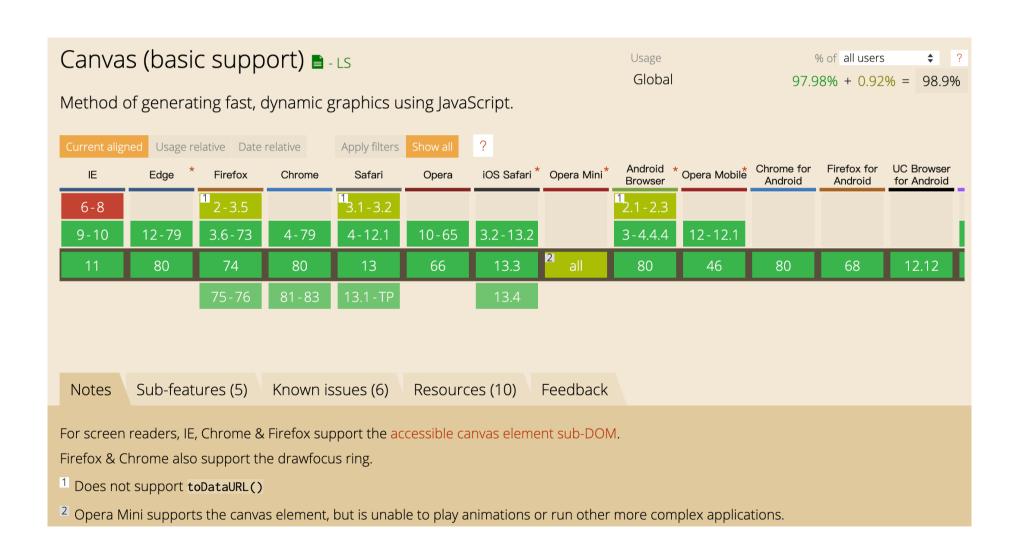


HTML Canvas

HTML Canvas 介紹



HTML Canvas 介紹

圖表, combine photos, or 動畫, 遊戲

SVG	HTML Canvas
SVG has better scalability. So it can be printed with high quality at any resolution	Canvas has poor scalability. Hence it is not suitable for printing on higher resolution
SVG gives better performance with smaller number of objects or larger surface.	Canvas gives better performance with smaller surface or larger number of objects.
SVG can be modified through script and CSS	Canvas can be modified through script only
SVG is vector based and composed of shapes.	Canvas is raster based and composed of pixel.

HTML Canvas 標籤

- 1. width
- 2. height
- 3. getContext()
- 4. toDataURL()

<canvas id="canvas" width="100" height="100"></canvas>

var ctx = document.getElementById('canvas').getContext('2d');

HTML Canvas

- 數學
- OOP

HTML Canvas API

- 1. 管理狀態: save(), restore()
- 2. 變形: scale(), rotate(), translate(), transform(), setTransform()
- 3. 畫面組成:globalAlpha, globalCompositionOperation
- 4. 色彩與風格: strokeStyle, fillStyle, createLinearGradient(), createRadialGradient(createPattern()
- 5. 線條邊角及組合:lineWidth, lineCap, lineJoin, miterLimit
- 6. 陰影: shadowOffsetX, shadowOffsetY, shadowBlur, shadowColor
- 7. 方形繪出: clearRect(), fillRect(), strokeRect()
- 8. 路徑API: beginPath(), closePath(), moveTo(), lineTo(), quadraticCurveTo(), bezierCurveTo(), arcTo(), rect(), arc(), fill(), stroke(), clip(), isPointInPath()
- 9. 焦點管理: drawFocusRing()
- 10. 文字: font, textAlien, textBaseline, fillText(), strokeText(), measureText()
- 11. 影像: drawImage(), createImageData(), getImageData(), putImageData()

HTML Canvas 範例

Codepen

three.js

實作