build it

- > npm install
- > npm run build

try it

> npm start

open http://localhost:4567 (or at the port set on src/vars.json in the SERVER.PORT)

use it

First of all in your html include *Leonardo.js* in the <head> tag:

```
<script src="path/to/Leonardo.js"></script>
```

Now create another <script> tag to use Leonardo.js:

```
<script>
  var L = Leonardo (300, 200, {id : "target"});
</script>
```

parameters:

width: the width in pixels (required) height: the height in pixels (required)

attrs: an hash of required attributes for the <svg> tag

for *svg namespaces* is enough just to pass a ns element containing an array containing one or more from the following set :

```
['cc', 'dc', 'ev', 'rdf', 'svg', 'xlink']
```

if all are needed is enough to pass '*'.

Now we can create new Elements through L.

tags

Every function listed below creates a Element instance, and thus benefits the following instance methods: attrs, styles, add, on ,off, clone, trans, rotate, scale, mirrorO, mirrorV and move. I will describe all them soon.

Once these elements are created at some point they must be added either directly to the root $\langle svg \rangle$ tag either to a $\langle g \rangle$ group element (same here for $\langle g \rangle$).

```
L.add(as, many, elements, as, needed)
```

<desc>

```
var desc = L.desc('This is the description of my svg')
```

Returns a <desc> tag containing the text passed to it

<image>

```
var image = L.image(x, y, w, h, src)
```

Returns a <image> tag positioned at P $\{x,y\}$; about w and h are meant to be the clearly the sizes but real image size will win on it, in the end the ratio cannot be modified.

line>

```
var line = L.line(x1,y1, x2,y2)
```

Returns a <line> tag representing a segment starting from P1(x1,y1) and ending in P2(x2,y2). Here could be useful to use the attrs function to, for example, style the line:

```
var line = L.line(...).attrs({"stroke-width" : 1.5,"stroke" : 'green'});
```

<polyline>

```
var polyline = L.polyline(x1,y1, x2,y2 [,x3,y3[...]])
```

creates a polyline which can even be opened (does not close it automatically).