02. SVG in HTML 5.

In HTML5, you can embed SVG elements directly into your HTML pages.

1.1. Embed SVG directly into HTML pages

Here is an example of a simple SVG graphic:

and here is the HTML code:

Example:

```
<!DOCTYPE html>
<html>
<body>

<h1>My first SVG</h1>

<svg width="100" height="100">
  <circle cx="50" cy="50" r="40" stroke="green" stroke-
width="4" fill="yellow" />
</svg>

</body>
</html>
```

2.2. SVG code explanation

SVG Code explanation:

- An SVG image begins with an **<svg>** element
- The width and height attributes of the <svg> element define the width and height of the SVG image
- The **<circle>** element is used to draw a circle
- The cx and cy attributes define the x and y coordinates of the center of the circle. If **cx** and **cy** are not set, the circle's center is set to (0, 0)
- The r attribute defines the radius of the circle
- The stroke and **stroke-width** attributes control how the outline of a shape appears. We set the outline of the circle to a 4px green "border"
- The **fill** attribute refers to the color inside the circle. We set the fill color to yellow
- The closing **</svg>** tag closes the SVG image

Note: Since SVG is written in XML, all elements must be properly closed!

2.3. SVG Shapes

SVG has some predefined shape elements that can be used by developers:

- Rectangle <rect>
- Circle <circle>
- Ellipse <ellipse>
- Line <line>
- Polyline <polyline>
- Polygon <polygon>
- Path <path>

The following chapters will explain each element, starting with the rect element.