



What is leaflet?



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{leaflet} and interactive maps

The {leaflet} package allows you to create interactive maps.

These interactive maps can be created in all of these places:

- RMarkdown reports
- RMarkdown slides
- {shiny} apps





How is this possible?

{htmlwidgets} is a tool for R developers to build R packages that allow us to make *interactive things*.

[htmlwidgets for R](#) [Home](#) [Showcase](#) [Develop ▾](#) [Flexdashboard](#) [Crosstalk](#) [Gallery](#) [GitHub](#)

HTML widgets work just like R plots except they produce interactive web visualizations. A line or two of R code is all it takes to produce a D3 graphic or Leaflet map. HTML widgets can be used at the R console as well as embedded in R Markdown reports and Shiny web applications. In addition to the widgets featured below you may also want to check out the [htmlwidgets gallery](#).

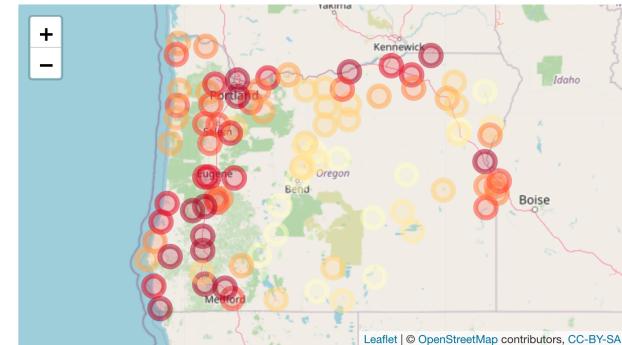
Leaflet Geo-spatial mapping	
dygraphs	Time series charting
Plotly	Interactive graphics with D3
rbokeh	R interface to Bokeh
Highcharter	R interface to Highcharts
visNetwork	Graph data visualization with vis.js
networkD3	Graph data visualization with D3
DataTables	Tabular data display
threejs	3D scatterplots and globes
rglwidget	Render scenes created with rgl
DiagrammeR	Diagrams and flowcharts

Leaflet

<http://rstudio.github.io/leaflet/>

Leaflet is a JavaScript library for creating dynamic maps that support panning and zooming along with various annotations like markers, polygons, and popups.

```
library(leaflet)
pal <- colorQuantile("YlOrRd", NULL, n = 8)
leaflet(orstationc) %>%
  addTiles() %>%
  addCircleMarkers(color = ~pal(tann))
```





How is this possible?

{htmlwidgets} is a tool for R developers to build R packages that allow us to make *interactive things*.

It works by wrapping JavaScript packages.

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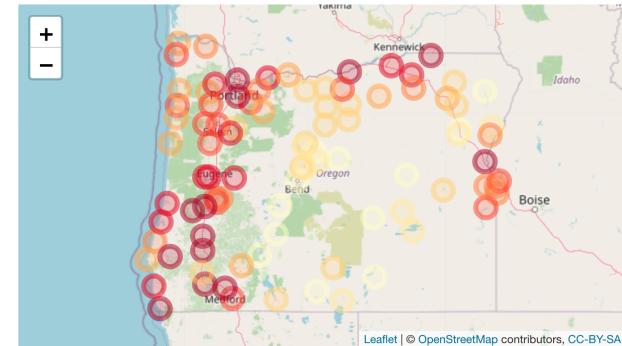
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Leaflet | © OpenStreetMap contributors, CC-BY-SA



... JavaScript?

1. JavaScript is the scripting language of the interactive web (often called JS).
2. Almost every interactive table, chart and map you'll find in a website is built with JavaScript.
3. Just like with R there are different JavaScript packages for doing different things
 - leaflet for interactive maps
 - plotly and highcharts for interactive charts
 - datatables and reactable for interactive tables



htmlwidgets.org

{htmlwidgets} is a tool for R developers to build R packages wrap JavaScript packages.

Each {htmlwidget} package wraps a different JavaScript package.

We can then write R code to make interactive things.

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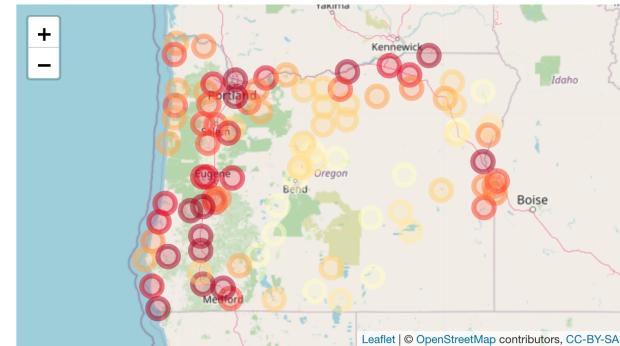
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Do I need to learn JavaScript?

Most interactive maps you'll want to make with `{leaflet}` **won't require learning any JavaScript**.

But.

... you will need to learn a little bit of HTML and potentially CSS.