

what is hydration?

Past

PHP & Rails
→ Render done at server

Very Performant

but no-interactivity

solution
JQuery

Very Performant

but
→ Bad experience for developer

Current DX
React - Angular - VueJS

HTML
contains info how to download and execute JS

Javascript

Execute APP

Render

click
Page

• Problem if JS file is bigger that means
big time blank page and bad UX

→ solution is
PreRendering means HTML rendered at server and rendered at first render without interactivity of JS

Bigger HTML
HTML

Page

JS

EX APP

Render

appears fast but without interactivity

click
Page

→ in render here it throw the DOM created by the server [HTML] and replace with DOM rendered with JS file → this mean duplication

but with hydration → it doesn't re-render but it Reconcile or hydrate comparing server DOM with client DOM

Future
Resumability

Performance

HTML

and download 1KB of JS so it become interactive
Page
click

JS

Download the rest of JS

Execute

Resumability

means execute when needed

You can find it in advance
photo search
Google search
it's internals in google

What is Hydration

DX ↑↑

PERF ↑↑

Past

Rendering and interactivity separated

Rendering done at the server by:



Interactivity:



Very performant

Slow development,
error prone,
complicated logic...

Current

Render and interactivity united into a single framework.

App runs twice in server and client using the same tech:



Unified model, fast development, scales in complexity

Uses hydration, to enable interactivity.
App runs twice.

Future



6:04 / 7:15

