

Sprites and sprite sheets

Two dimensional image or animation integrated into a larger scene, usually treated as a graphical overlay

in 1970/1980's, doing 2D graphics was computationally expensive. Sprites were 2D images provided to special hardware accelerators that overlaid the images onto the display.

Now, sprites are logical entities used to organize/represent images that add visual complexity to a game

Sprite sheets consisted a collection of sprites organized as a single image. Note that the individual sprites need not be regularly spaced on the sprite sheet.



We will prefer to load sprites as individual images to provide more flexibility in modifying the art assets for *Spaceship* and *RiceRocks*.

Color and transparency

Color - up to now, "White", "Black", "Red"

RGB model - three red, green, blue channels

Stored channel values as numerical intensities in the range 0-255

HTML string - "rgb(255, 0, 0)" - equivalent to "Red"

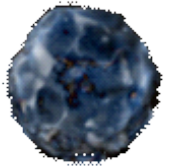
http://www.w3schools.com/html/html_colors.asp

Challenge- would like to draw irregular shapes (like an asteroid or spaceship) that lie in rectangular images

Transparency - up to now, always opaque

Add alpha channel to RGB model - channel stores transparency

HTML string - "rgba(255, 0, 0, 0.5)" - (1 is opaque, 0 is transparent)



Create image with transparent alpha channel in *Photoshop*, *GIMP*, *paint.net*, etc.
PNG image format is popular choice