

MDN DNA 2020

TPAC breakout session, Oct 27, 2020



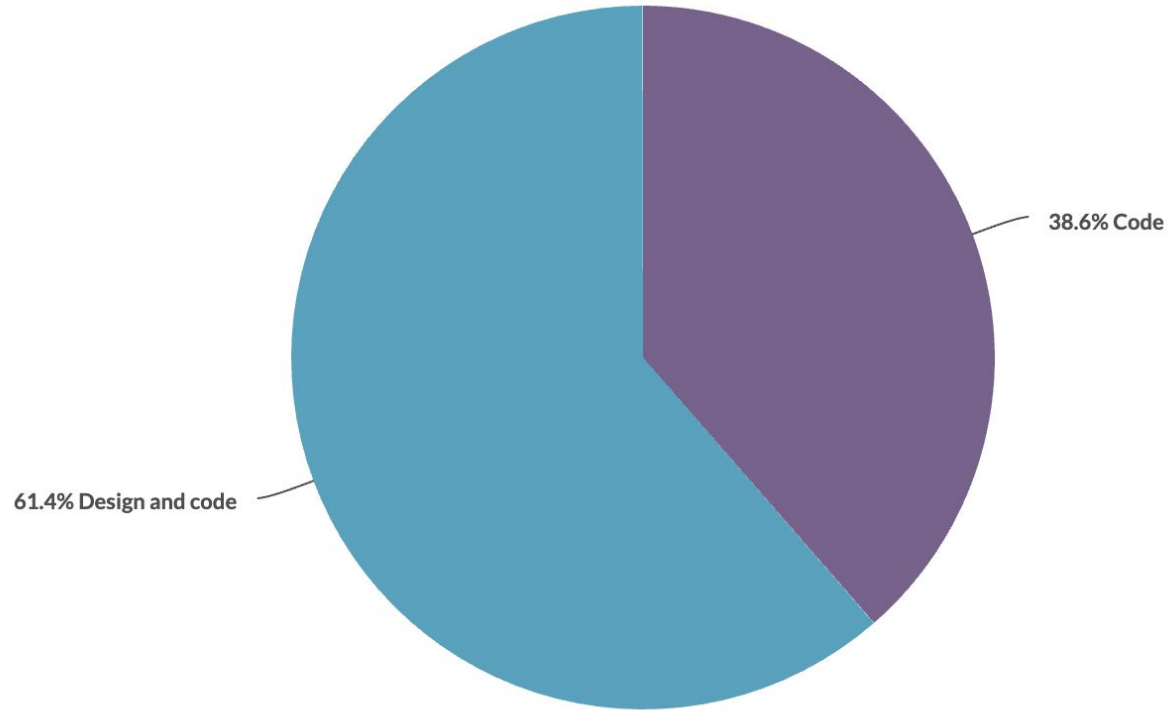
Background

- MDN Developer Needs Assessment ran for the first time 2019. Findings:
 - Top Pain Points:
 - i. Having to support specific browsers (e.g., IE11).
 - ii. Outdated or inaccurate documentation for frameworks and libraries.
 - iii. Avoiding or removing a feature that doesn't work across browsers.
 - iv. Testing across browsers.
 - v. Making a design look/work the same across browsers.
- Was followed by MDN Browser Compatibility survey and report. Findings:
 - We found that a lot of developers are struggling in particular with layout and styling issues: CSS Flexbox, CSS Grid and problems achieving consistent layout in recent browsers with dynamic viewport sizes and scrolling.
 - JavaScript was often mentioned, but turned out not to be problems with the core language and instead numerous challenges with achieving browser compatibility with various Web APIs.

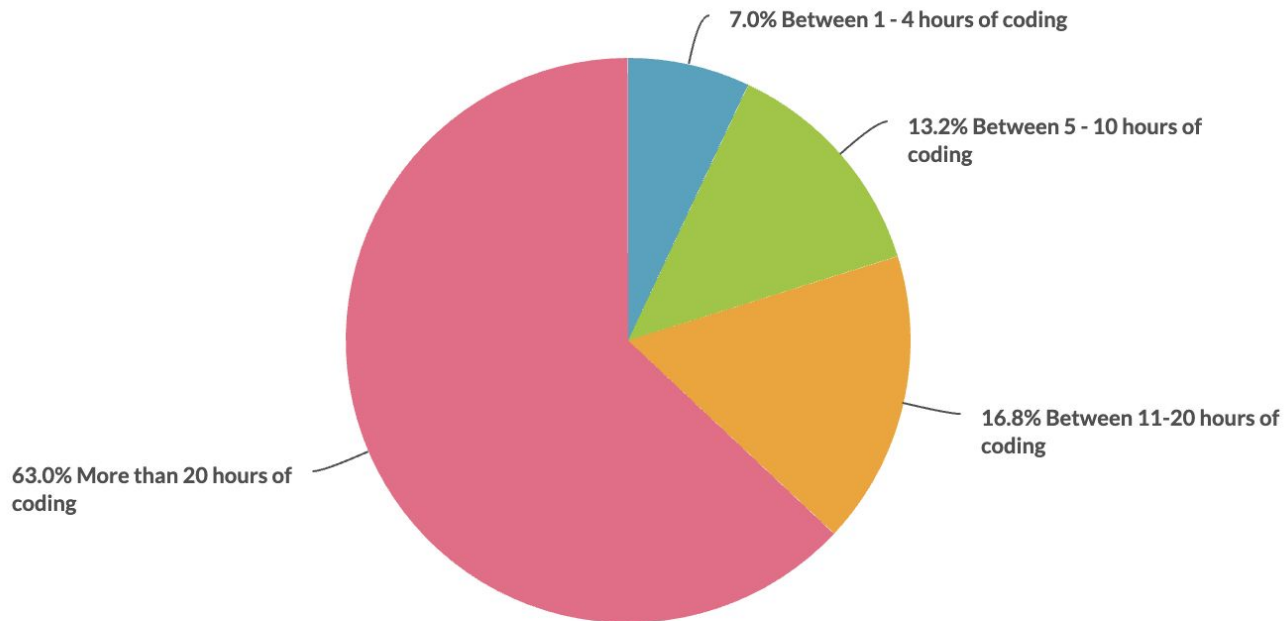
MDN DNA 2020 Results preview

- Fielding since
- 5,225 complete responses so far, ~22% response rate.
- Fewer people beginning to take the survey and a lower response rate compared to 2019.

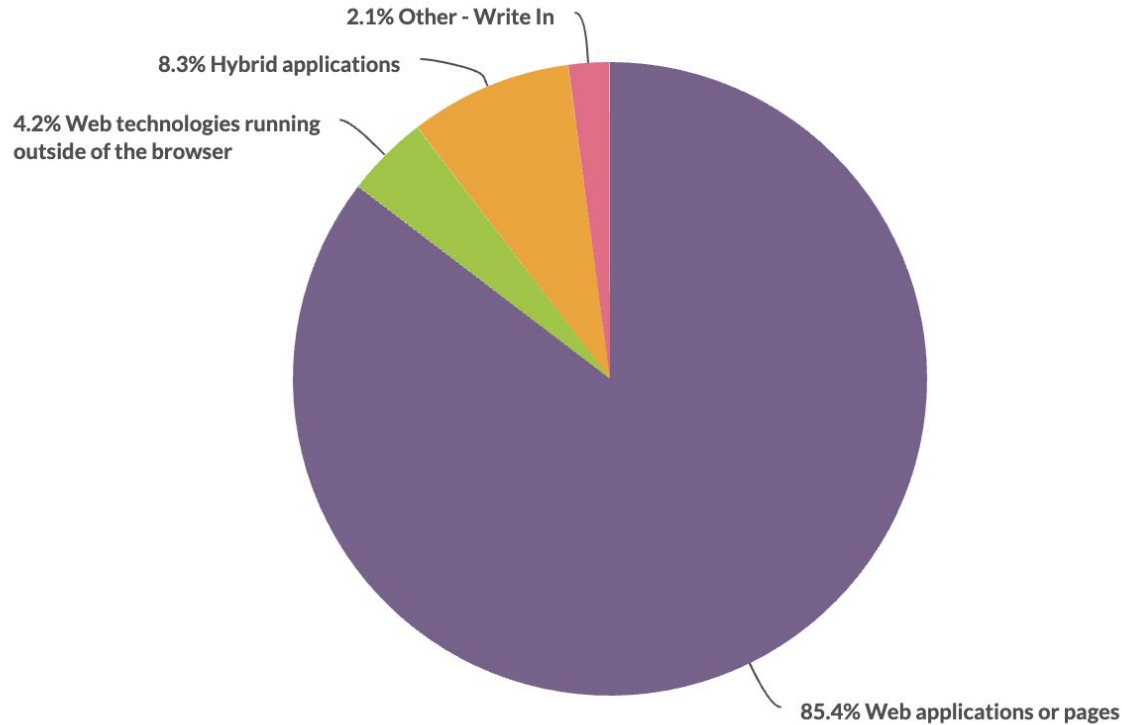
In regards to web applications or web pages do you:



How many hours during a typical week do you spend writing, reviewing, testing, or debugging code?

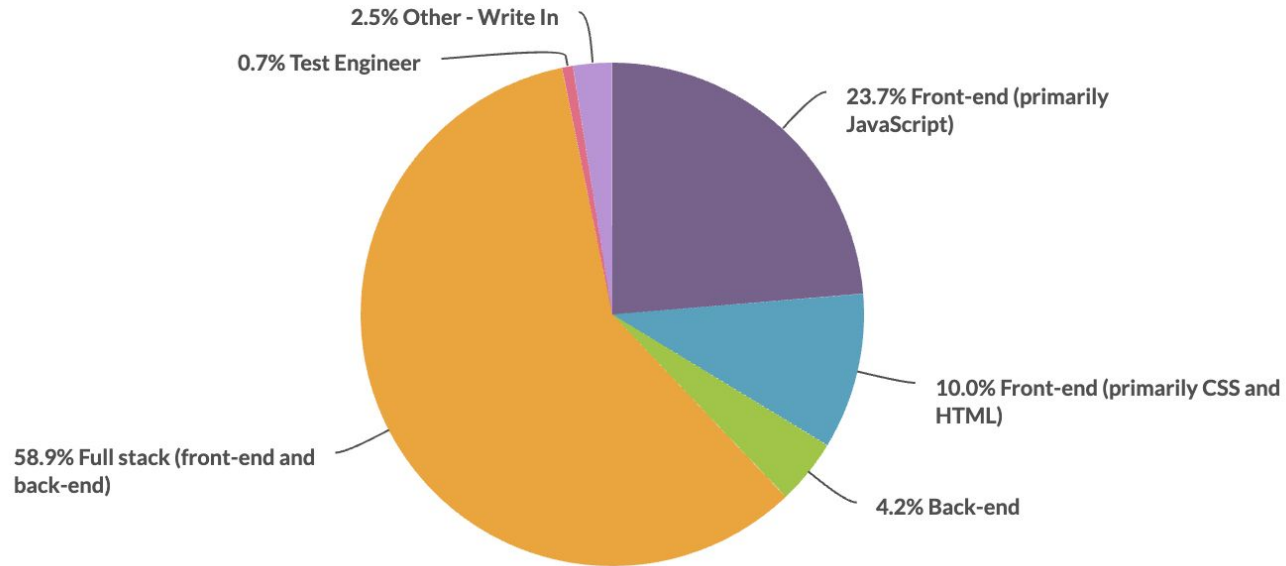


Which best describes the types of projects or what environment you target?

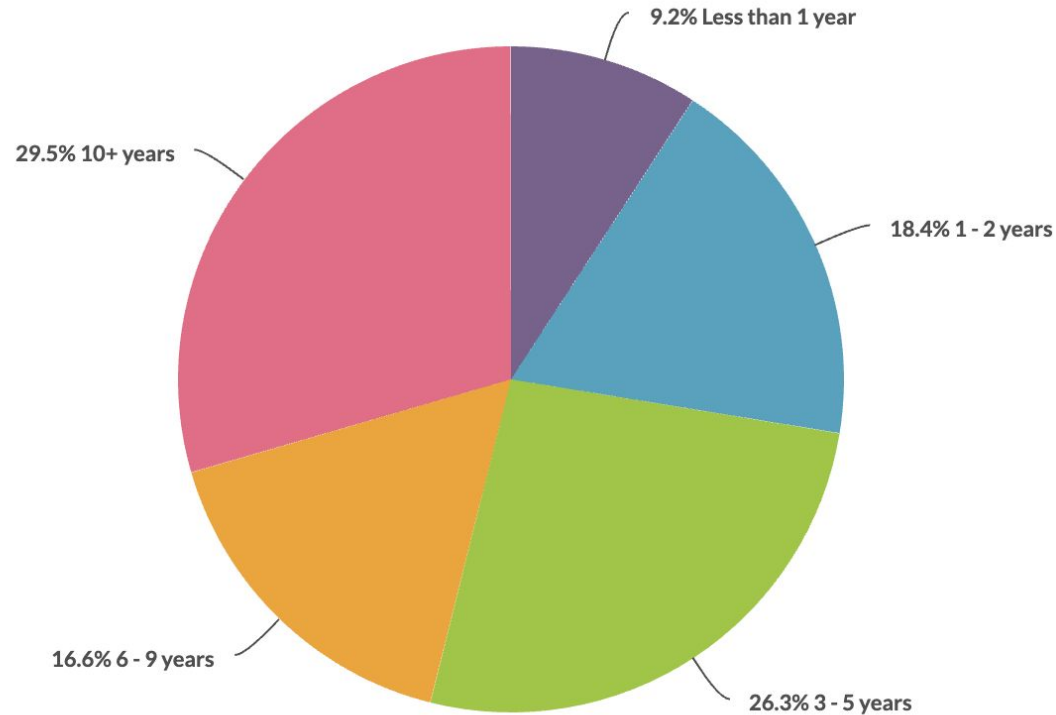


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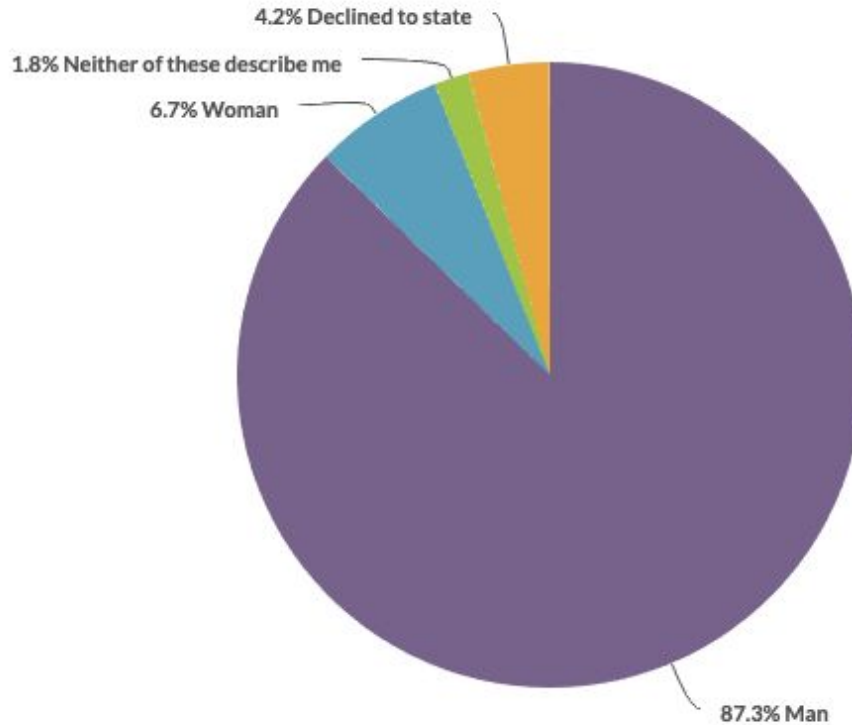
Which best describes the type of web developer you are?



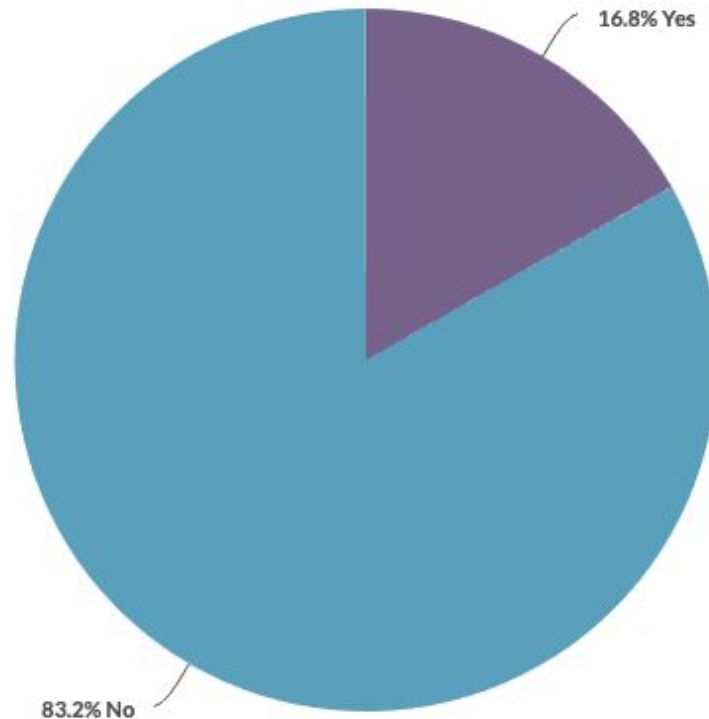
How long have you been developing for the web?



What gender do you identify with?

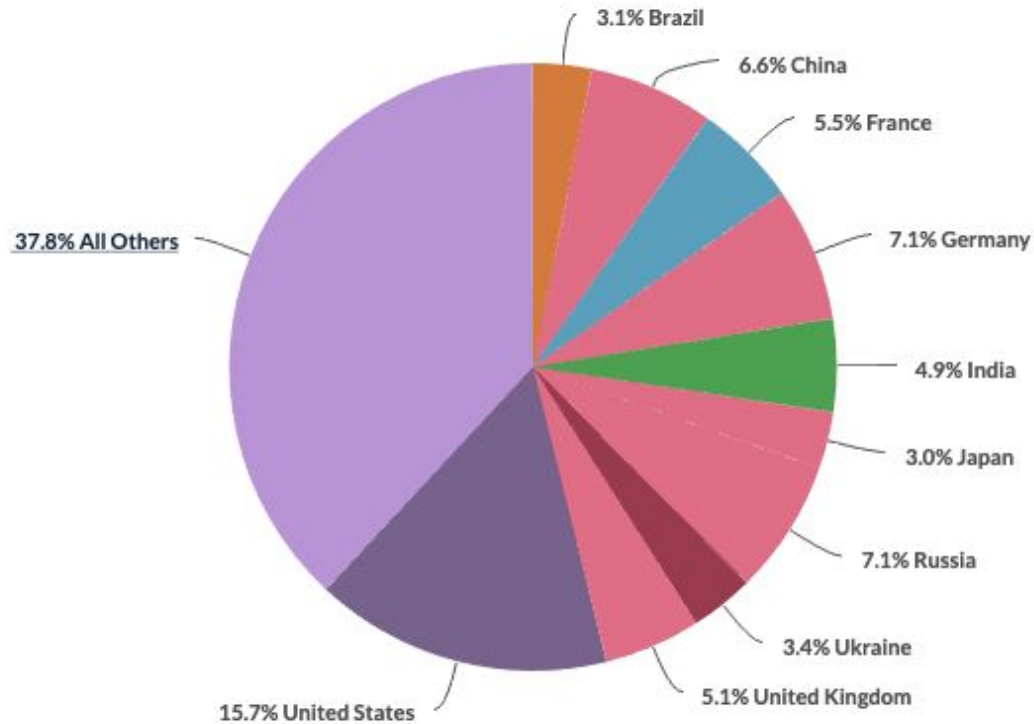


Do you identify as being part of a minority group in your region of the world?



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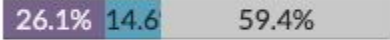
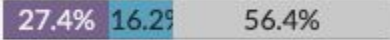

What country do you live in?



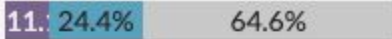
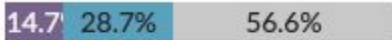



Satisfaction questions, overall and by area

TODO

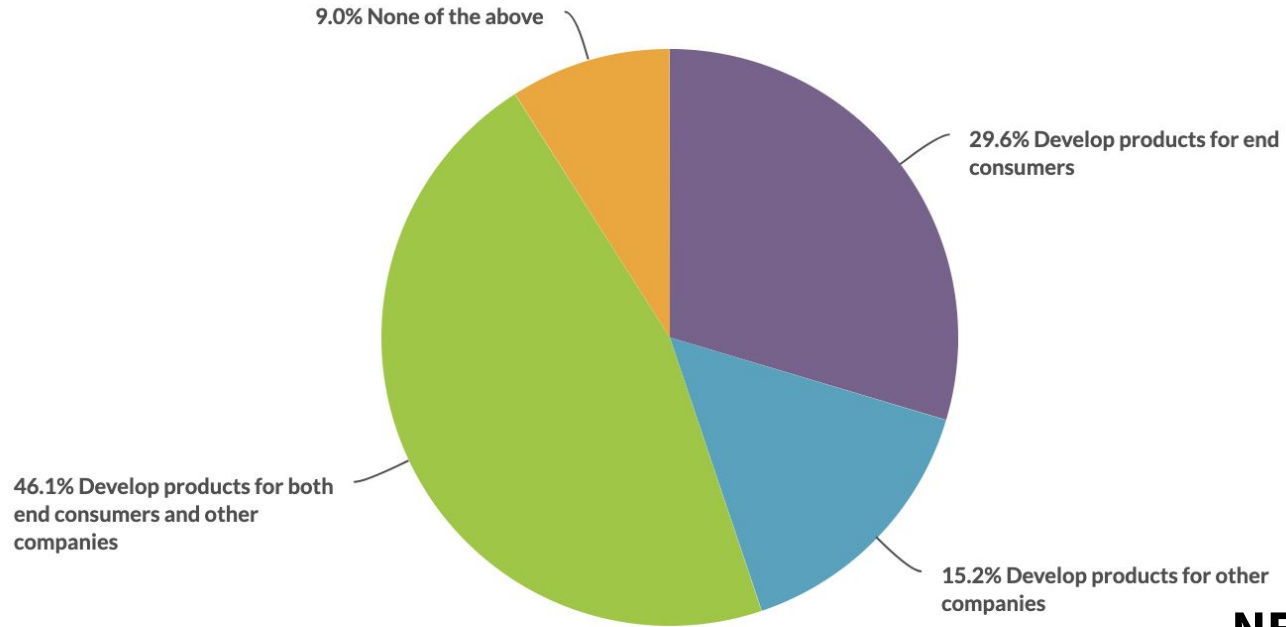
We want to learn about things that cause you the greatest frustration when you're developing for the web: top 5

Issue		Rank	Score
Having to support specific browsers (e.g., IE11)	 <div>47%10.42.7%</div>	1	0.37
Avoiding or removing a feature that doesn't work across browsers	 <div>31.6%14.154.3%</div>	2	0.17
Discovering bugs not caught during testing	 <div>26.1%14.659.4%</div>	3	0.11
Testing across browsers	 <div>27.4%16.256.4%</div>	4	0.11
Outdated or inaccurate documentation for frameworks and libraries	 <div>27.2%16.256.5%</div>	5	0.11

We want to learn about things that cause you the greatest frustration when you're developing for the web: bottom 5

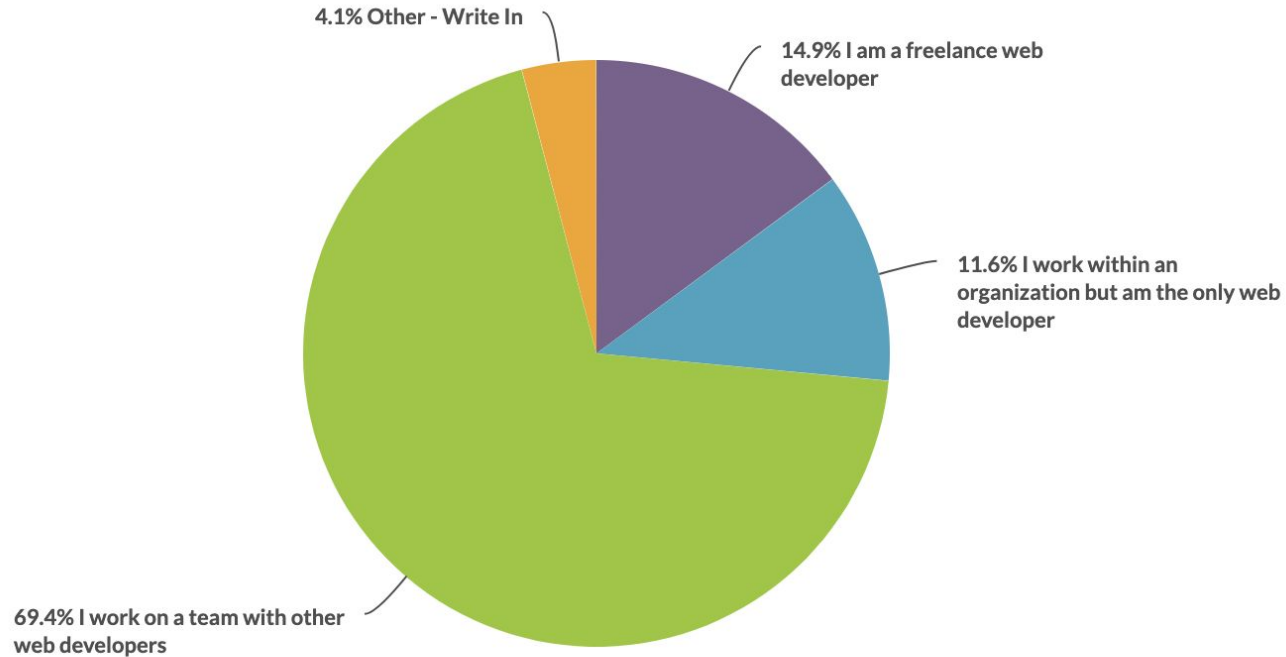
Implementing localization		24	-0.13
Keeping up with changes to the web platform		25	-0.14
Knowing what browsers support a specific technology		26	-0.16
Getting users to grant permissions to WebAPIs (e.g., Geolocation)		27	-0.17
Outdated documentation for HTML, CSS, and JavaScript		28	-0.18

Do you...

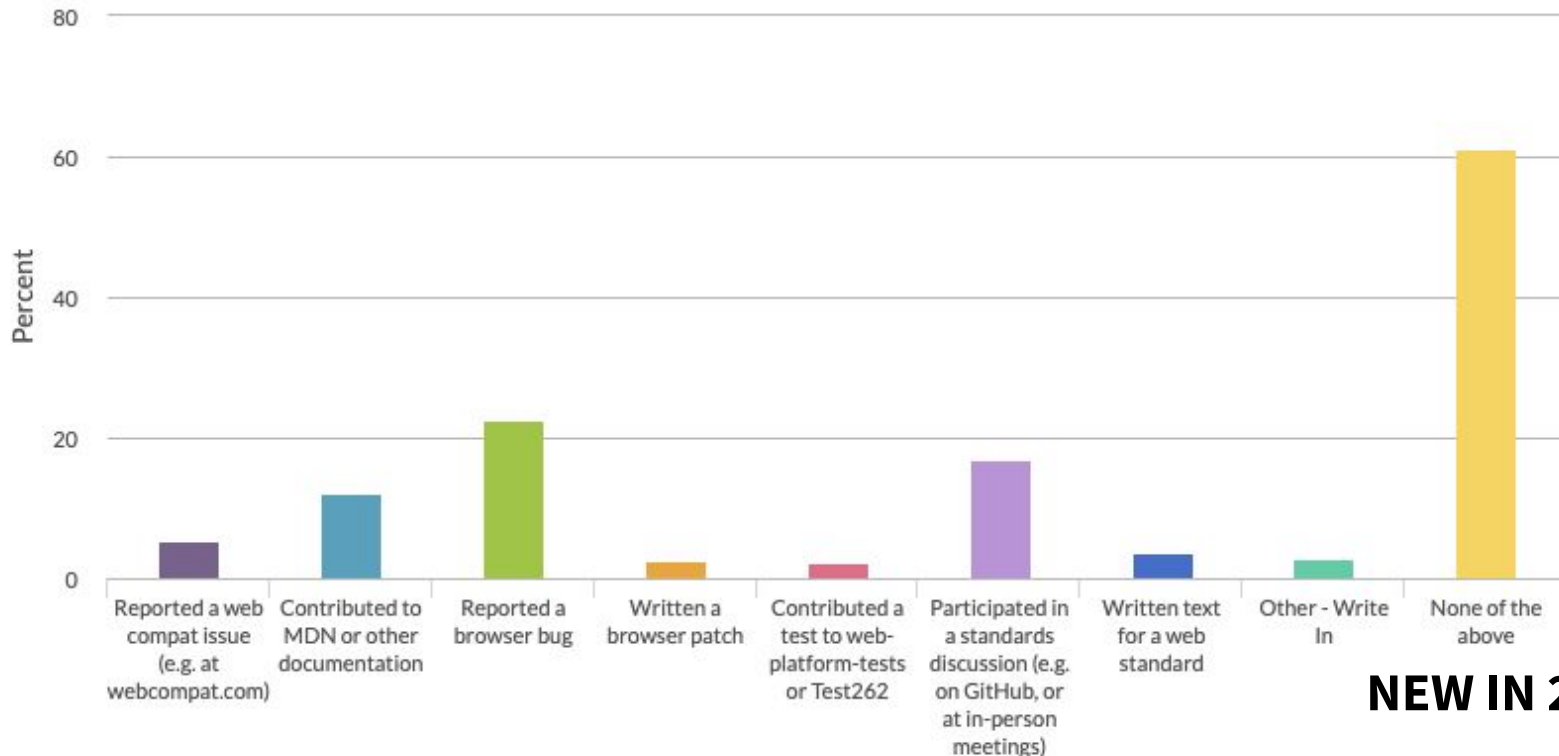


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What team structure best describes your working situation?

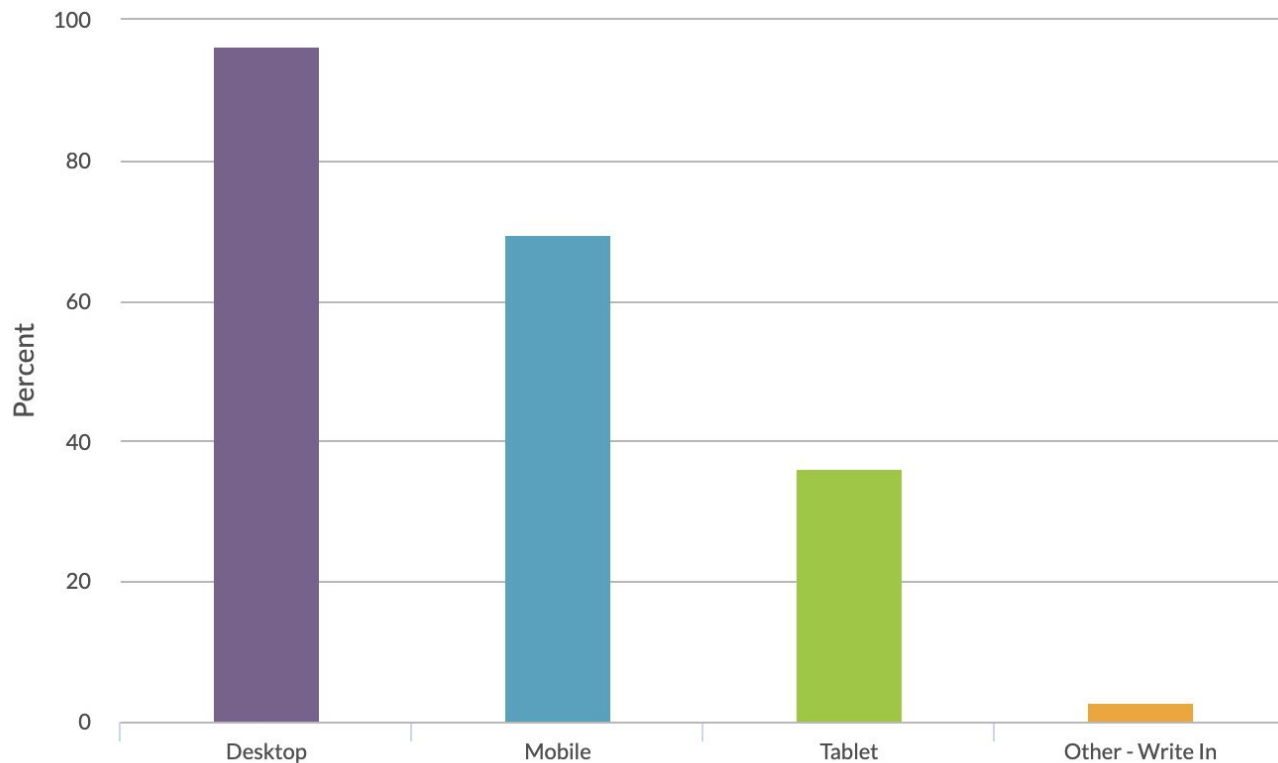


Which of the following things have you done to participate in the development of the web platform?

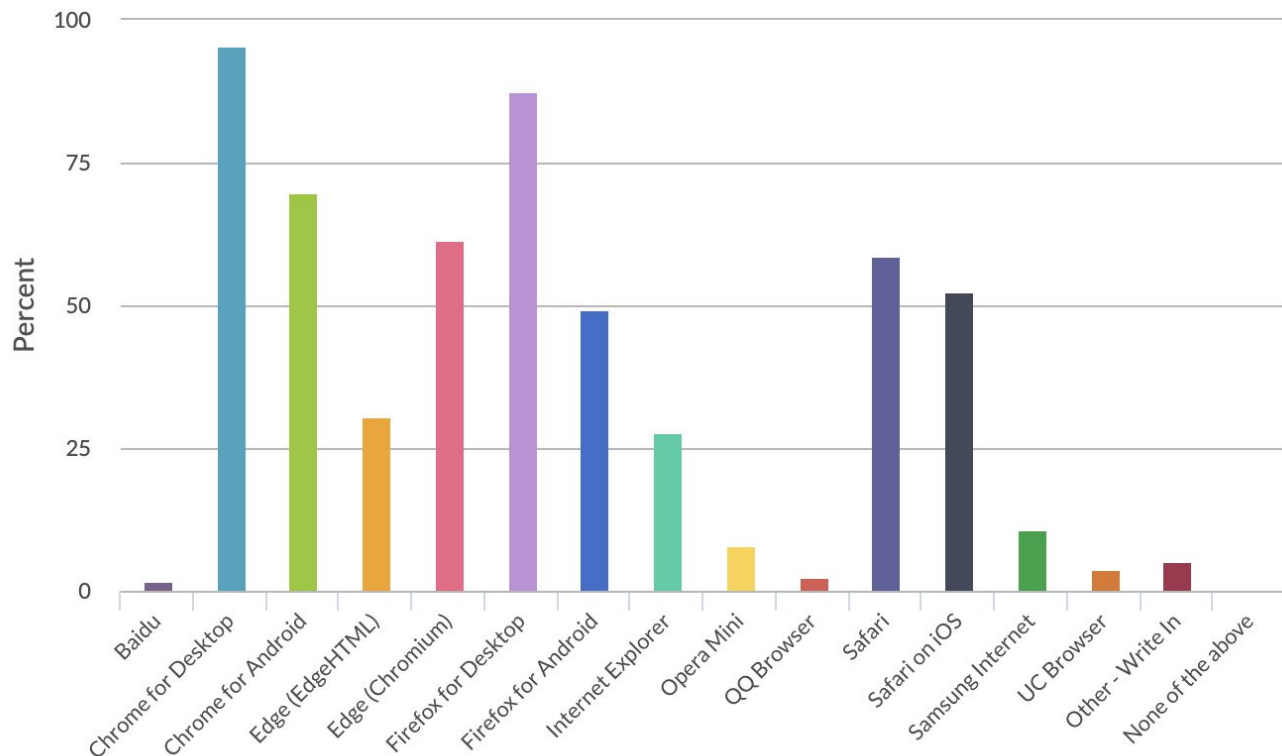


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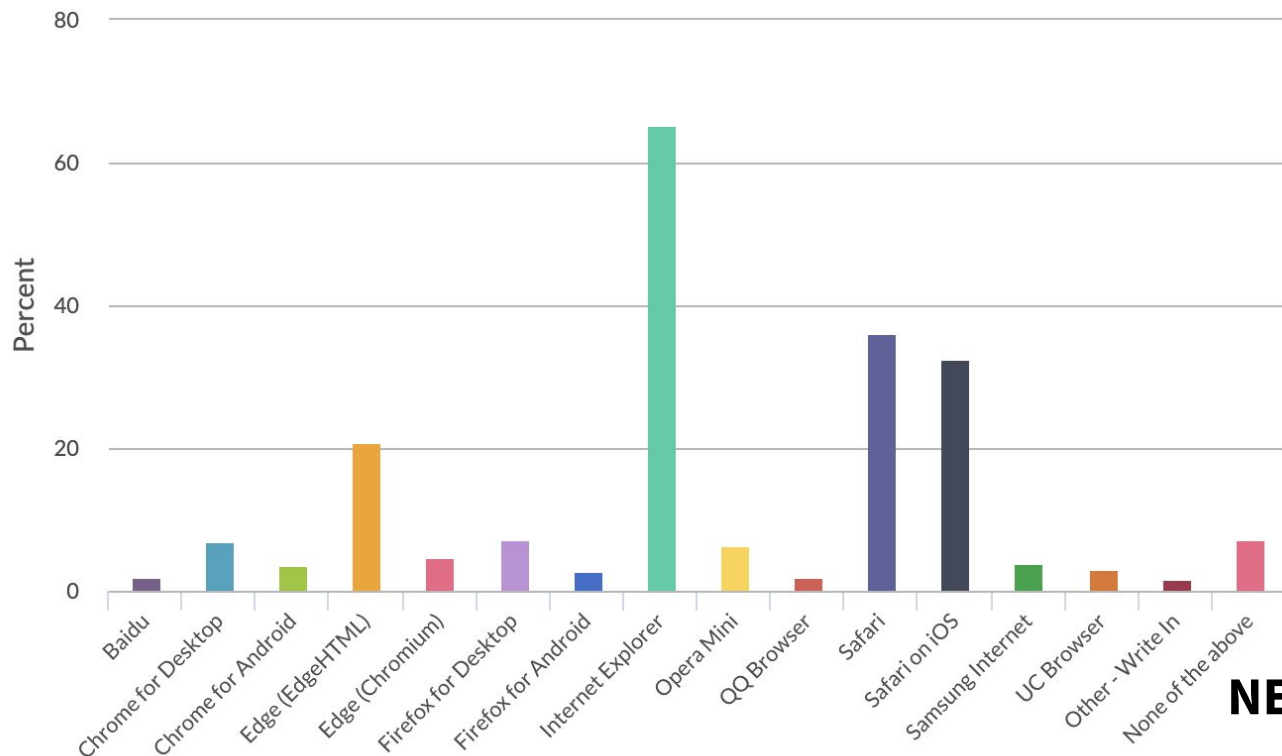
Which devices do you primarily target?



Which browsers do you support?

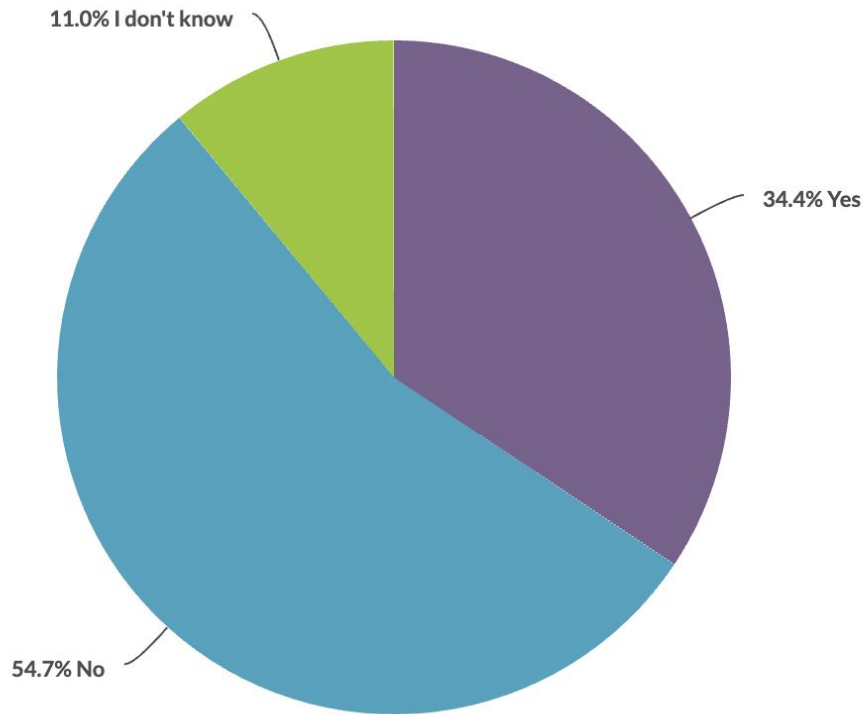


Which browsers cause you the most issues, regardless of whether you support them?

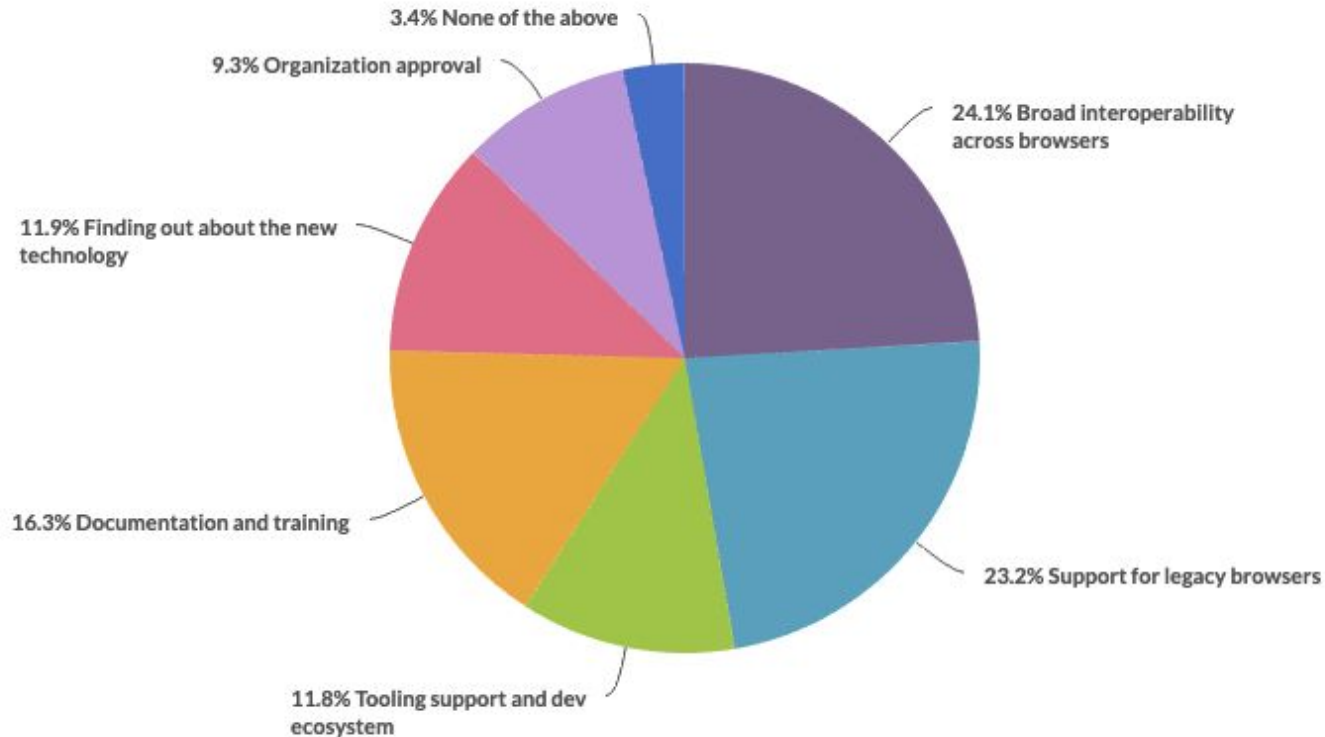


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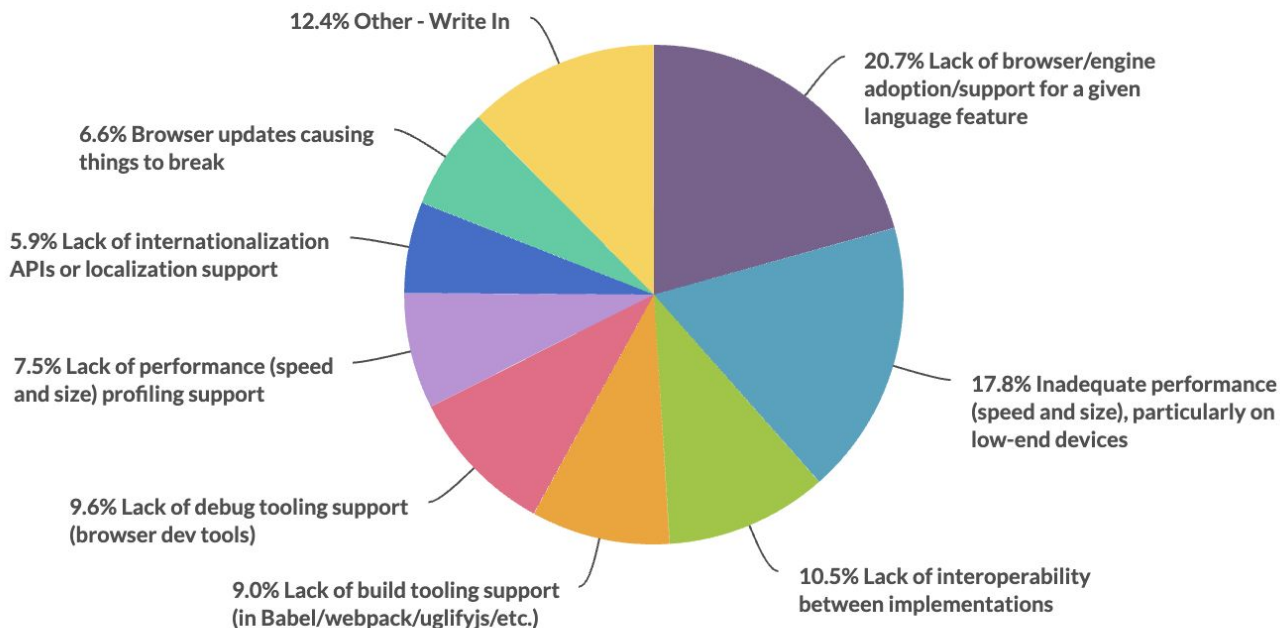
Progressive web apps (PWAs) have a manifest, can be added to a device, and have some offline support. With that definition, do you build PWAs?



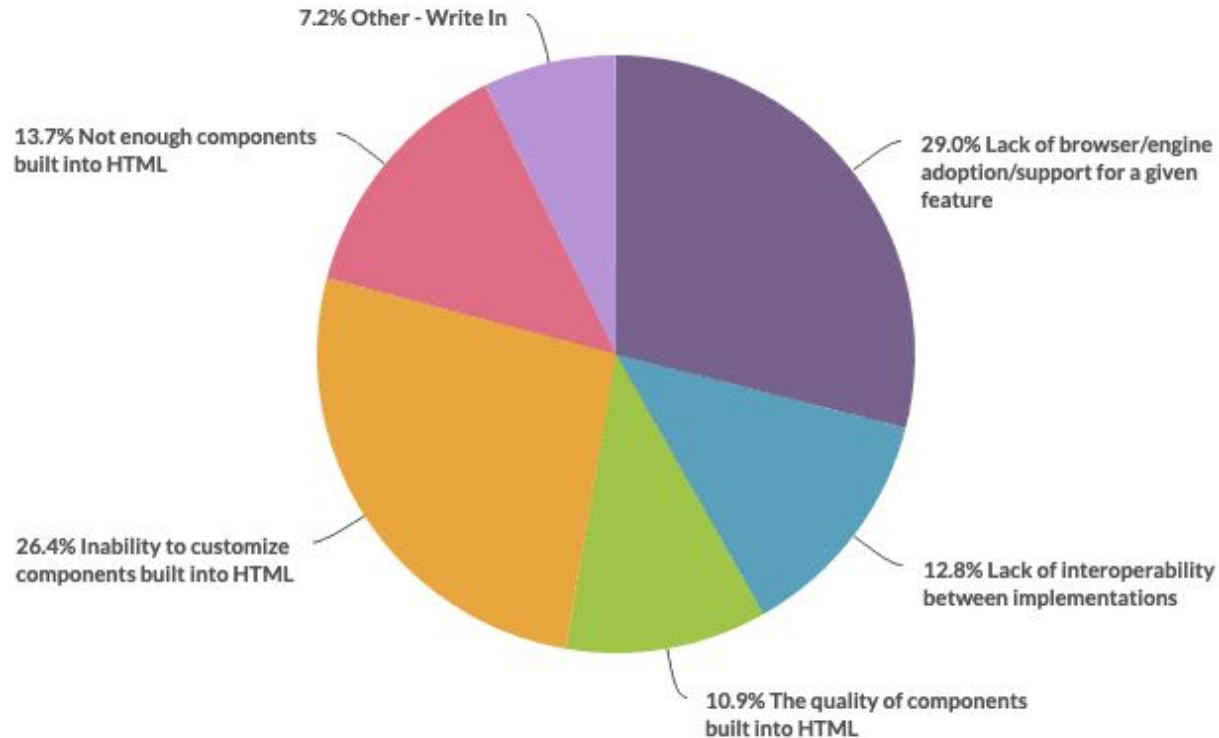
When a new Web technology relevant to your needs becomes available, what is the main barrier to adoption?



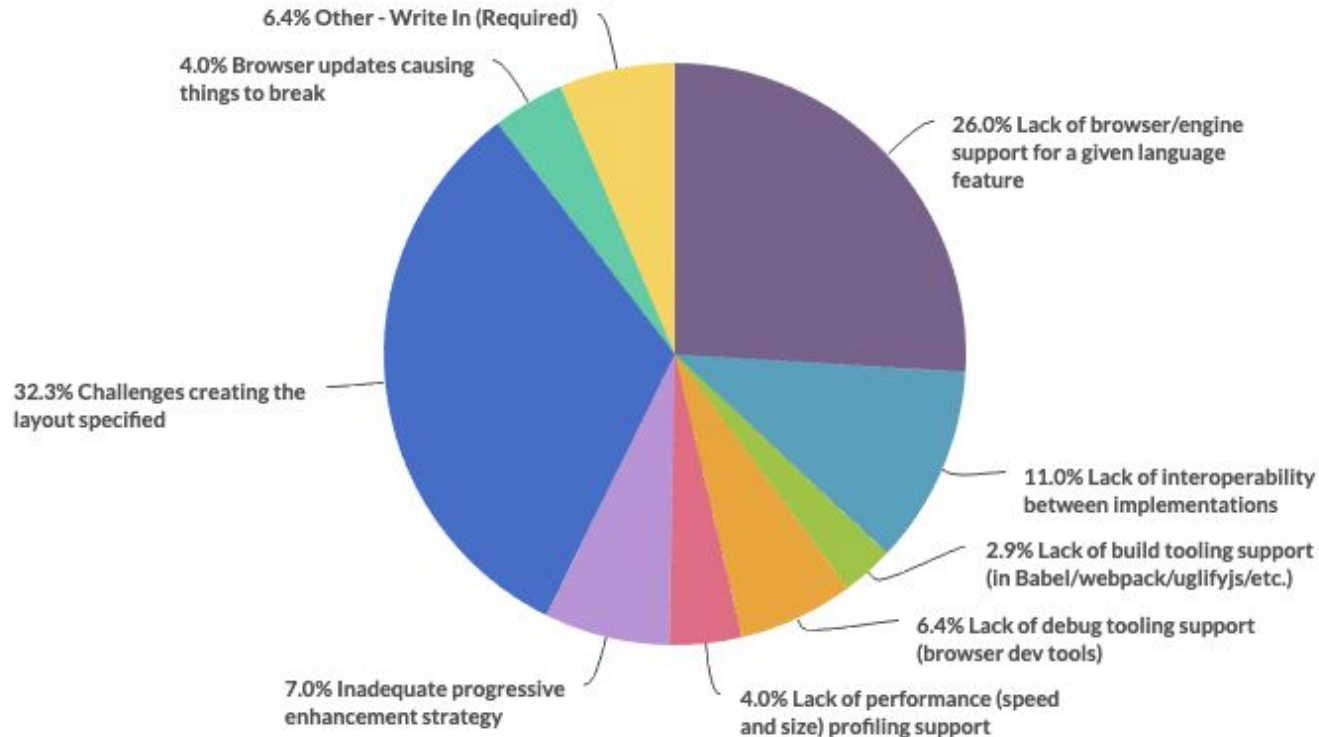
Which of these is the biggest pain point for you when it comes to JavaScript development?



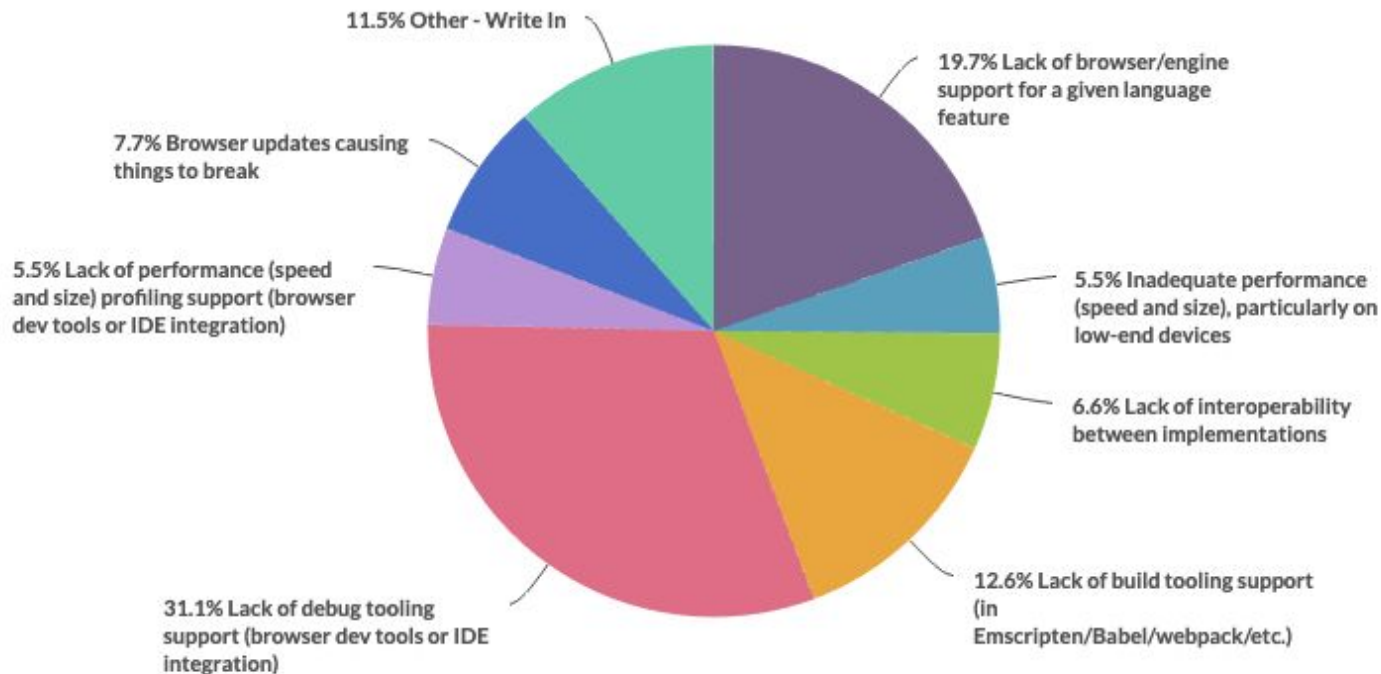
Which of these is the biggest pain point for you when it comes to HTML development?



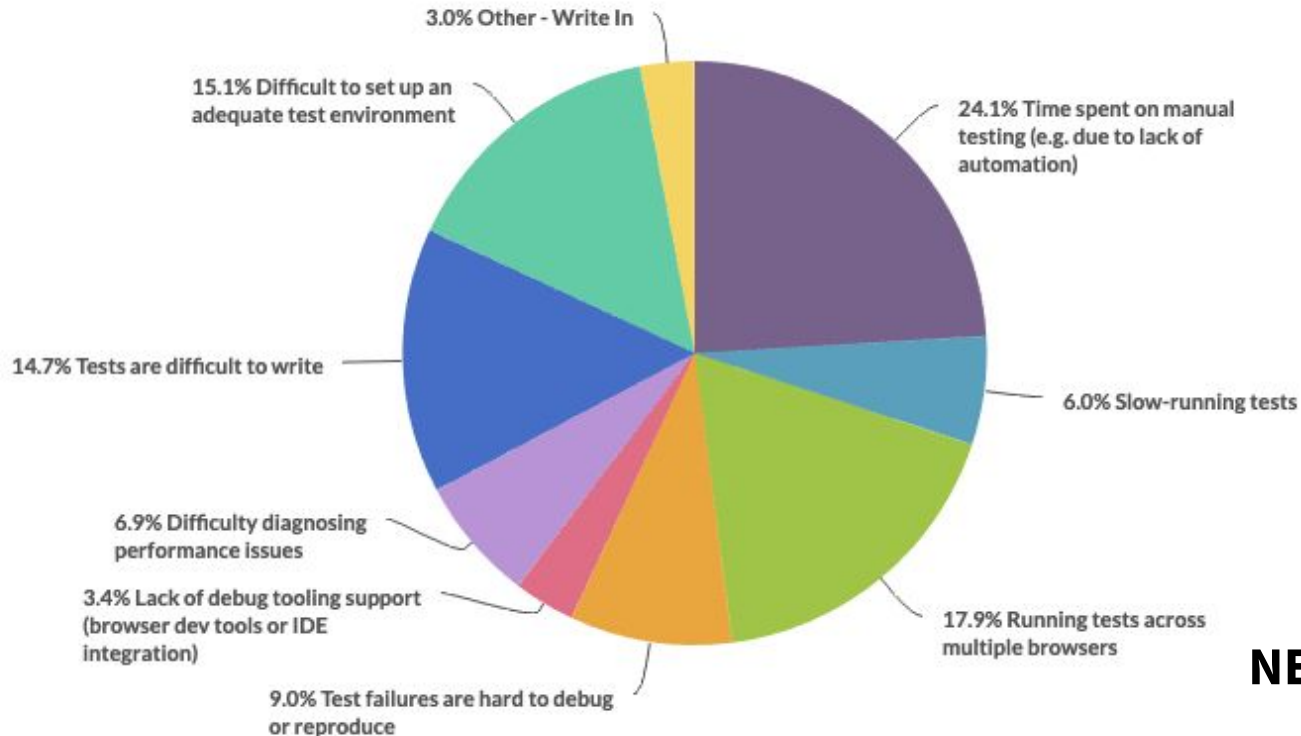
Which of these is the biggest pain point for you when it comes to CSS development?



Which of these is the biggest pain point for you when it comes to WebAssembly development?

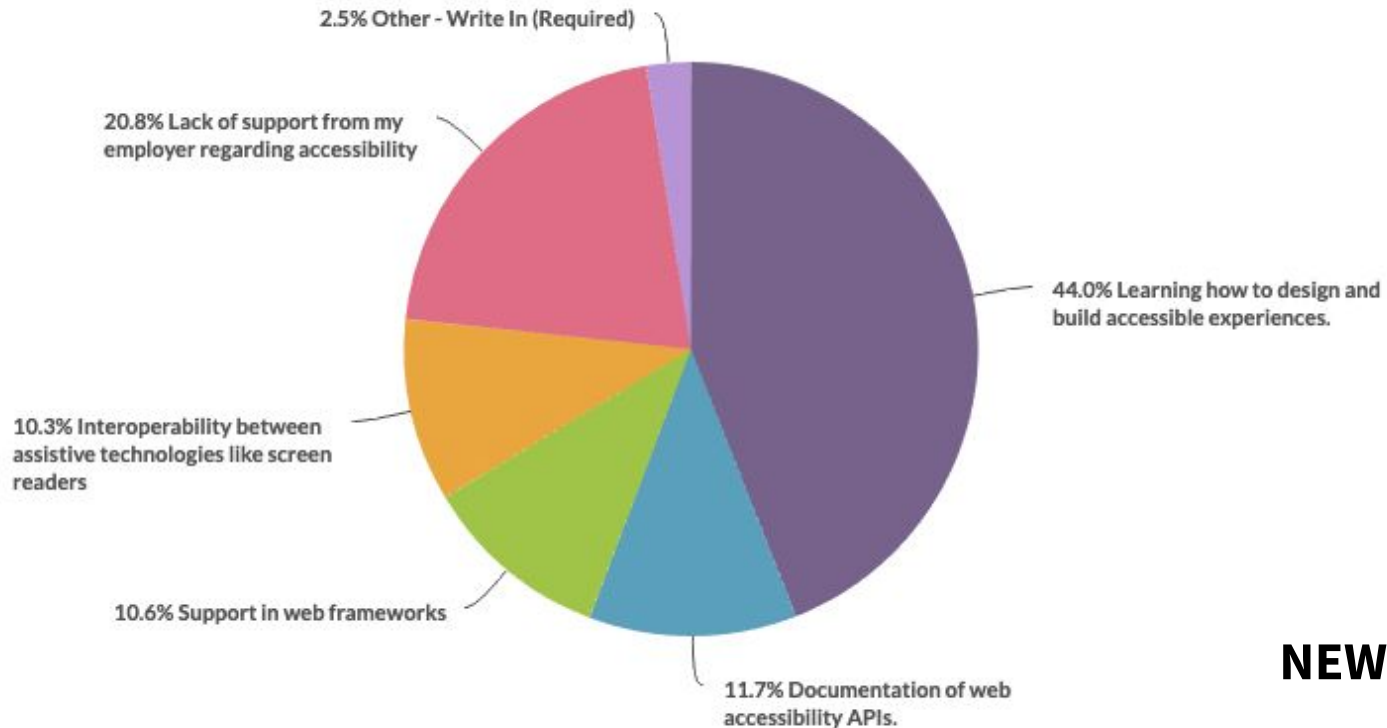


Which of these is the biggest pain point for you when it comes to web testing?



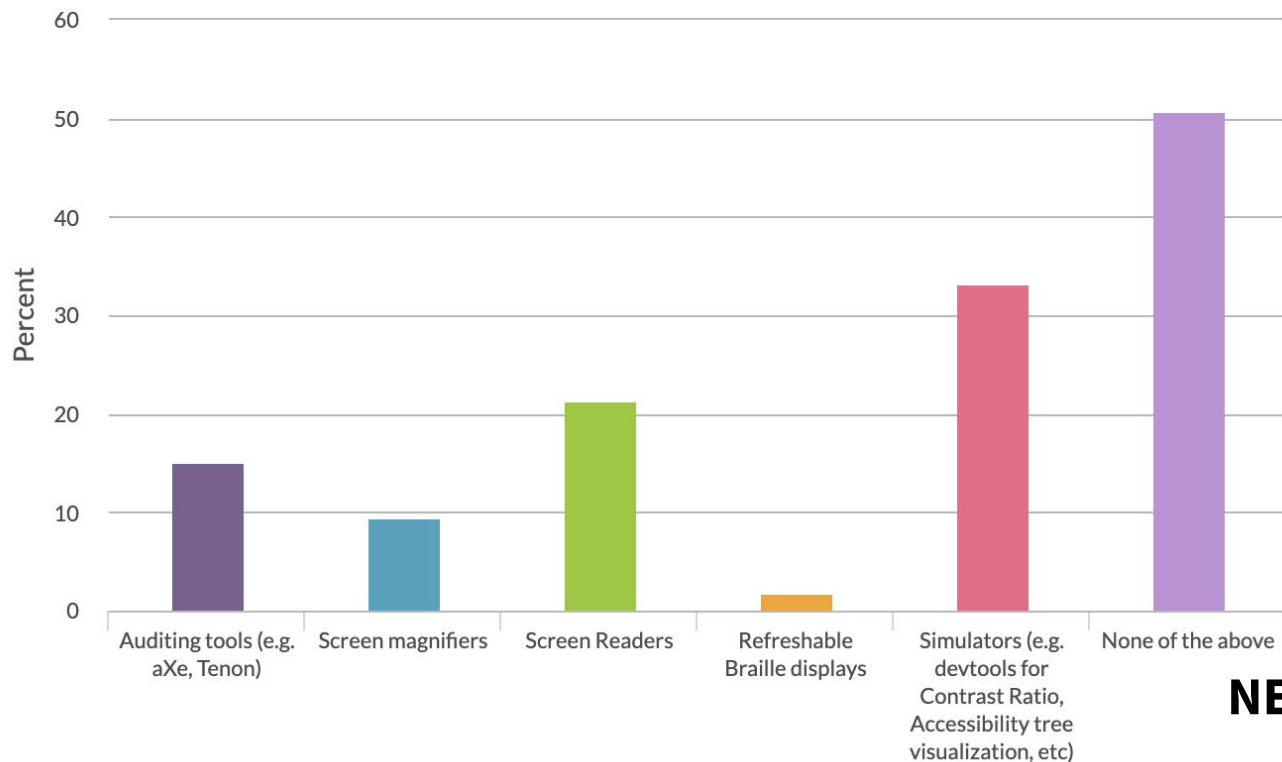
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Which of these is the biggest pain point for you when it comes to web accessibility?



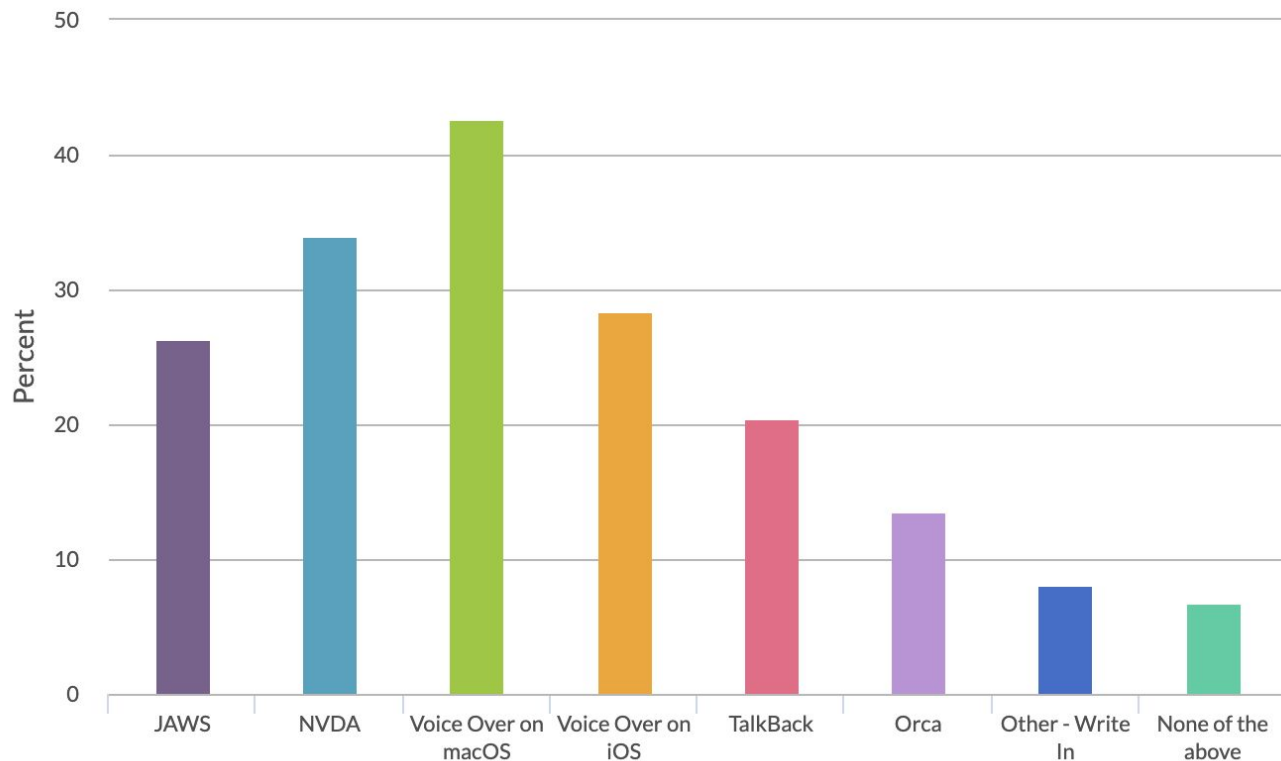
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What tools do you perform accessibility testing with?



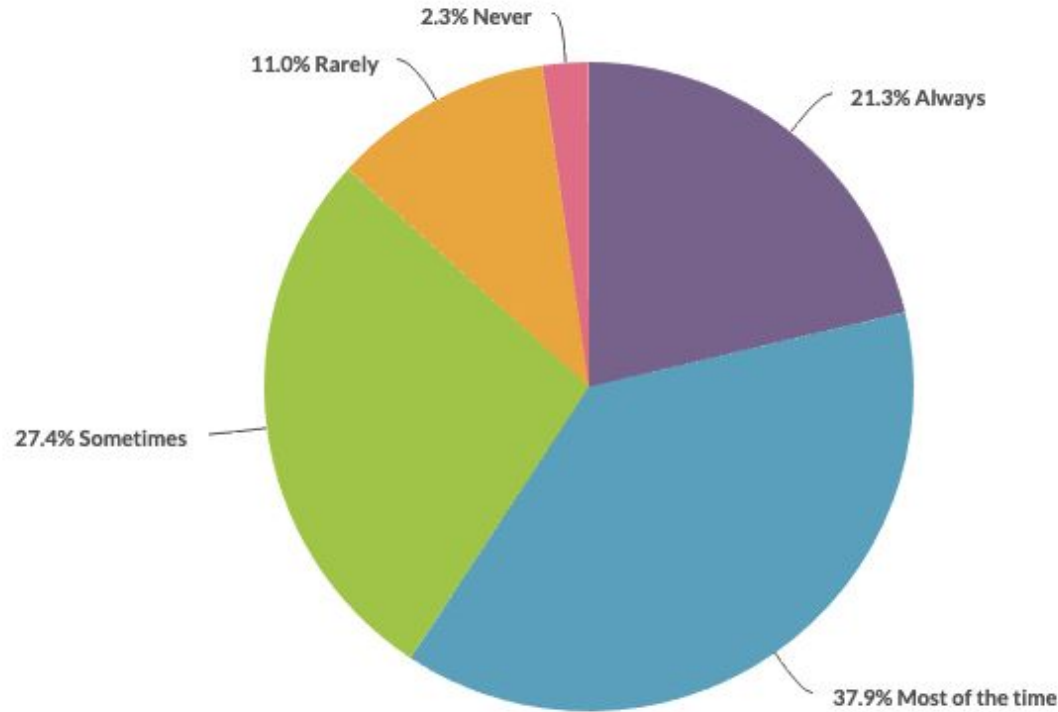
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Which screen readers do you test with?

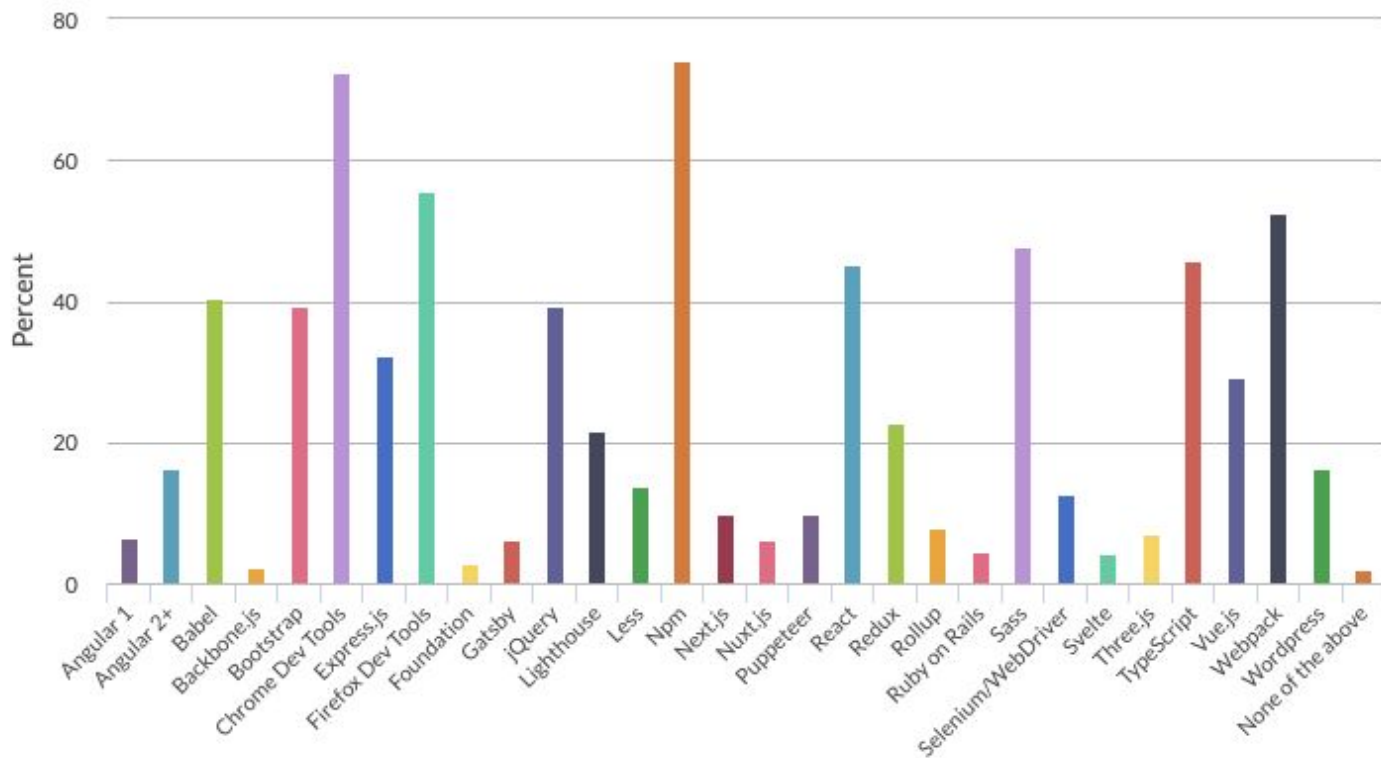


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How often do you get to choose the technologies, languages, programs, libraries, and frameworks you use for your work on the web?



What libraries, frameworks, platforms, and tools do you actively use?



Suggested discussion topics



Goals for 2021

Hypothesis:

The DNA does not yet fully reflect the needs of the web developer community.

Goals for Improvement:

- Earlier, more extensive input gathering
- Broader representation in research design
- Greater opportunities for segmentation by demographics
- More active recruitment of participants, especially from underrepresented communities