

The role of progressive enhancement today.

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Perf.now() Meetup

Hello



I'm Kevin Farrugia, co-founder of [Incredible Web](#) and an independent front-end web performance consultant.

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“Progressive Enhancement”

Coined by Steven Champeon and Nick Finck in 2003

Progressive Enhancement

Progressive enhancement is a strategy that reaches back into the history of the semantic markup technologies that gave rise to HTML and inspired XML. By making use of new presentation technologies such as CSS, it allows the Web document designer, visual designer, and developer to play to their own strengths while enabling each to deliver the information and interactivity demanded by users, while embracing accessibility, future compatibility, and determining user experience based on the capabilities of new devices.

Instead of placing responsibility on server to determine what to send back to the client, PE uses longstanding characteristics of markup, bugs in various browsers, and other tactics to place a renewed focus on information delivery. Rather than hoping for graceful degradation, PE builds documents for the least capable or differently capable devices first, then moves on to enhance those documents with separate logic for presentation, in ways that don't place an undue burden on baseline devices but which allow a richer experience for those users with modern graphical browser software.



Source: hesketh.com

Don't do this at home...

```
// how not to use JavaScript...
<a href="javascript:location.setUrl('/my-route')">My Route</a>
// ...please don't do this either
<a href="#" onclick="location.setUrl('/my-route')">My Route</a>
```

Flame-wars 🔥

"Sorry, 99.9% of the planet, we've presented you with a sub-optimal 1993 experience because 0.1% of you have outdated tech"

Source: stackoverflow.com

What is a Progressive Web App?

- Attributes
- Testable Criteria
- Client's Perspective

Progressive

Progressive — Works for every user, regardless of browser choice because it's built with progressive enhancement as a core tenet.

[Google Developers: Your First Progressive Web App](#)



Definition no longer appears on Google Developers

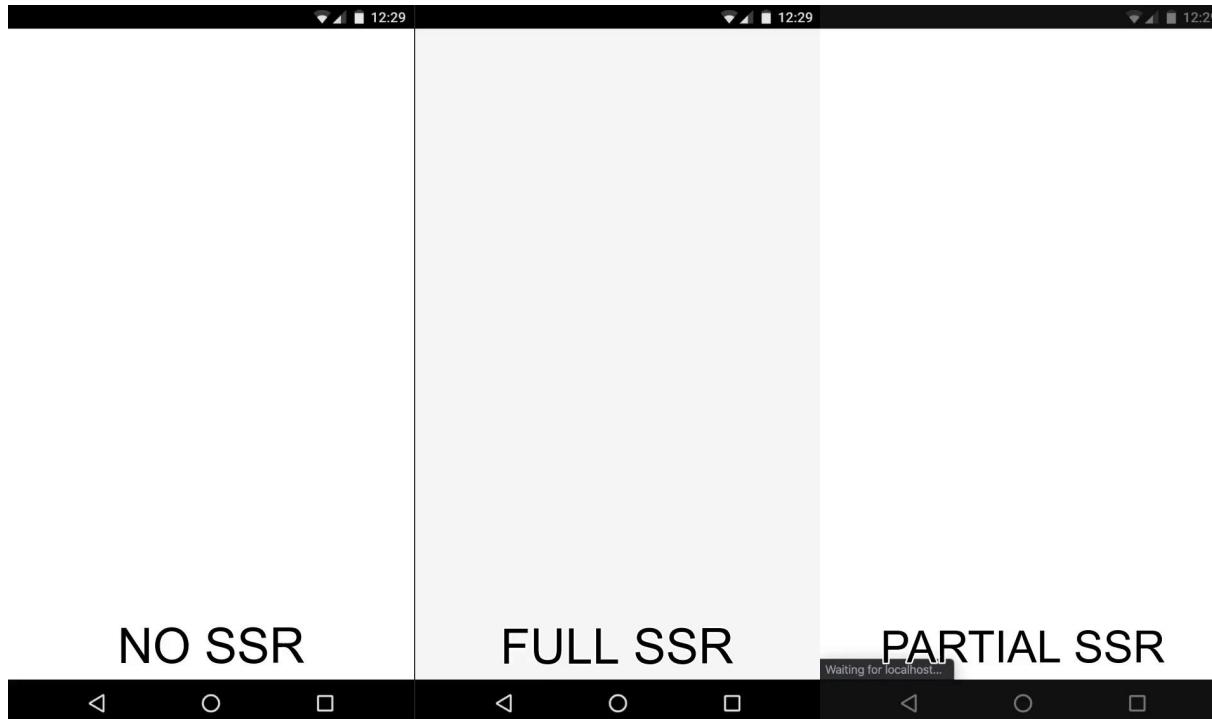
Benefits

- Accessibility
- Cross-browser & legacy support
- Consistent user experience
- Standard implementations across packages
- ...

...and performance

- “Inlining” critical content
- Service workers

Demo



SSR Configurations

- No SSR
- Full SSR
- Partial SSR

Results

	Throttling	CPU Throttling	Speed Index	FCP *
No SSR	Slow 3G	4x Slowdown	4000ms	3300 ms
Full SSR	Slow 3G	4x Slowdown	2200ms	1500 ms
Partial SSR	Slow 3G	4x Slowdown	2200ms	900 ms

* according to Google Chrome's Lighthouse

Thank you

imkev.dev/perfnow