

Name(s) _____ Period _____ Date _____

Activity Guide - Interactive Card Planning



Digital Card Planning

You're going to be developing an interactive digital card to share with someone you care about, but you'll need to do some planning before working on programming.

Designing Your Background

This first thing to consider when designing your card is what your background will look like. You might want to refer back to the digital scene you created in the first few lessons for a refresher on how to use shapes. Consider who your card will be for, what it will be about, and what kind of image you'd like to have in the background.

The space below is 20 by 20. That means each square on the paper will map to 20 pixels on the computer. Sketch out your background using only the drawing commands (reference provided to the right). List the blocks you used below.

Need graph here

Block	Inputs

Shapes:
background(color)
rect(x, y, width, height)
ellipse(x, y, width, height)
regularPolygon(x, y, sides, radius)
point(x, y)
line(x1, y1, x2, y2)
shape(x1, y1, x2, y2...)
text(string, x, y, width, height)
textAlign(horizontal, vertical)
textSize(pixels)
textFont(font)
Color and Style:
color(red, green, blue)
fill('color')
noFill()
stroke('color')
noStroke()
strokeWeight()

Planning your Sprites

Now that you Use the table below to plan out your Sprites (you need at least one, but you can use as many as you want!) Next to each Sprite, plan out the image it will use and which properties will be changing.

Sprite Label	Image(s)	Properties

Developing Interactions

The final element of your card to consider is how the user will interact with it, and how the Sprites may interact with each other. You'll want to include conditionals that respond to keyboard input (such as `keyDown()`) as well as conditionals that respond to changing variables or Sprite properties (such as `sprite.y > 300`). Use the table below to plan out all of your conditionals and the corresponding action

If / Else if / Else	Condition	Action

Rubric

Your project will be assessed for the following criteria. Read through the criteria, make sure you understand what is expected for each (and ask questions if you don't), and then step back through **your**

Objective
Uses a background composed of multiple shapes (eg. <code>rect</code> , <code>ellipse</code> , <code>line</code>)
Uses at least 1 sprite that responds to user input (eg. <code>keyDown</code> , <code>mouseDidMove</code>)
Updates at least 3 different sprite properties in the draw loop (eg. <code>sprite.x</code> , <code>sprite.scale</code> , <code>sprite.visible</code>)
Uses at least 1 conditional that is triggered by a variable or sprite property (eg. <code>sprite.y > 300</code>)
Increment or decrement a variable or sprite property (eg <code>score = score + 1</code>)