

```
var context = dnaism.context()
    .start(1100000)
    .stop(1200000)
    .size(1280)
    .chrn('chr17')
    .step(2);
```

First we define the context of the region of the genome we are interested in exploring. We do that by setting the chromosome and the start and stop position of the region of interest. In addition we have to specify the space we have to visualize the data, in pixels. Finally the `step()` method allows us to control the resolution.

```
d3.select("#demo").selectAll(".axis")
    .data(["top", "bottom"])
    .enter().append("div")
    .attr("class", function(d) { return d + " axis"; })
    .each(function(d) { d3.select(this).call(context.axis().ticks(12).orient(d)); });
```

The next two set of statements define the axis and the rules. Those will remain the same for other visualizations so the user does not have to modify them.

```
d3.select("body").append("div")
    .attr("class", "rule")
    .call(context.rule());
```

We define a source. The interface of a source component defines a contract that context uses to requests data for a specific region. All the logic on how to retrieve the data is encapsulated in that component.

```
var source_bedfile = context.bedfile();

var metrics = [
    source_bedfile.metric("18277.bed"),
    source_bedfile.metric("19466.bed"),
    source_bedfile.metric("23138.bed"),
    .... ];
```

Once the source is defined we instantiate metrics for all the samples we want to incorporate in our visualization.

```
d3.select("body").selectAll(".horizon")
    .data(metrics)
    .enter().insert("div", ".bottom")
    .attr("class", "horizon")
    .call(context.horizon()
        .format(d3.format(".2")));
```

Finally, we use the horizon component to render the visualizations.

```
context.on("focus", function(i) {
    d3.selectAll(".value").style("right", i == null ? null : context.size() - i + "px");
});
```

The final statement adds visual clarity to the visualization by changing the coordinates of the values of the metrics to make sure they follow the rule as its moves along the x-axis.