SUPER H!

Data Visualization + D3.js

A 6-week course aimed at beginners and those that want to learn how to use storytelling to turn it into engaging, interactive experiences using HTML, CSS, SVG and the D3.js Javascript library

Have a question? Get in touch!

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About the course

Our Data Visualization course focuses on the practical aspects of working with data. In this 6-week long course, we'll cover the basics of storytelling and working with data in a creative, fun way. You'll learn how to create interactive, engaging experiences using HTML, CSS, SVG and Javascript.

This course, aimed at beginners, will teach you how to work with data and choose the right visuals to represent it effectively. We'll introduce the basics of the powerful D3.js library used to animate and add interactions to your charts and graphs. You'll also learn how to pull data from the web using Ajax.

Who is this course for?

Anyone who is looking for ways to work with data-driven design or work closer with designers to implement beautiful visualizations of data.

We would recommend a little knowledge of HTML, CSS and Javascript before starting this course. Reading our Learn To Code Now book or taking either Foundation HTML, CSS + JS will be sufficient.

What you'll learn

- The different types of data visualizations and how to use them effectively

- How to work with and understand data sets and turn them into engaging experiences

- How to use HTML, CSS, SVG to design charts and graphs

- How to use Javascript to add animations, transitions and interactions to your experiences

- An introduction to the fundamentals of the powerful Javascript library D3.js

- Using Ajax to pull data from the web into your visualizations

What you'll get

15+ hours of video lessons
Covering the best in modern data visualization techniques

Resources
Resources to get you started and keep you going post-course

Continued help post-course
Help from our expert instructors with years of experience in the industry

Real world projects
Projects and code that you can alter and remix to add your own sites

Extra homework challenges
Test your knowledge!

Access to the SuperHi community
Join our Slack and our super secret group on Facebook

Week 1 – part A

Working with HTML, CSS + SVG

We start by talking about the basics of web coding by discussing HTML and CSS, then dive into how to make custom vector graphics within the web by using SVG tags, such as rectangles, circles, text, and paths
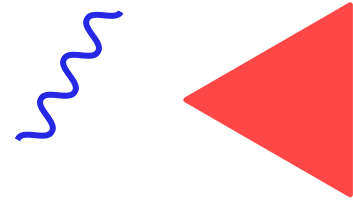
Week 1 – part B

Automating with Javascript

Adding our own SVG tags is pretty time consuming so we can instead automate this process using the web browser's in-built language, Javascript. We add in how to store our data and use it to make our own visualizations.
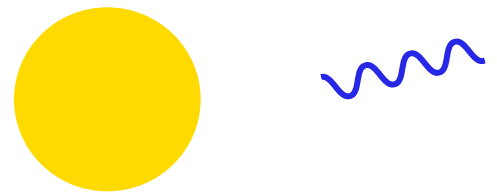
Week 2 – part A

Simplifying with D3.js

When we start creating more complex data visualizations, our Javascript code will also get more complex, so to make our lives easier, we are going to use the correct tool for the job. D3 is a Javascript library made by the New York Times's data visualization team to make writing visualizations easier with Javascript. We'll turn our existing Javascript code into simpler D3-enabled code!
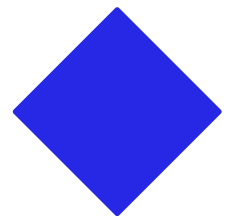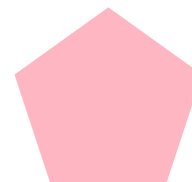
Do I have to finish the course in a certain amount of time?

Once you buy the course, it's yours forever! You'll always have access to the lessons and our support.

This course has around 15 hours of video lessons, so you can break down your learning however works best for you and your schedule.

Week 2 – part B

Events + animation

The great thing about digital data visualization is the ability to add in interactivity. In this lesson we'll add in both events, such as click and hover, and animations such as size and color changes.

Week 3 – part A

Line charts + axes

D3 is particularly powerful as it makes the seemingly hard a lot easier. In this lesson we add in a new D3 "shape" – the line chart – along with the ability to add in an axis or multiple axes for our interactive chart

Week 3 – part B

Pies, arcs + donuts

Before we begin, we talk about how for a lot of instances that pie charts suck – they're bad for visualizing data generally – so we talk about where they should and shouldn't be used. We also talk about other types of shapes similar to the pie chart such as donut charts and arcs.

What is Part A + Part B?

To make things less stressful, we split up each week into two parts – Part A is released on Monday and Part B on Wednesday.

Each part is around 60-90 mins long so think of it like doing an evening class twice a week for 6 weeks.

Week 4 – part A

Domains, ranges + scales

Sometimes we don't always know what data our visualization will receive, so we have to be clever by adding in domains and ranges to ensure our visualization still makes sense. We also discuss how to add in non-linear scales to our project for uneven data points.

Week 4 – part B

Color + best design practices

Similarly to domains and ranges, we may have a wide range of color that our data can represent so we discuss color scales and spaces. We also have to make sure that our design adheres to good design practices such as making sure our visualizations are accessible and clear.

Week 5 – part A

Stacked bar charts

With more complex data, we may want to explain more than one particular area of data within our visualization such as stacking information in bar charts. We also discuss how more complex data would be stored within Javascript.
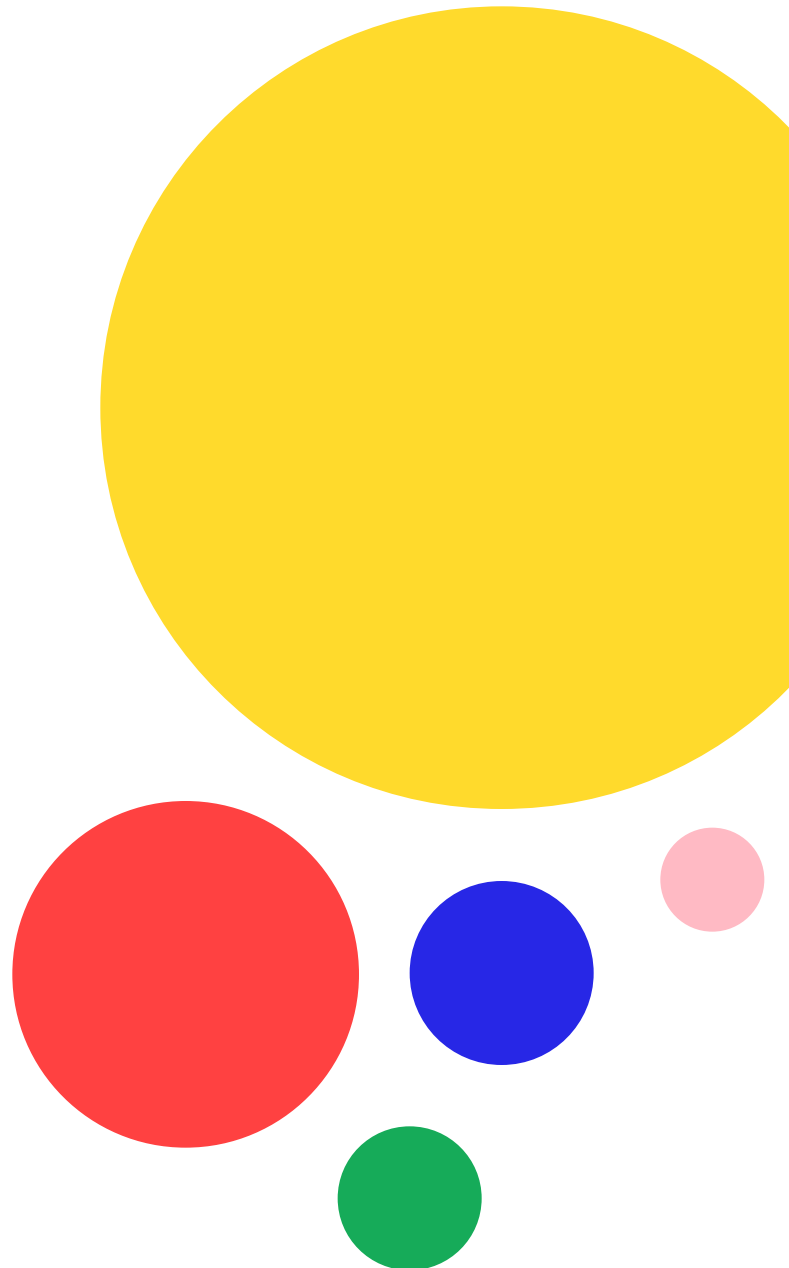
What if I need help?

We have several ways to get help! You can ask a question in the Q+A section on every video, get help via our live support, email hi@superhi.com or ask in our #help-dataviz Slack channel

Week 5 – part B
Scatter graphs

Most of the data we talk about is one-dimensional but what if there are two parts of information we would like to display in our visualization. Here we talk about how to create beautiful multi-dimensional scatter graphs

Week 6 – part A
Grabbing data with Ajax

What if our data is stored and updated somewhere else on the internet, such as a weather service? How do we pull that into our project? We use Ajax, a Javascript technique for grabbing information from elsewhere and using it in our project!

Week 6 – part B
Maps

In the last project, we discuss how to use D3's geographies and shapes tools to add data visualizations that are linked to real world places such as displaying data on a country, state or county level.

What will I be able to do at the end of the course?

At the end of the course, you will be comfortable making your own data visualizations, from scratch and without assistance, using various different kinds of data and visualization types