

Information Visualization

Introduction to SVG

Paulo Dias





“SVG is to graphics what HTML is to text”



- SVG created by “W3C”, a Consortium that develops standards and guidelines to help everyone build “open source standards” for web.
- September 2001 : SVG 1.0 recommendation by W3C
- January 2004: SVG 1.1 recommendation by W3C
- August 2011: SVG 1.1 (2nd edition) - recommendation by W3C
- October 2018: SVG 2.0 - Recomendação



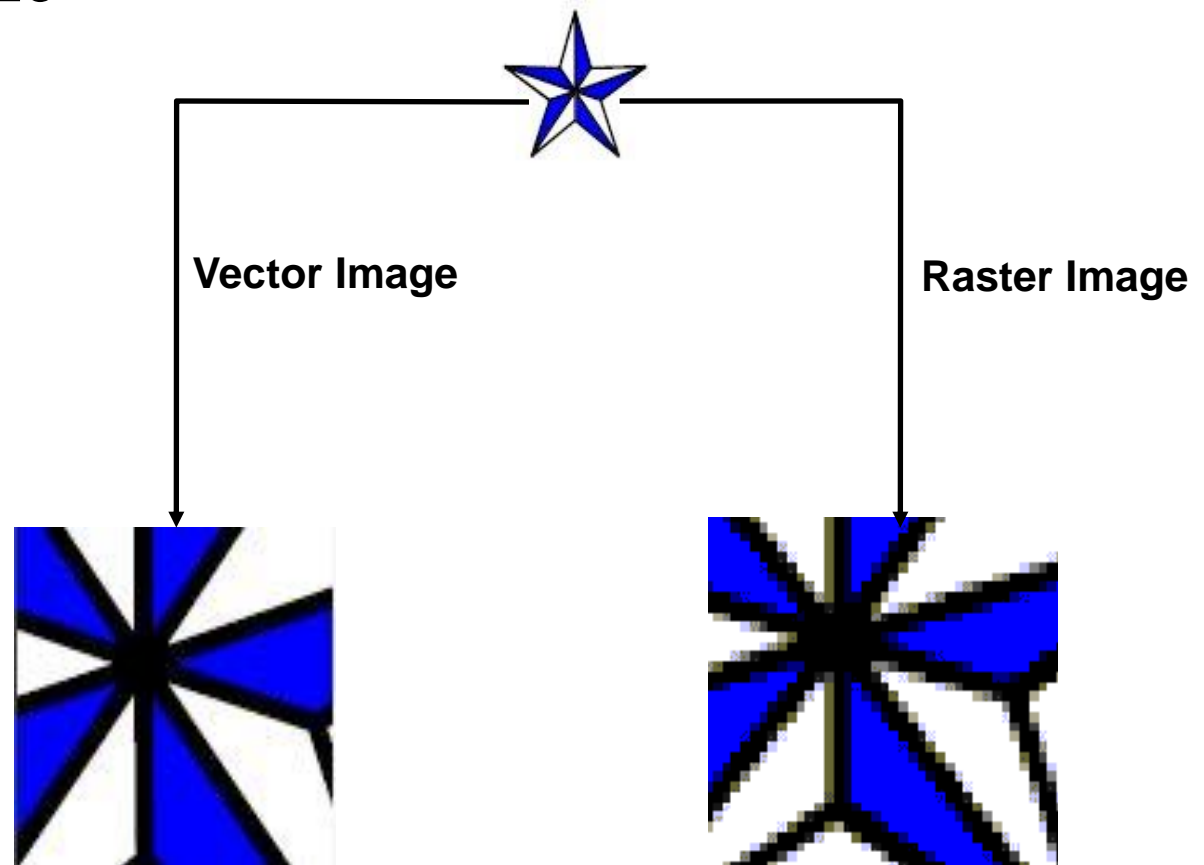
SVG:

- XML File – can be created and edited with any text editor
- Scalable
- Can be printed and zoomed/resized impresso/ampliado without any quality loss
- Open standard – different from Flash
- Can be searched, indexed, compressed
- supported by all major browsers



- SVG is efficient
 - SVG files are text files relatively small When compared to raster formats (BMP, JPEG, PNG)
 - Can also be created from image editing software such as Inkscape or GIMP.

SVG is scalable





- SVG is XML based

`<text x="50" y="60">Hi World</text>`

Attributes Content

tag tag

element



- SVG based on 3 types of basic elements:
 - shapes
 - images (raster images can be loaded)
 - text



- Na SVG document consist in a root element `<svg>` followed by several primitives that are the graphics elements.
- It is possible to make relatively complex Graphics since SVG supports: gradients, transformations, filters, animations, interactions with Javascript...



<!-- Abertura do ficheiro SVG -->

<svg>

<!-- Cria um shape rect especificando
coordenadas do canto superior esquerdo e
dimensões -->

<rect x="80" y="50" width="100"
height="150"/>

<!-- Fecho o documento SVG -->

</svg>