Suica 2.0 for JavaScript

boytchev.github.io/suica
version 1

BASIC OBJECTS

circle (center, size, color)
cone (center, size, color)
cube (center, size, color)
cylinder (center, size, color)
line (center, size, color)
point (center, size, color)
polygon (count, center, size, color)
prism (count, center, size, color)
pyramid (count, center, size, color)
sphere (center, size, color)
square (center, size, color)

ADVANCED OBJECTS

construct (expression, size, color)
convex (src^2, size, color)
group (object, object, ...)
  .**add** (object, object, ...)
model (filename, center, size)
model.save (filename, [object, object, ...])
surface (center, curve^2, count, size, color)
text3d (text, font^1, center, size, color)
tube (center, curve, radius, count, size, color)
spline (src, closed, interpolating)
  [[x,y,z], ... [x,y,z]]
spline (function, param1, param2)
  func (u, p1, p2)
splane (src, closed, interpolating)
  [[[x,y,z], ... [x,y,z]],
    : :
    [[x,y,z], ... [x,y,z]]]
splane (function, param1, param2)
  func (u, v, p1, p2)

PROPERTIES

.center = [**.x**, **.y**, **.z**]
.color = "colorname" / 0xFFFFFF
  = [r,g,b] 0...1
  = **rgb** (r,g,b) 0...255
  = **hsl** (h,s,l) h=0...360, 0...100
.count = count / [count, count]
.curve = .src
.expression = "string" A+B, A-B, A*B, (...)
.font^1 = "fontname.json"
.image = drawing / "filename.jpg" /
  image ("filename.jpg ")
.images = .count / [count, count]
.size = width / [**.width**, **.height**, **.depth**]
.spin = spinH / [**.spinH**, **.spinV**, **.spinT**]
.src^2 = [point, ... point]
  ^{3} = [[point, ...], ... [point, ...]]
.wireframe = true/false
threejs = THREE.Mesh
  .material = THREE.Material
  .geometry = THREE.BufferGeometry

SUICA

<script src="**suica.js**"></script>
<suica> ... </suica>

background (color)
proactive ( )
oxyz (size, color)
demo (distance, altitude, speed)
orbit (distance, altitude, speed)
lookAt (from, to, up)

perspective (near, far, fov)
orthographic (near, far)
fullWindow ( )
fullScreen ( )
stereo (distance)
anaglyph (distance)
vr ( )

capture (filename, time, fps, format, skipframes)

EVENTS

onPointerEnter, **onPointerLeave**, **onPointerMove**, **onPointerDown**, **onPointerUp**, **onClick**, **onTime**

obj.**addEventListener** (eventName, eventHandler)
obj.**removeEventListener** (eventName)
obj.eventName = eventHandler

function pointerEventHandler (event) { ... }
function timeEventHandler (time, dTime) { ... }

MISC

its
obj.**clone**
obj.**style** ({name: value, ...})
allObjects ( )

findPosition (event)
findObject (event)
findObjects (event)
objectPosition (local)
screenPosition (local, global)

radians (degrees)
degrees (radians)
random (from, to)
random (array)

DRAWINGS

drawing (width, height, color)
moveTo (x, y, x, y, ...)
lineTo (x, y, x, y, ...)
curveTo (m_x, m_y, x, y)
arc (x, y, radius, from, to, cw)
stroke (color, width, closed)
fill (color)
fillText (x, y, text, color, font)
  "bold 20px Courier"
clear (color)

LMS

scorm
  .**api**, .**studentName**, .**score**, .**getValue** (value)
  .**setValue** (name, value), .**derandomize** (seed)

Suica 2.0 for HTML

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version 1

BASIC OBJECTS

<**circle** center size color ...>
<**cone** center size color ...>
<**cube** center size color ...>
<**cylinder** center size color ...>
<**line** from to color ...>
<**point** center size color ...>
<**polygon** count center size color ...>
<**prism** count center size color ...>
<**pyramid** count center size color ...>
<**sphere** center size color ...>
<**square** center size color ...>
<... id spin image images wireframe>

ADVANCED OBJECTS

<**clone** src center size color ...>
<**construct** expression center size color>
<**convex** src^2 size color ...>
<**group** center size color ...> ... </**group**>
<**model** filename center size ...>
<**surface** center curve^3 count size color ...>
<**text3d** text font^l center size color ...>
<**tube** center curve radius count size color ...>
<**spline** src closed/open
interpolating/approximating>
x,y,z; ... x,y,z
<**spline** src>
functionName
<**splane** src closed/open
interpolating/approximating>
x,y,z; ... x,y,z|
: :
x,y,z; ... x,y,z
<**splane** src>

PROPERTIES

center = "**x**, **y**, **z**"
color = "colorname" / "0xFFFFFF"
= "r,g,b" 0...1
= "**rgb** (r,g,b)" 0...255
= "**hsl** (h,s,l)" h=0...360, 0...100
count = "count" / "count, count"
curve = src
expression = "string" A+B, A-B, A*B, (...)
font^l = "fontname.json"
id = "string"
image = "drawing" / "filename.jpg"
images = "count" / "count, count"
size = "width" / "**width**, **height**, **depth**"
spin = "spinH" / "**spinH**, **spinV**, **spinT**"
src^2 = "point; ... point"
^{3} = "point; ... point | ... | point; ... point"
wireframe = "true/yes/false/no"
point = "**x**, **y**"
orientation = "xyz"/ "xzy"/ "yxz"/ ...

SUICA

<script src="**suica.js**"></script>
<**suica** width height background orientation proactive
perspective orthographic fullWindow fullScreen stereo
anaglyph vr> ... </**suica**>

<**background** color>
<**proactive**>
<**oxyz** size color>
<**demo** distance altitude speed>
<**orbit** id distance altitude speed>
<**lookAt** from to up>

<**perspective** near far fov>
<**orthographic** near far>
<**fullWindow**>
<**fullScreen**>
<**stereo** distance>
<**anaglyph** distance>
<**vr**>

<**capture** filename time fps format skipframes>

EVENTS

onPointerEnter, **onPointerLeave**, **onPointerMove**, **onPointerDown**, **onPointerUp**, **onClick**, **onTime**

<tag ... eventName="eventHandler">

function pointerEventHandler (event) { ... }
function timeEventHandler (time, dTime) { ... }

DRAWINGS

<**drawing** size color>
<**moveTo** point>
<**lineTo** point>
<**curveTo** m point>
<**arc** point radius from to cw>
<**stroke** color width closed>
<**fill** color>
<**fillText** point text color font>
"bold 20px Courier"
<**clear** color>