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<https://github.com/brendanle65/dataviscourse-awwwards-viz>

CS5630-001 FALL 2022 Awwwards.viz Project Proposal

Website design and development is a popular topic amongst people within computer science. But what makes a website good? Is it the way it looks, the information it conveys, or maybe its ease of use. This information has not been consolidated in a meaningful way—which makes answering this question difficult. How should someone make a good website? This project hopes to tackle this challenge and enhance the decision making processes of website developers through a deeper understanding of popular design trends..

Finding quality websites to process is not easy. How do we know which websites are well designed? Thankfully, the Awwwards organization consistently showcases well designed websites that have been vetted by a panel of qualified jurors. The panel analyzes every aspect of the websites they review and scores them accordingly. As we found this to be the most efficient way to collect data of well designed websites, our project will be using data scraped from their archives.

We believe that it would be interesting to be able to visualize the relationships between a website's characteristics and the scores they receive. Our objective as a project is to showcase the trends regarding different website designs, while also displaying the technical components that successful websites often utilize. We are aiming to allow the project's users to dive deeper into the work that goes into website design and understand what makes a website stand out to critics. The visualizations will allow various filters that

display a trend in website design via different categories. As a team, our objectives are to create meaningful and significant visualizations that effectively display the trends of successful websites. By completing this project, we'll prove that we have learned how to create purposeful visualizations for an important topic.

As previously mentioned, the Awwwards archives contains relevant information to the project. This data will be harvested via a custom made data scraper, fetching relevant data about websites, such as country of origin, back-end libraries, type of website, date of submission, color metadata, and submission information. The scraper and data source can be found in Appendix I.

Further, because the data is being collected from a single source via a custom scraping tool, the data fetched is already tailor made and fairly clean. This results in minimal data processing, aside from edge cases such as duplicate authors who submit multiple websites. We find this approach ideal as it reduces the overall project complexity. As the archives contain the information for several thousand websites, we are inferring that scraping approximately 10,000 websites should suffice to show relevant data trends. We do not anticipate large variance in data range, however, should this be an issue we will likely trim any edge cases' data that are not beneficial to the visualization. This trimming logic will be implemented via the project code, and will not be done via the data scraper.

Creatively developing meaningful and effective visualizations that encompass multivariable datasets is an interesting challenge. In which ways should data be displayed to convey its meaning? The group has developed several prototypes shown in the following sections of this proposal. In general, they consist of several dynamic visualizations that are supported by useful filters, such as the ability to sort via country of origin, and relevant

characteristics such as frontend libraries used. This is implemented with a map, and a line chart. The map is filterable and searchable. The accompanying line chart shows filtered trends of websites over a span of time. This chart is hoverable and displays the metainformation regarding websites that fall into the selected area. The data can be accessed by the visualization to see examples of websites that implemented the selected filters. The final sketch has an additional line chart which accompanies the first line chart—the first chart displays the aggregate data of various tags, while the second line chart displays specific country-level data of a given tag. The given tag is selected by hovering over the area in the first line chart. The map was chosen because it is the most efficient way to filter by countries as it relies on spatial cognition. Further, the map also implements a search engine as it is occasionally easier to select a country by its name rather than locating it on the map. The map will also group filters into categories for easier search. Line charts are used to represent the data because they express trends over time adequately. To reduce the amount of data on screen, hovering is used as it is intuitive and visually decluttering.

While some of the project's visualizations rely on aspirational features, this project would be a failure should the group fail to implement the basic map and line visualization, as well as the ability to filter data based on their tag. We consider the search engine feature of the map visualization to be a stretch goal, and therefore optional. Should the group fail to implement this feature, the visualizations will still be meaningful, albeit less user friendly.

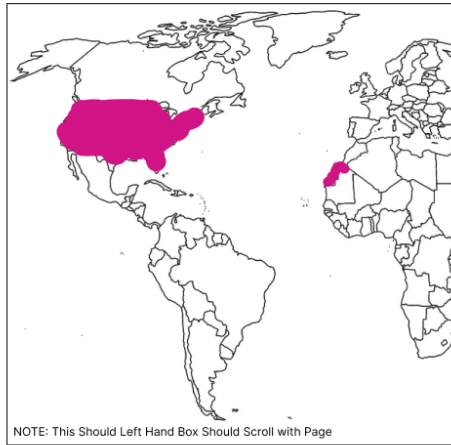
The expected weekly project schedule is shown in Fig 1., individual responsibilities will be recorded in this process book as the project progresses. The group communicates over a shared private online server, and meets weekly to discuss progress regarding the project. The group expects to use a scrum board to track progression of the project.

| Member Names | Brendan Le | Gabriel Jarrard | James Scholz |
|---------------------|-----------------------------|-----------------------------|-----------------------------|
| Week 10 | Backbone/Structure | Backbone/Structure | Backbone/Structure |
| Week 11 | Tag Filter | Tag Filter | Tag Filter |
| Week 12 | Geographical Line Chart/Map | Geographical Line Chart/Map | Geographical Line Chart/Map |
| Week 13 | Tag Line Chart | Tag Line Chart | Tag Line Chart |
| Week 14 | Search Engine | Search Engine | Search Engine |
| Week 15 | Testing | Testing | Testing |

Fig 1. Weekly Project Schedule

Sketches

Sketch 1—



The Fold

Selected Countries: United States Western Sahara Fr ×

France South Africa

Selected Tags: Honorable Mention Adobe Illustrator React.js Green Film & TV ×

Awards

Developer Mobile Excellence Site of the Day Site of the Month Site of the Year

Design Software

Figma Blender Adobe Photoshop Adobe Indesign Adobe After Effects

Technologies

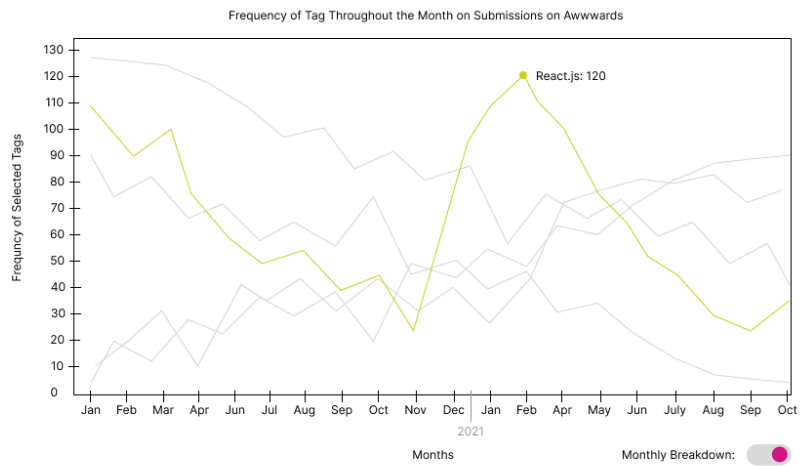
React.js Angular.js Webflow Three.js Vue.js

Colors

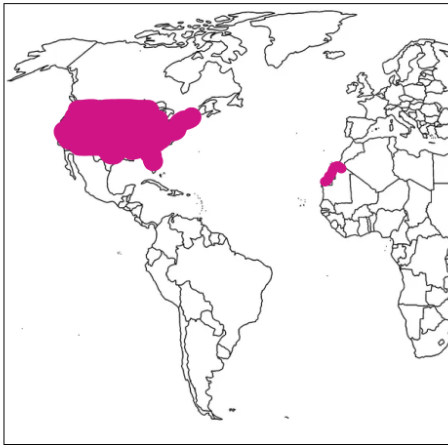
Green Blue Black Red Yellow

Categories

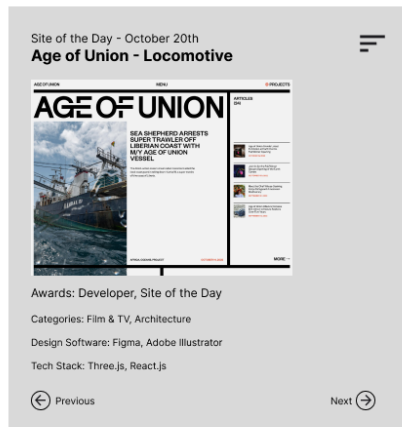
Architecture Films & TV Technology



Sketch 2—



The Fold



Selected Countries:
United States
Western Sahara
Fr

France
South Africa

Selected Tags:
Honorable Mention
Adobe Illustrator
React.js
Green
Film & TV

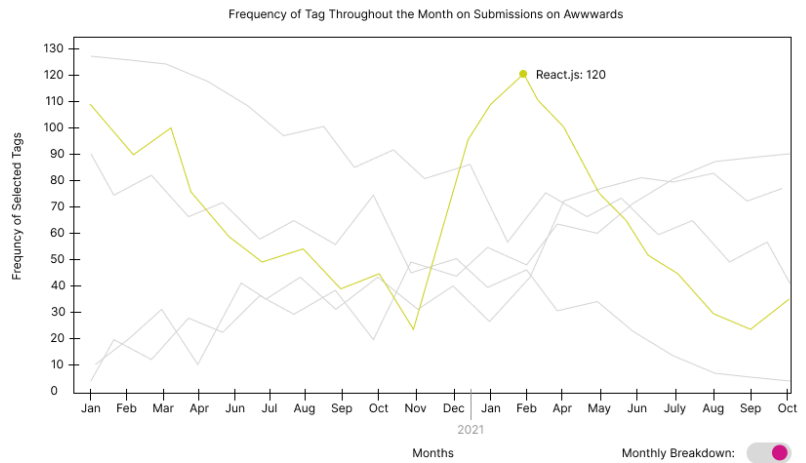
Awards
Honorable Mention
Developer
Mobile Excellence
Site of the Day
Site of the Month
Site of the Year

Design Software
Figma
Blender
Adobe Photoshop
Adobe Indesign
Adobe After Effects

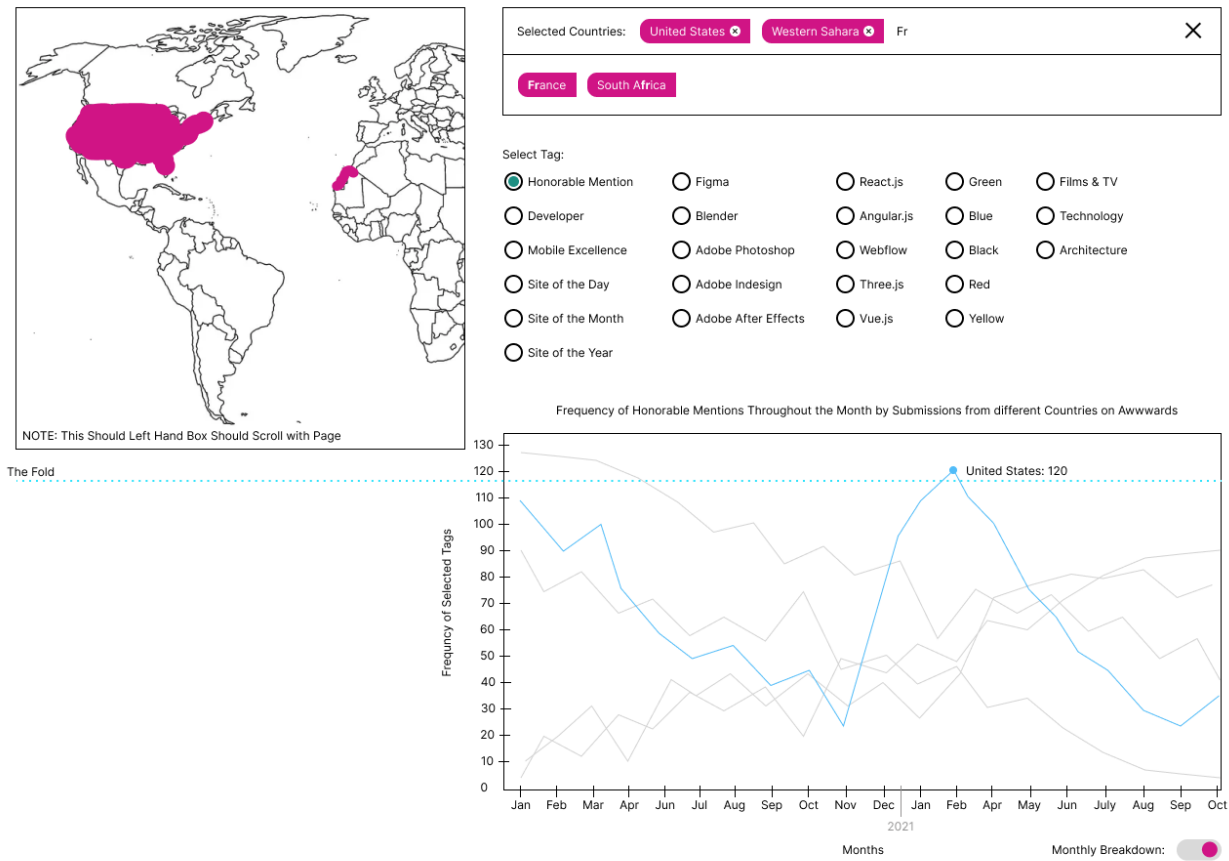
Technologies
React.js
Angular.js
Webflow
Three.js
Vue.js

Colors
Green
Blue
Black
Red
Yellow

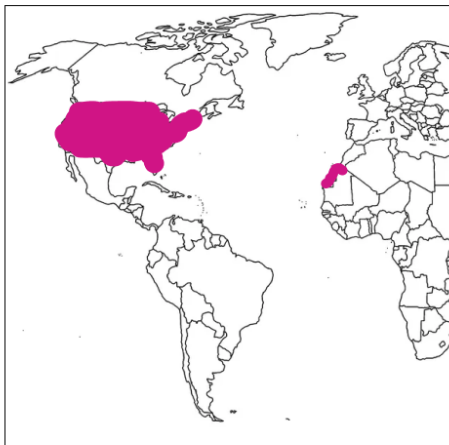
Categories
Architecture
Films & TV
Technology



Sketch 3—



Sketch 4—



The Fold

Site of the Day - October 20th
Age of Union - Locomotive

Awards: Developer, Site of the Day
 Categories: Film & TV, Architecture
 Design Software: Figma, Adobe Illustrator
 Tech Stack: Three.js, React.js

Honorable Mention - Sep 29, 2022
BRYANTCODES.ART

Selected Countries:
 United States
Western Sahara
Fr
×

France
South Africa

Selected Tags:
 Honorable Mention
Adobe Illustrator
React.js
Green
Film & TV
×

Awards
 Honorable Mention
Developer
Mobile Excellence
Site of the Day
Site of the Month

Site of the Year

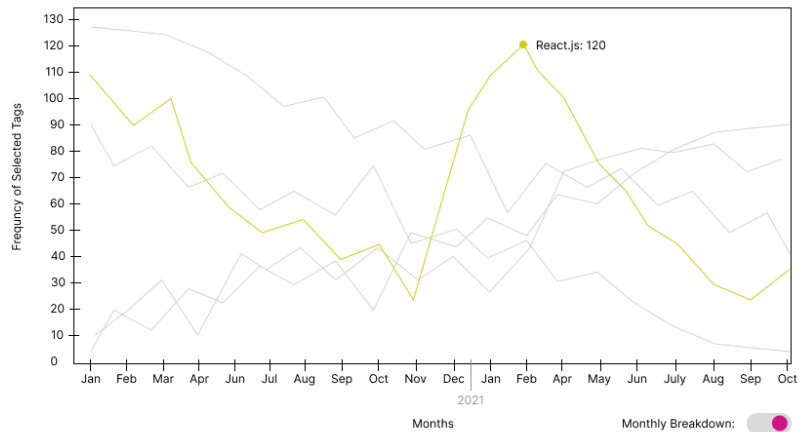
Design Software
 Figma
Blender
Adobe Photoshop
Adobe Indesign
Adobe After Effects

Technologies
 React.js
Angular.js
Webflow
Three.js
Vue.js

Colors
 Green
Blue
Black
Red
Yellow

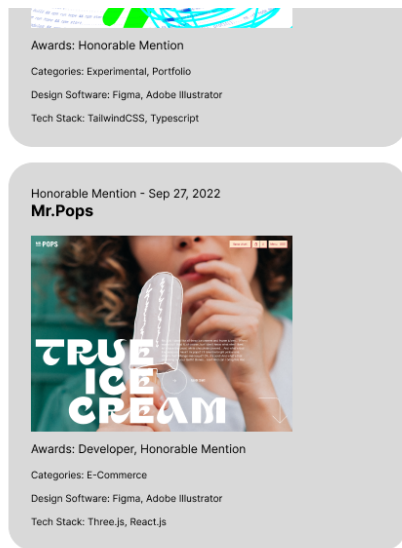
Categories
 Architecture
Films & TV
Technology

Frequency of Tag Throughout the Month on Submissions on Awwwards

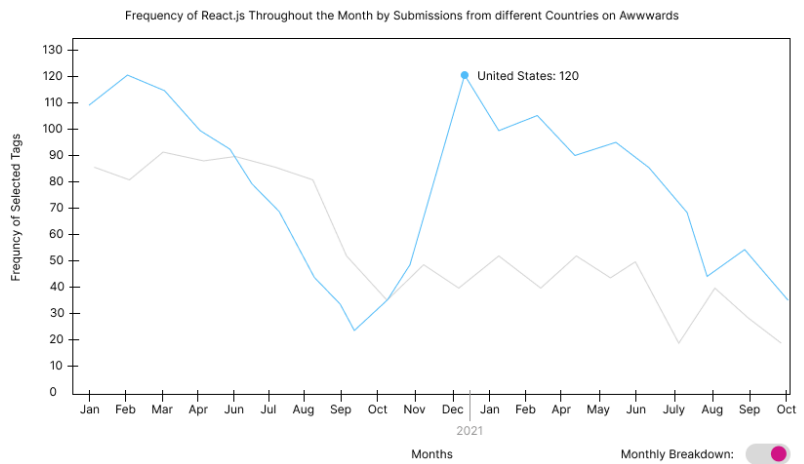


Note: Whichever line is selected will be the tag selected below to allow comparing trends among selected countries

Sketch 4– Continued



1 2 3 4 NEXT



Appendix I.

Awwwards website—<https://www.awwwards.com/>

Data scraper script(dev branch)—<https://github.com/brendanle65/awwwards-scraper>