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- APPENDIX 1: Datasets

MODULE 1: MAKING A SCATTERPLOT

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- LESSON 2: (2:03) Steps in drawing any chart
- LESSON 3: (1:57) Step 1: Access data
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- LESSON 5: (2:59) Step 3: Draw canvas
- LESSON 6: (4:20) Step 4: Create scales
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- LESSON 8: (11:29) Step 6: Draw peripherals
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MODULE 7: ...

Ask a question

- Contents
- Adding Labels
- Final code for this lesson

Fullstack D3 Masterclass > Making a Bar Chart

Adding Labels

We draw a label over each bar, showing the number of points within that bin.

LESSON DISCUSSION 0



Let's add labels to show the count for each of these bars.

We can keep our chart clean by only adding labels to bins with any relevant days — having 0's in empty spaces is unhelpful visual clutter. We can identify which bins have no data by their lack of a bar, no need to call it out with a label.

d3 selections have a `.filter()` method that acts the same way the native Array method does. `.filter()` accepts one parameter: a function that accepts one data point and returns a value. Any items in our dataset who return a **falsey** value will be removed.

By "falsey", we're referring to any value that evaluates to `false`. Maybe surprisingly, this includes values other than `false`, such as `0`, `null`, `undefined`, `""`, and `NaN`. Keep in mind that empty arrays `[]` and object `{}` evaluate to **truthy**. If you're curious, [read more here](#).

We can use `yAccessor()` as shorthand for `d => yAccessor(d) !== 0` because `0` is **falsey**.

code/03-making-a-bar-chart/completed/draw-bars.js

```
33 const barText = binGroups.filter(yAccessor)
```

Since these labels are just text, we'll want to use the SVG `<text>` element we've been using for our axis labels.

Remember, `<text>` elements are positioned with `x` and `y` attributes. The label will be centered horizontally above the bar — we can find the center of the bar by adding half of the bar's width (*the right side minus the left side*) to the left side of the bar.

code/03-making-a-bar-chart/completed/draw-bars.js

```
68 const barText = binGroups.filter(yAccessor)
69   .append("text")
70   .attr("x", d => xScale(d.x0) + (xScale(d.x1) - xScale(d.x0)) / 2)
```

Our `<text>`'s `y` position will be similar to the `<rect>`'s `y` position, but let's shift it up by 5 pixels to add a little gap.

code/03-making-a-bar-chart/completed/draw-bars.js

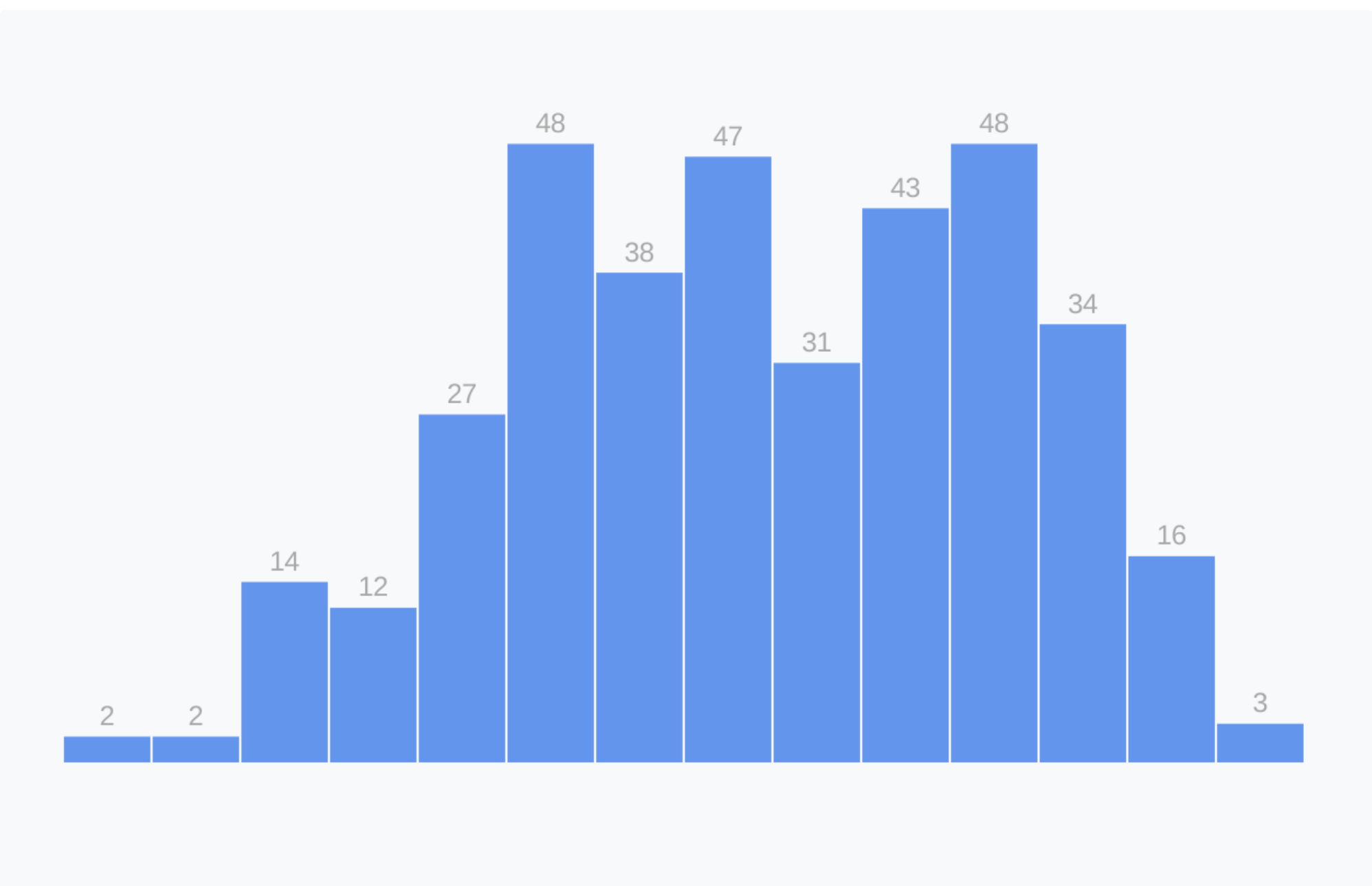
```
68 const barText = binGroups.filter(yAccessor)
69   .append("text")
70   .attr("x", d => xScale(d.x0) + (xScale(d.x1) - xScale(d.x0)) / 2)
71   .attr("y", d => yScale(yAccessor(d)) - 5)
```

Next, we'll display the count of days in the bin using our `yAccessor()` function. *Note: again, we can use `yAccessor()` as shorthand for `d => yAccessor(d)`.*

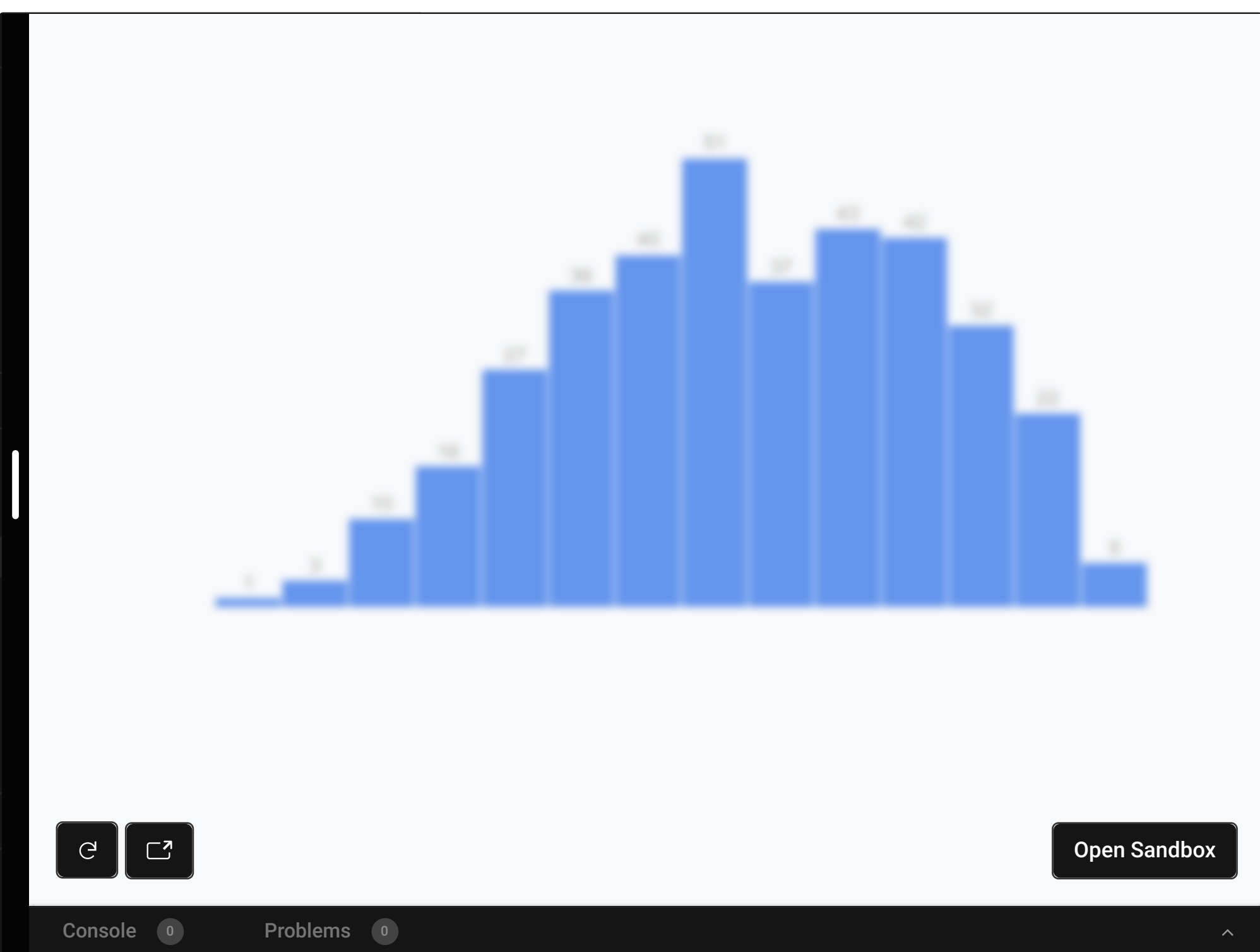
We can use the CSS `text-anchor` property to horizontally align our text — this is a much simpler solution than compensating for text width when we set the `x` attribute.

After adding a few styles to decrease the visual importance of our labels...

...we should see the count of days for each of our bars!



Final code for this lesson



Previous Lesson: Draw data Next Lesson: Draw peripherals