same character in different poses

Spritesheets

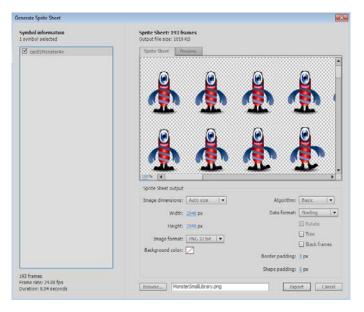




Spritesheet generators:

- 1. http://spritesheetpack er.codeplex.com/
- 2. Texture packer
- 3. Flash CS6 with support for Easel JS.

Sprite generation in Flash



Select a graphic in the library and in right mouse button contextual menu press "Generate Spritesheet".

You can set the size, select a background colour or transparency and change a data format that facilitates the integration of the spritesheet into a games framework (such as EaseIJS).

When to use sprites

a sprite is an image so it will probably draw faster than vectors -> mobile definitely

sprites are great for when you need to draw the same thing over and over

in games > bullets

 very fast to load a bullet sprite once and draw it over and over.

Sprites are fast to download and draw as part of a sheet:

-> 1 load request for all your graphic assets

Spritesheets help separate code from presentation: designers replace artwork, drop in new spritesheet and the new artwork is displayed without modifying codebase.

draw loop for spritesheets

```
clear Portion of
                                      width of frame
                      ctx
function draw() {
                                                     height of frame
         requestAnimationFrame(draw);
         ctx.clearRect(0,0,212,201);
        x = (count \% 9)* 212;
        y = Math.floor(count /9) * 201;
         ctx.drawImage(\img, x, y, 212, 201, 0,0, 212,201);
         if(count== 149)
             count >
         else
             count++
                            number of cols of
                                                      x and y position
      total number of
                                 frames
                                                        of sprite on
          frames
                                                           canvas
```