

FrankenJS • 30th November 2023

Web development like 15 years ago – the new fullstack frameworks

Sonja Feitsch • E2N GmbH



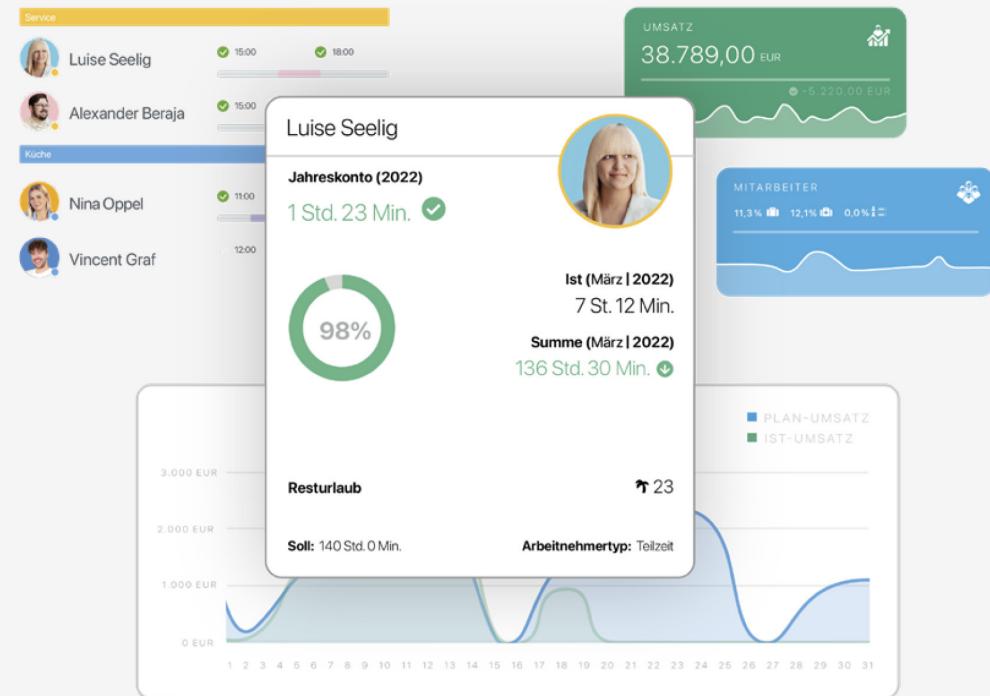
Hi, its me



- During my studies in biology I discovered my interests in web development.
- Since 2015 I worked with PHP, JavaScript/TypeScript and React.
- Joined e2n and working as frontend developer.

The smart software for employee management

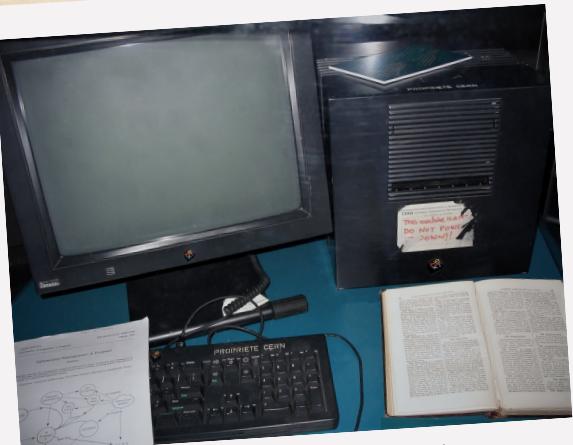
- We believe that digitalization is a key to success for companies.
- We optimize processes within employee management.
- We enable companies to save time and money with e2n.



Why this talk?

Tell me, how was web
development in the
past...

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static HTML was delivered
by a server

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Feeding HTML with data
using languages like PHP

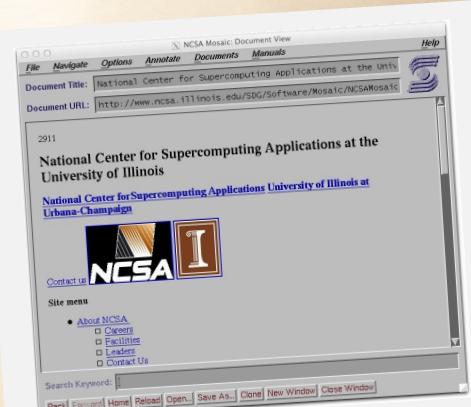
Tell me, how was web development in the past...



static HTML was delivered
by a server



Feeding HTML with data
using languages like PHP



Servers were powerful, the
browser only displayed the
document

Browsers got powerful
and JavaScript got
good...

Browsers got powerful
and JavaScript got
good...



write less, do more.

Enable HTML manipulation, event handling
and animations directly on the client

Browsers got powerful
and JavaScript got
good...



Enable HTML manipulation, event handling
and animations directly on the client

Me, adding
interactivity
using jQuery



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Deu News

May, 2013

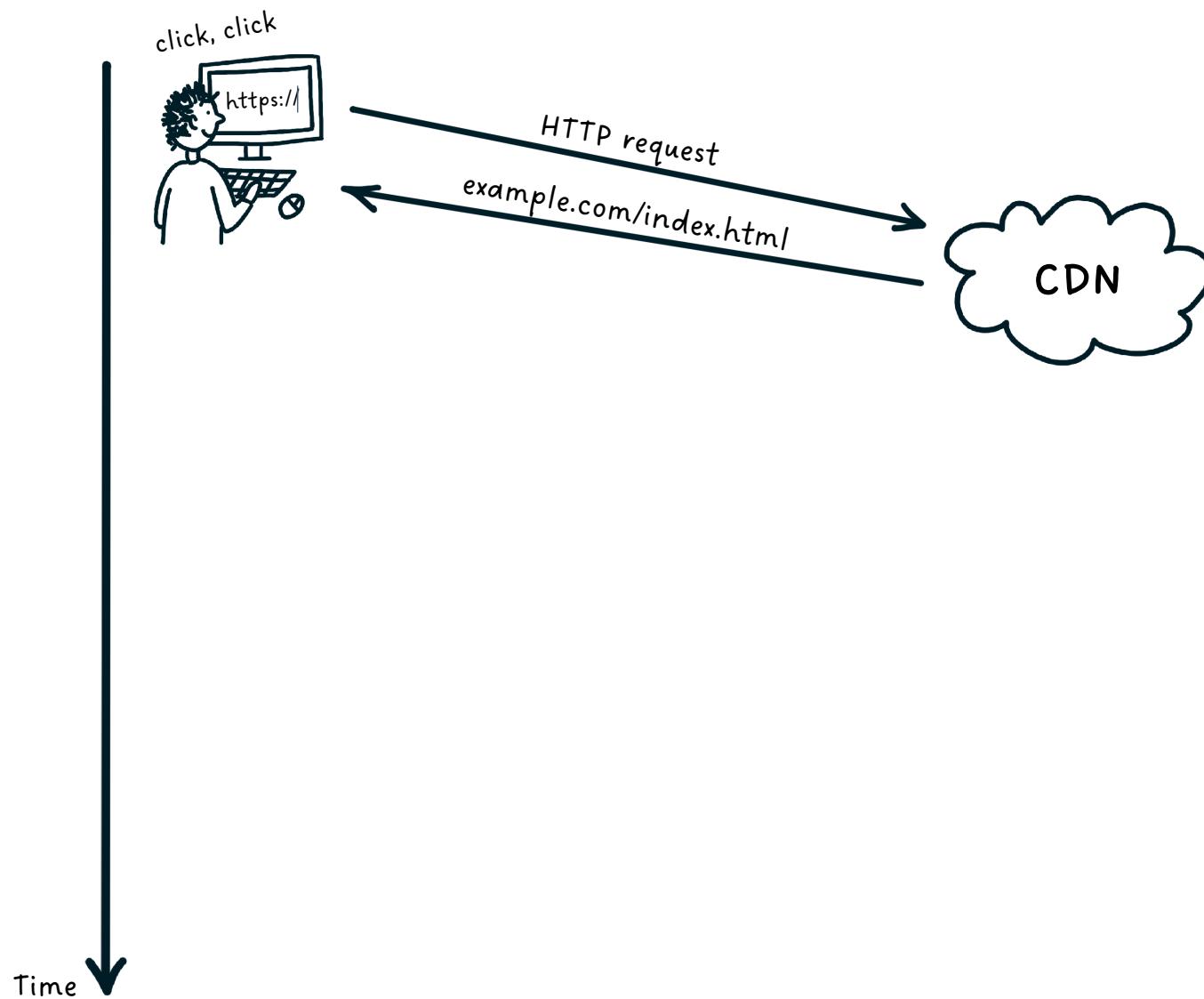
Big fail at JSConf

Facebook React is not JsConf. Mixin HTML in Ren
geeting much love at JS seems like a bad idea. fol
low

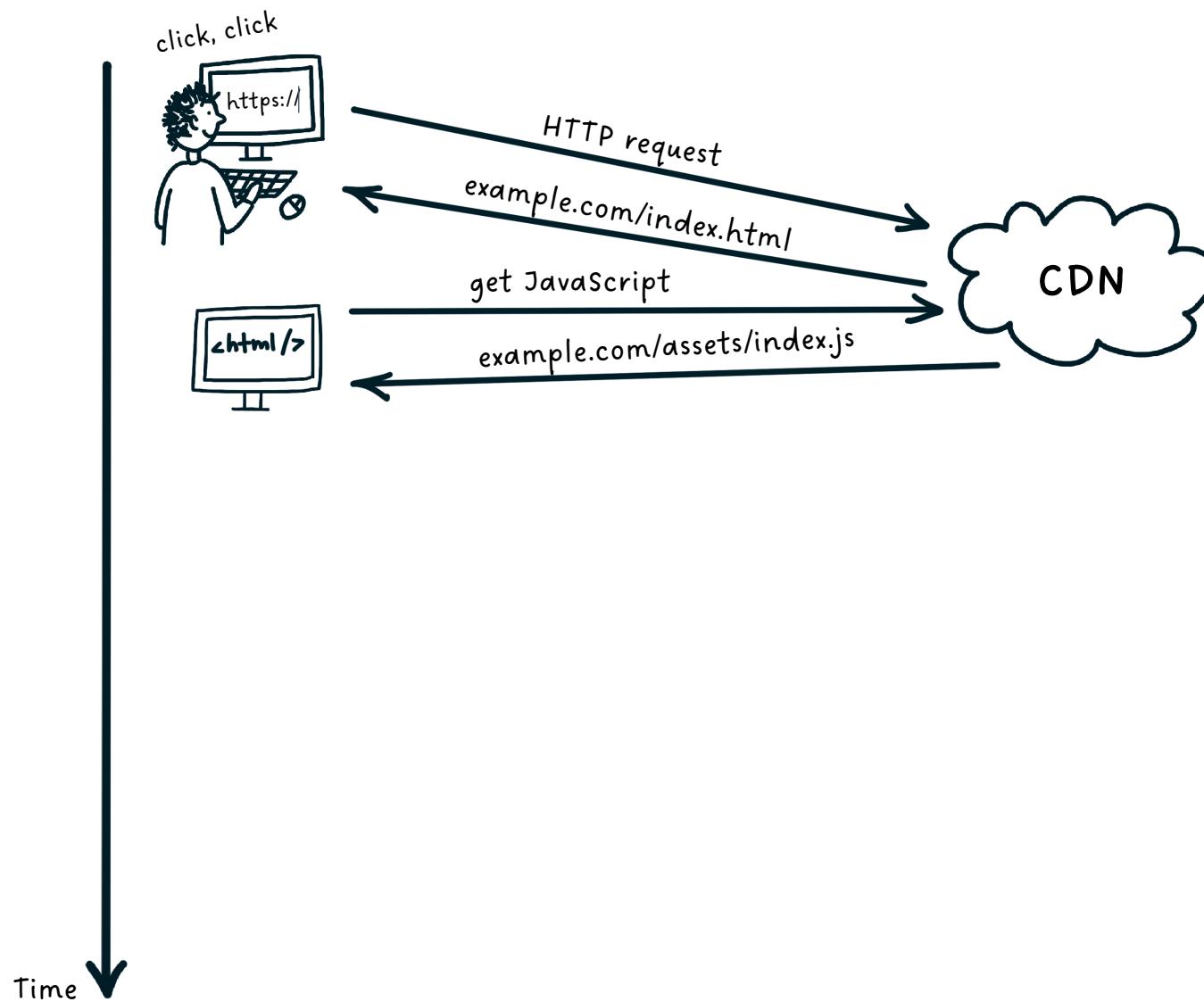
Since 2012 React, Angular and
similar frameworks changed web
development

How does a Single Page Application work?

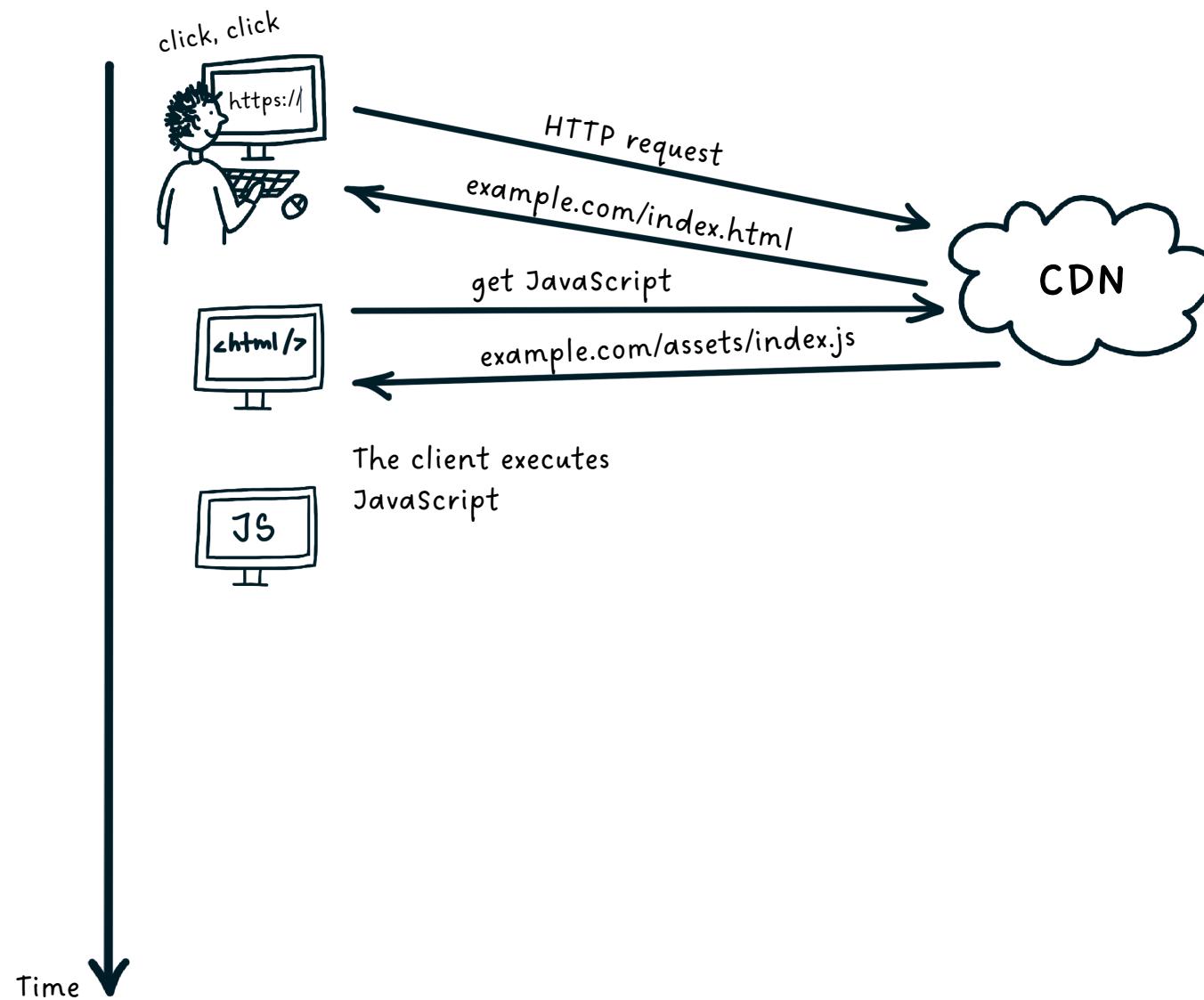
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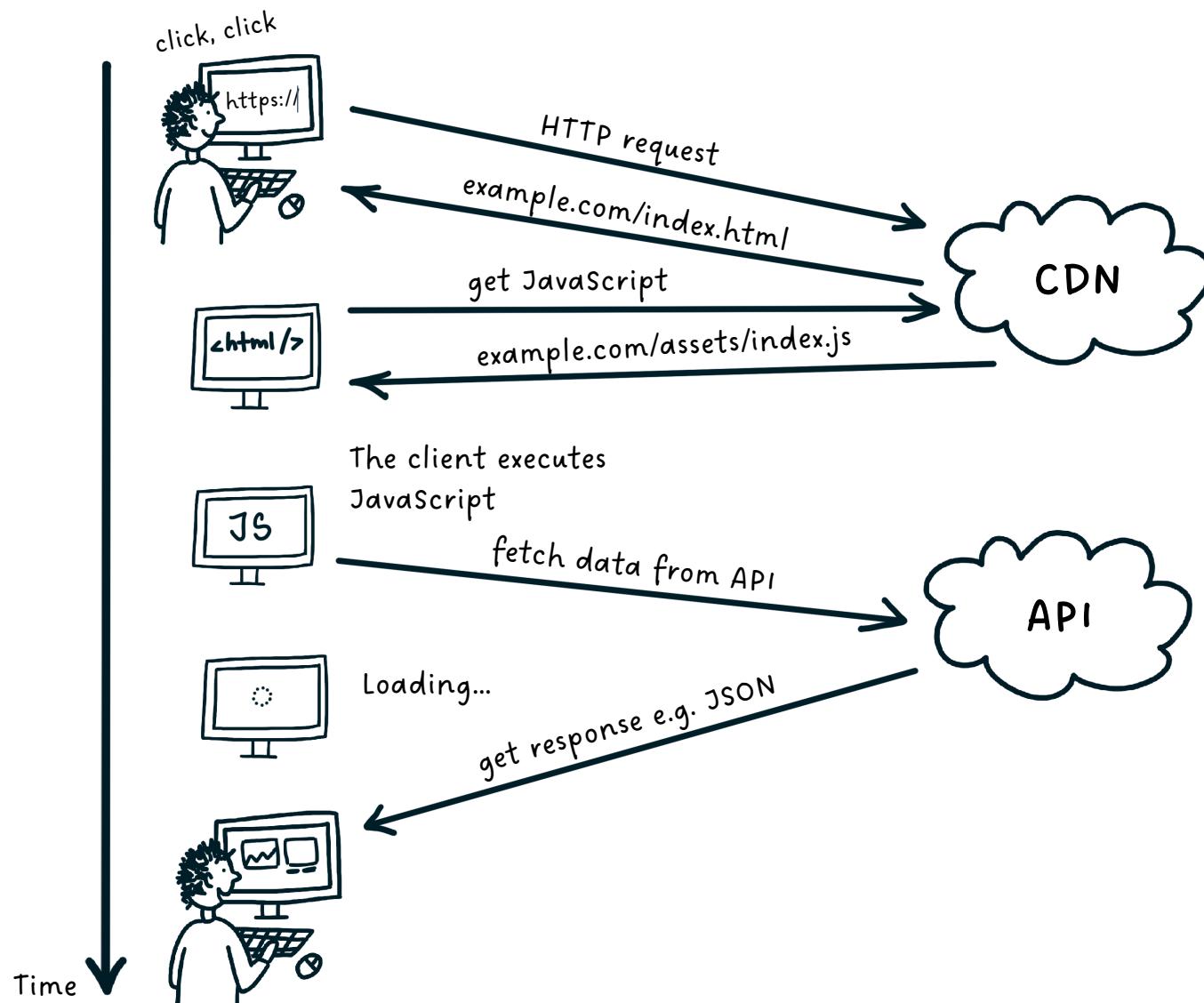
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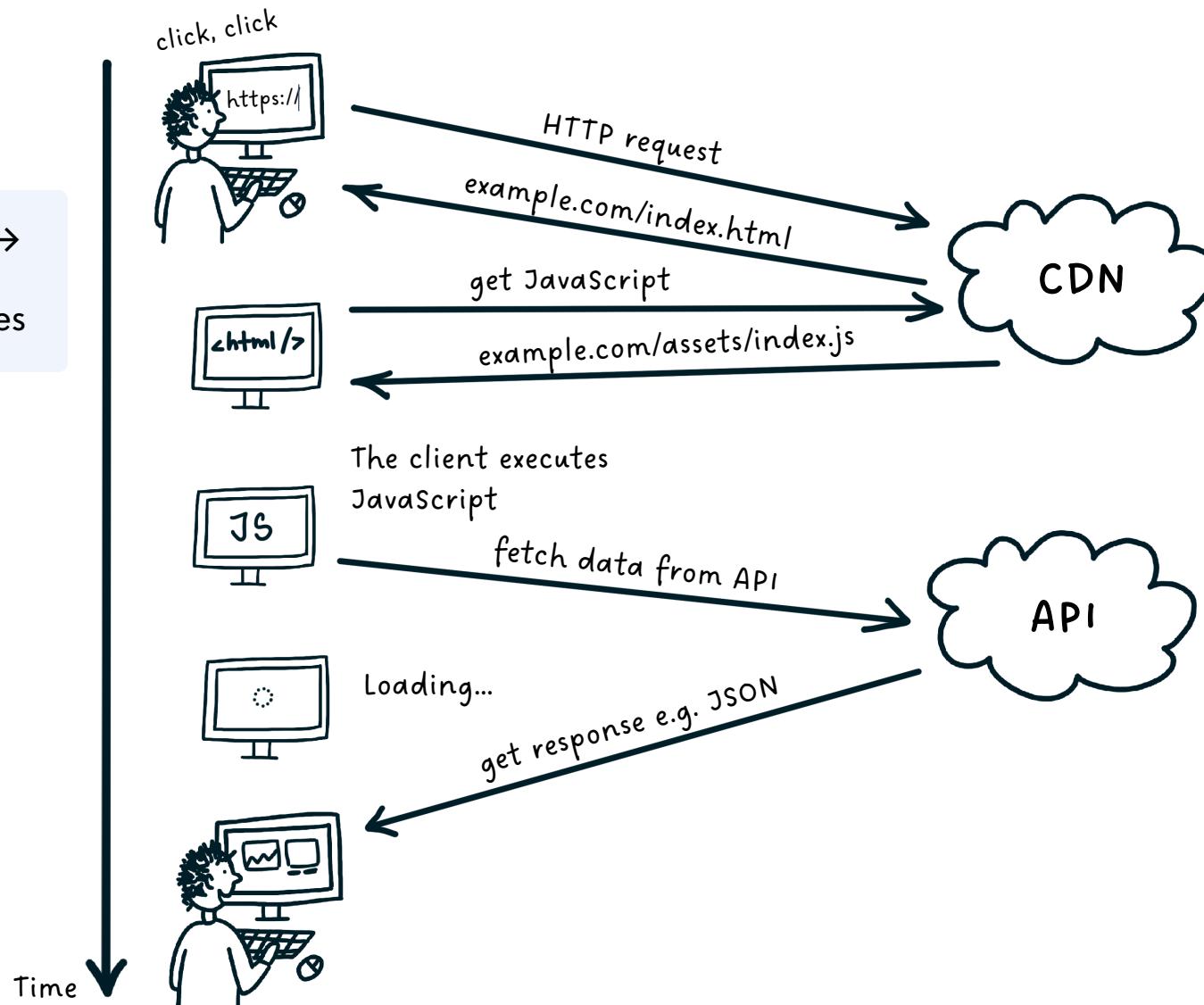
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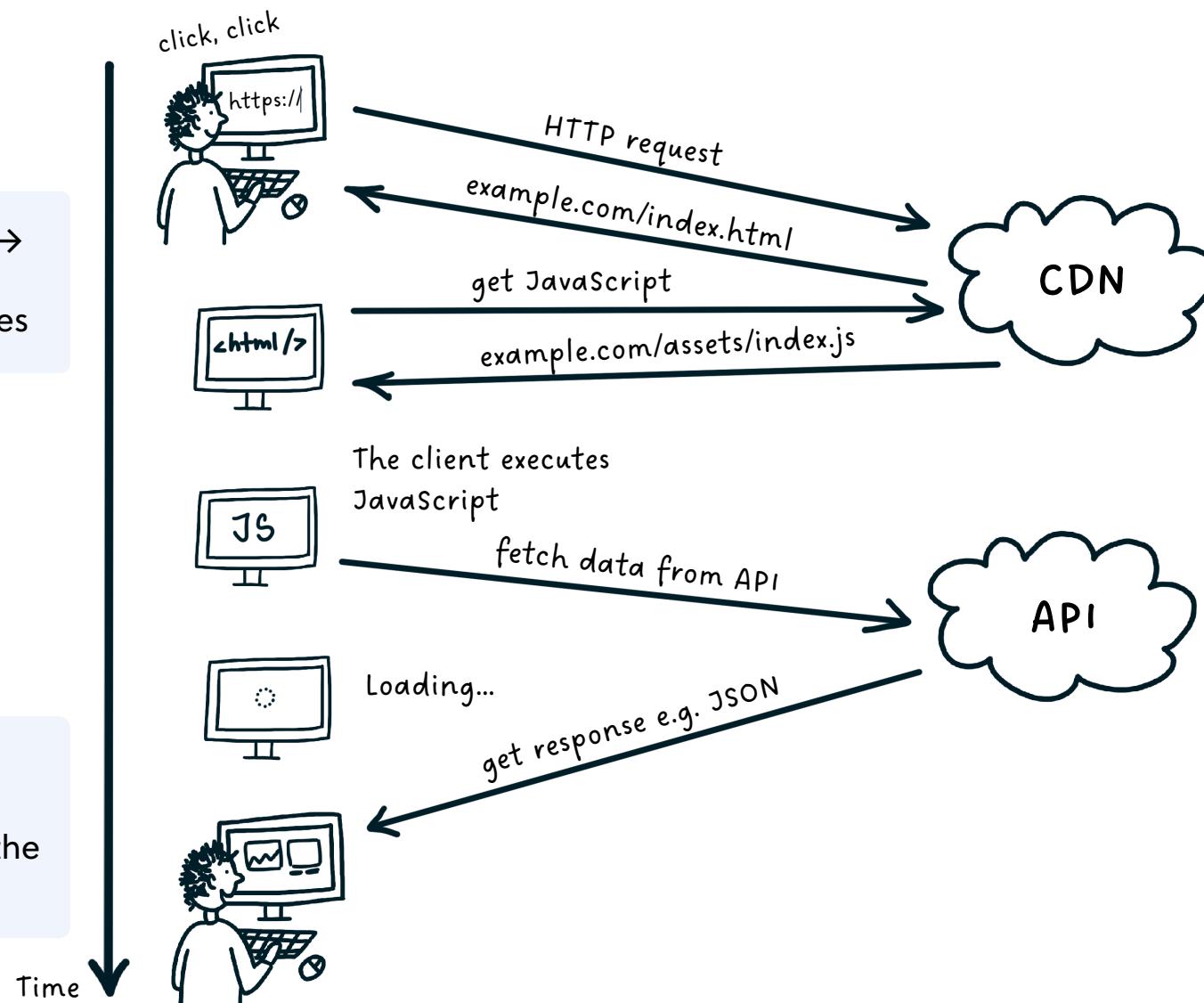


Single HTML-file →
difficult to get
metadata for routes



How does a Single Page Application work?

⚠ Single HTML-file →
difficult to get
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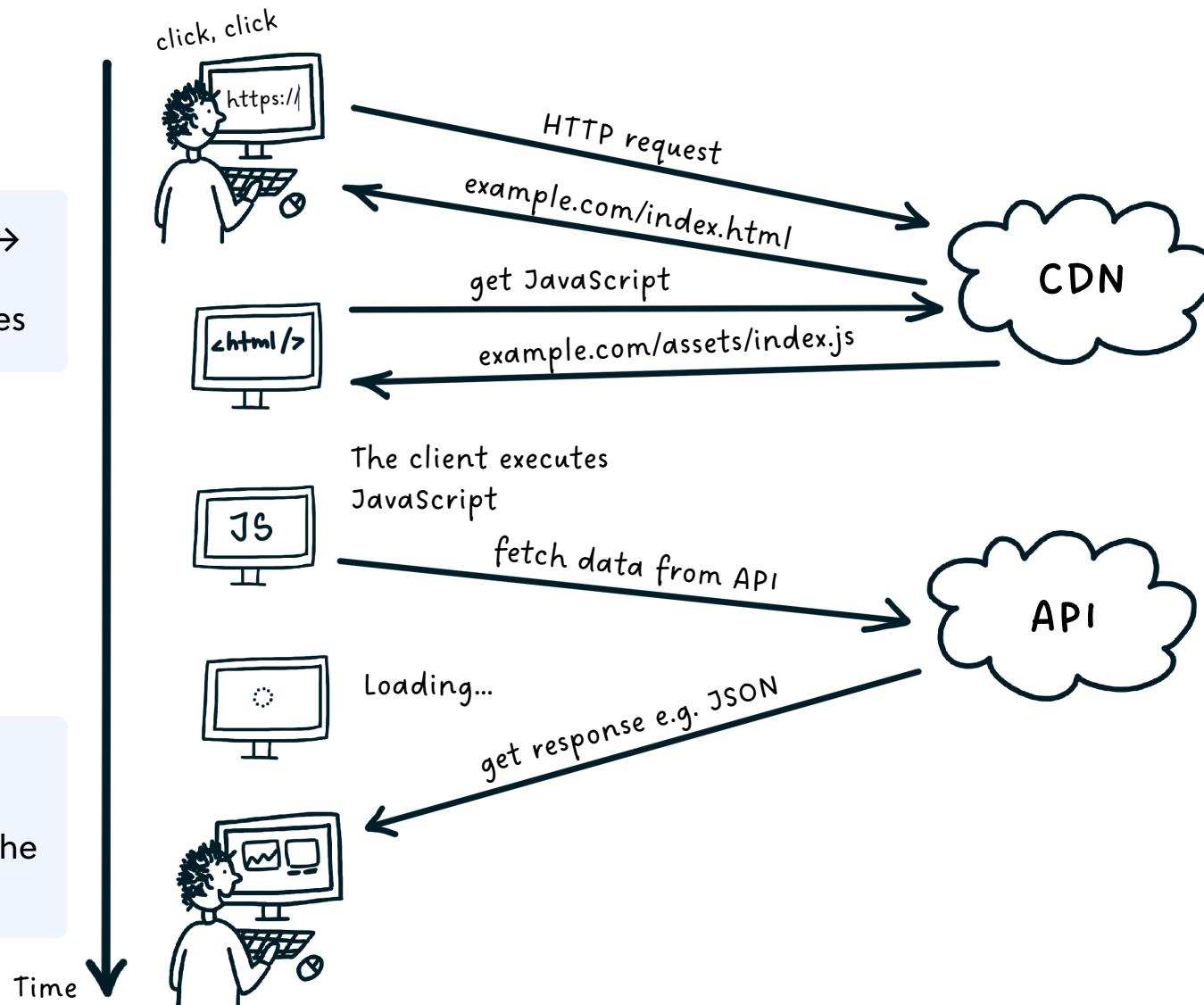


⚠ The client needs
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How does a Single Page Application work?

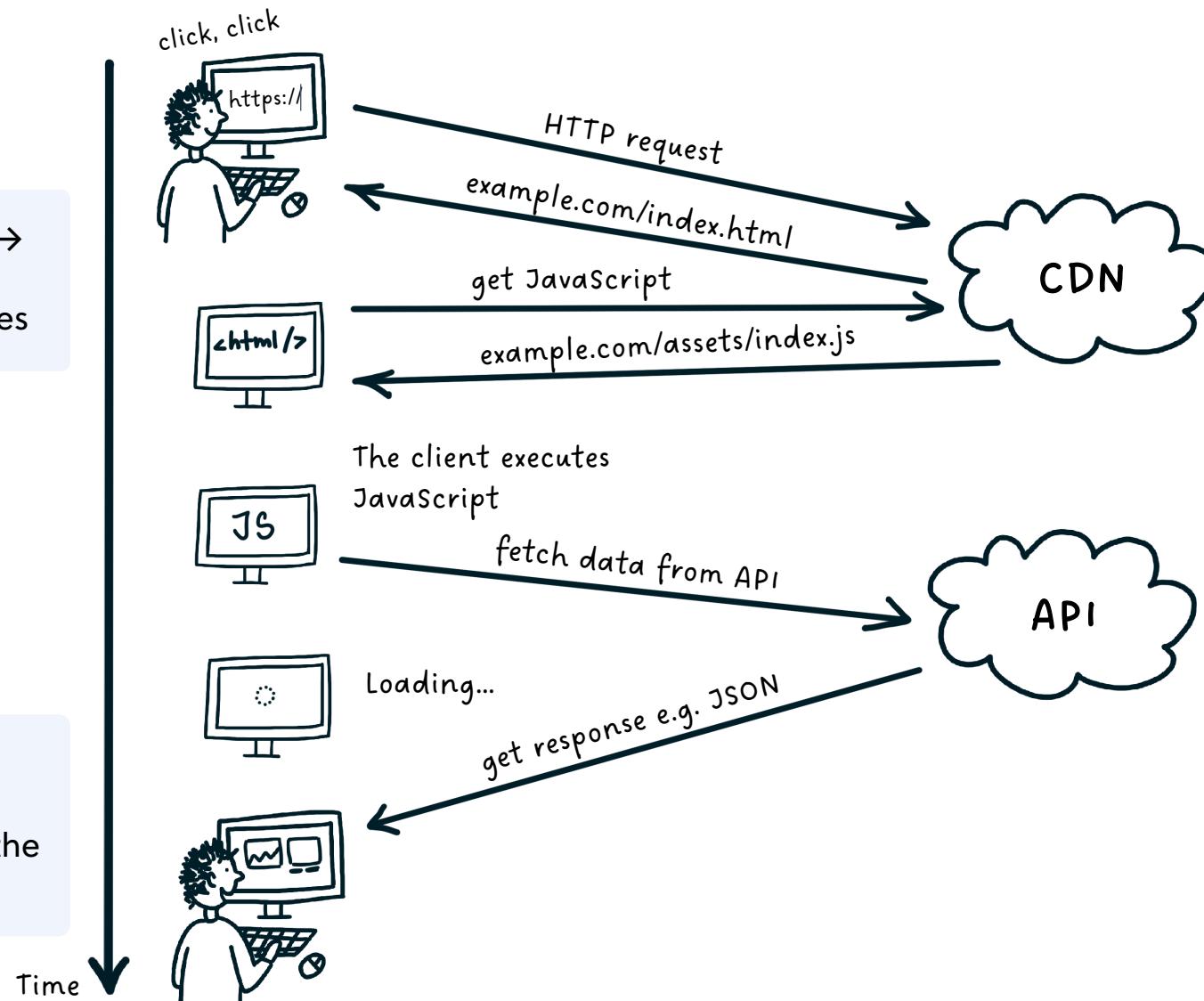
⚠ Single HTML-file → difficult to get metadata for routes

⚠ The bigger a page, the longer it takes until the page is viewable and interactable



How does a Single Page Application work?

⚠ Single HTML-file → difficult to get metadata for routes



⚠ The client needs Javascript to view and interact with the page

⚠ The bigger a page, the longer it takes until the page is viewable and interactive

? Back to the roots?

Not everything in the past was bad.

Combine ideas from back then with modern technologies.

Back to the roots with fullstack frameworks

Back to the roots with fullstack frameworks

- New frameworks in the JavaScript ecosystem: Next.js, React Remix, Nuxt, SvelteKit

Back to the roots with fullstack frameworks

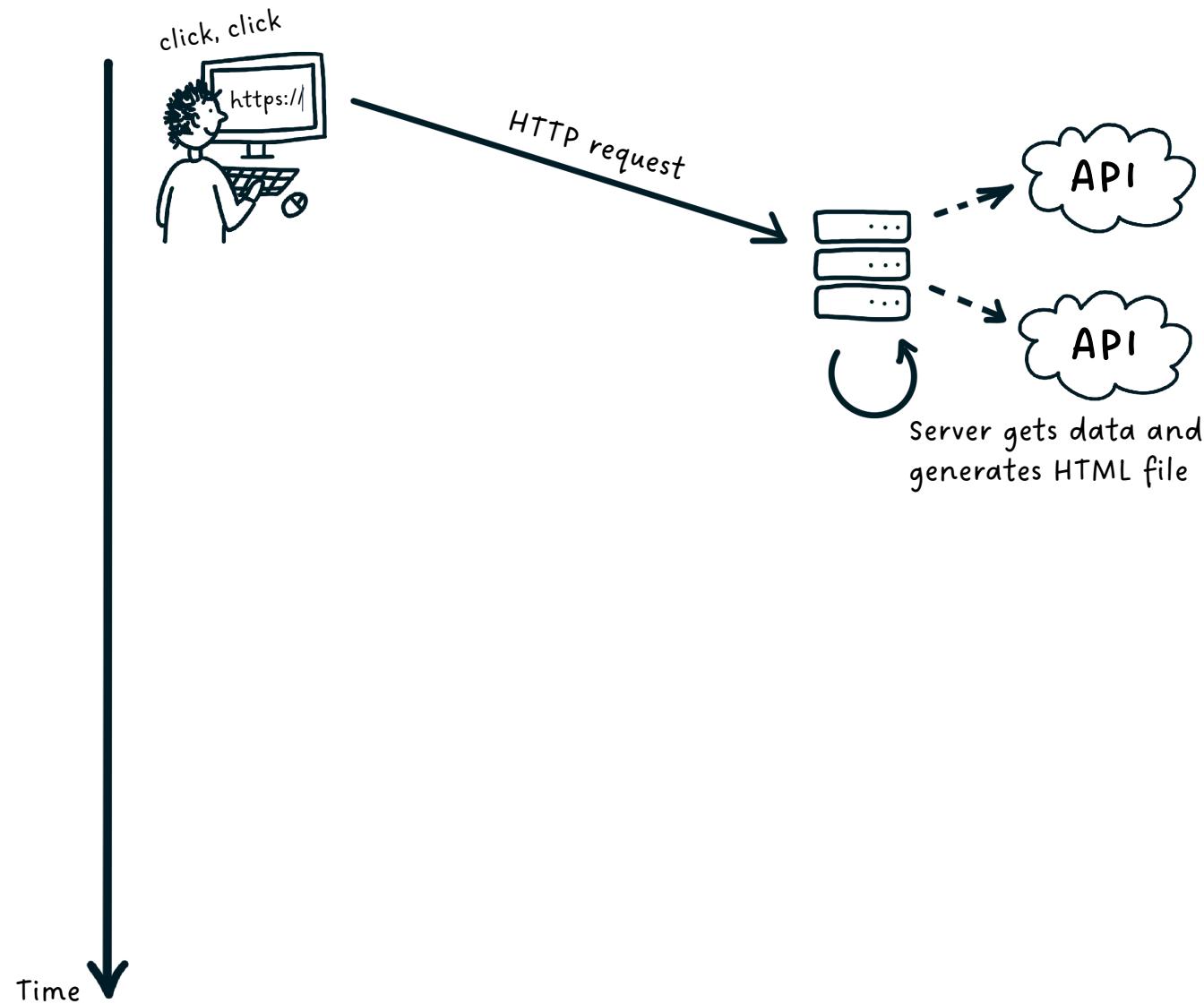
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- Remix got open-sourced in 2021 by Micheal Jackson

Back to the roots with fullstack frameworks

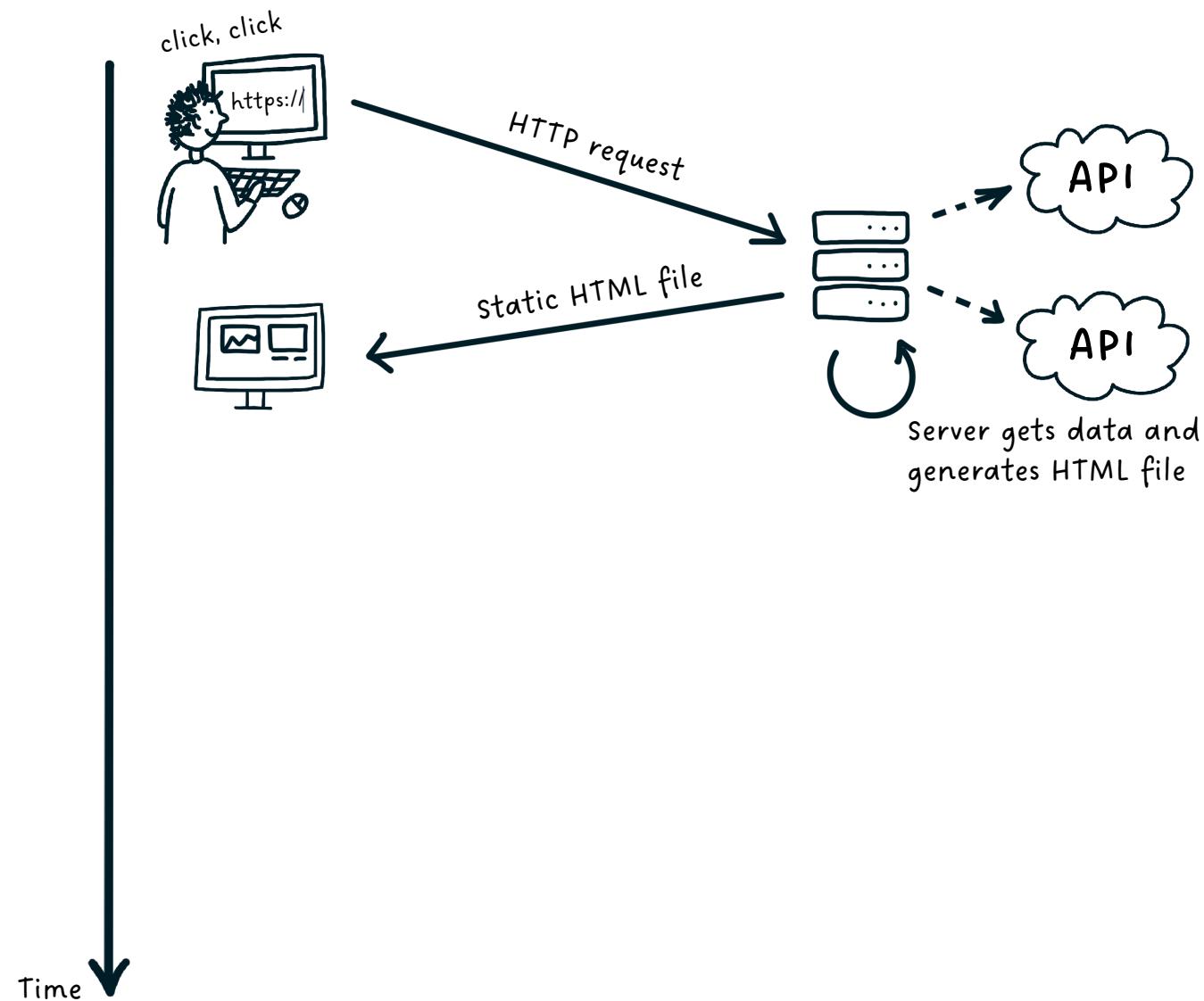
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- Progressive Enhancement and close to HTML5 standards

React Remix: Server-side rendering with Hydration

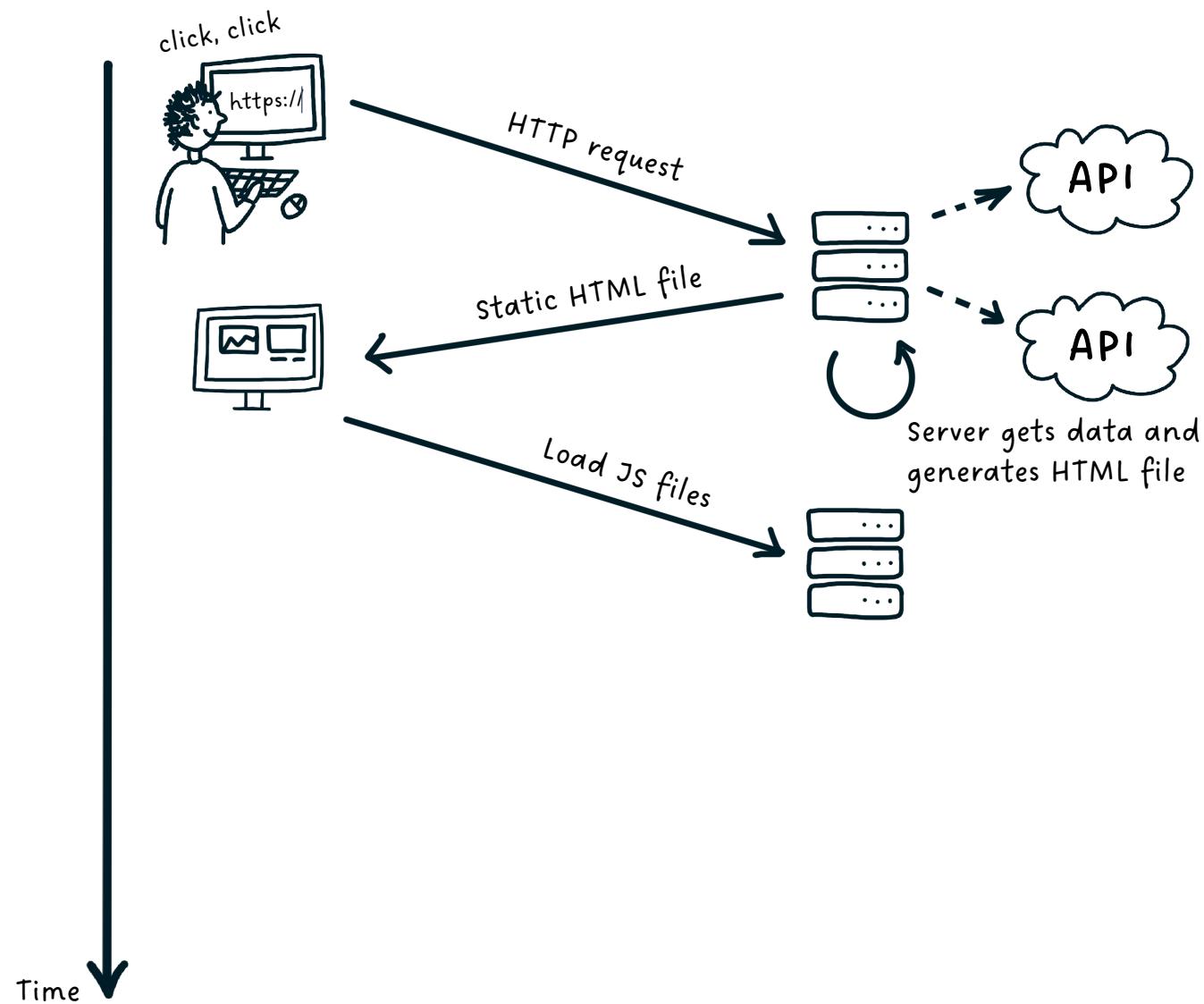
React Remix: Server-side rendering with Hydration



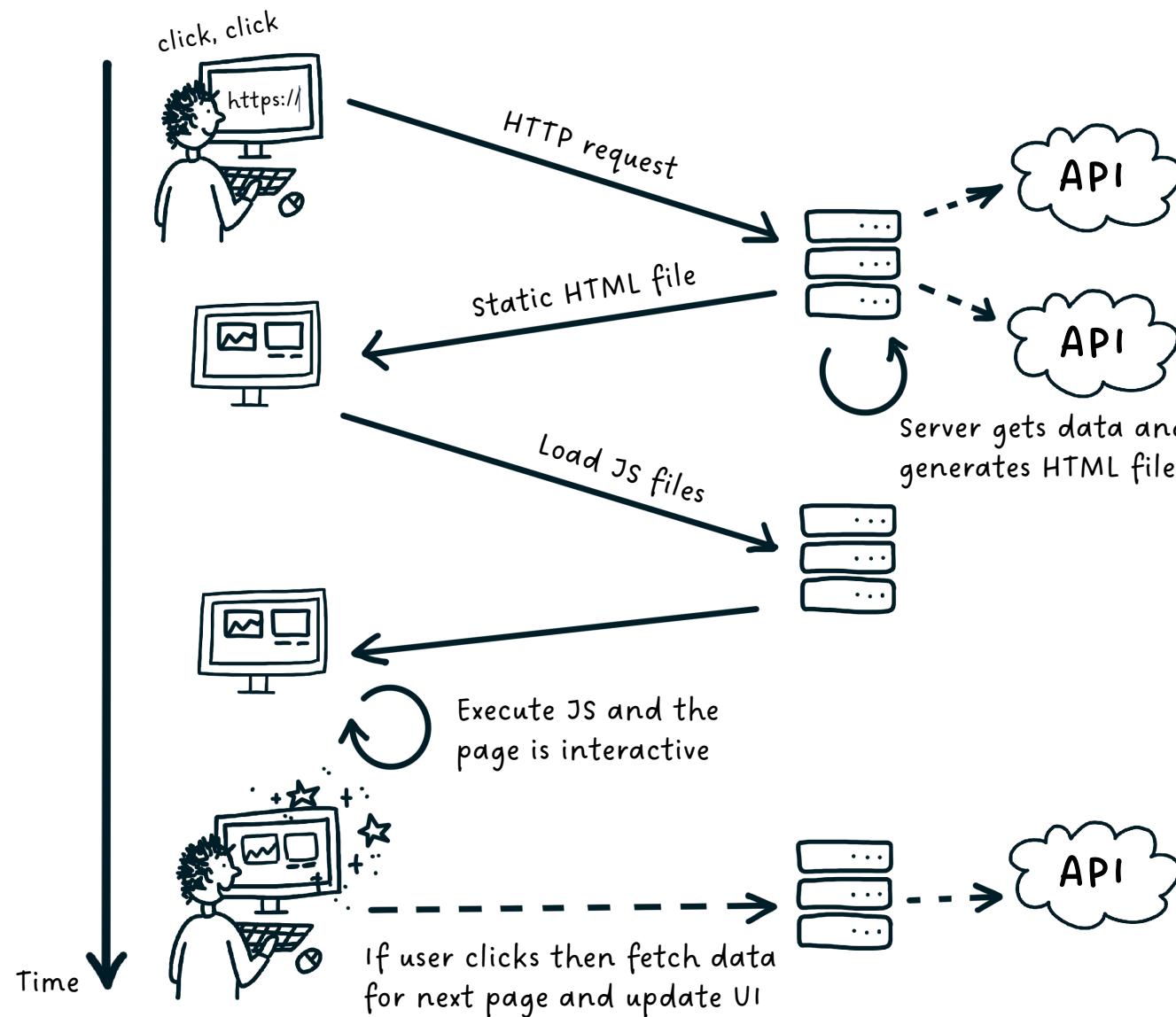
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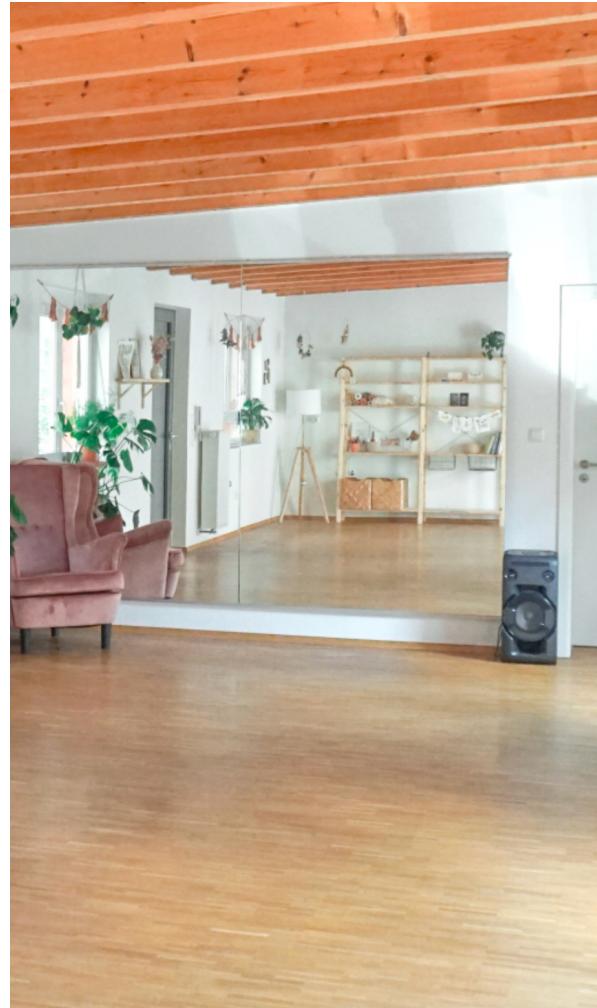
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React Remix: Server-side rendering with Hydration



Example: Booking an event room



Meine Buchung

Gib den Wunschzeitraum für Deine Veranstaltung ein.
Prüfe mit einem Klick ob sie verfügbar ist.

Von

TT.MM.JJJJ, --:--

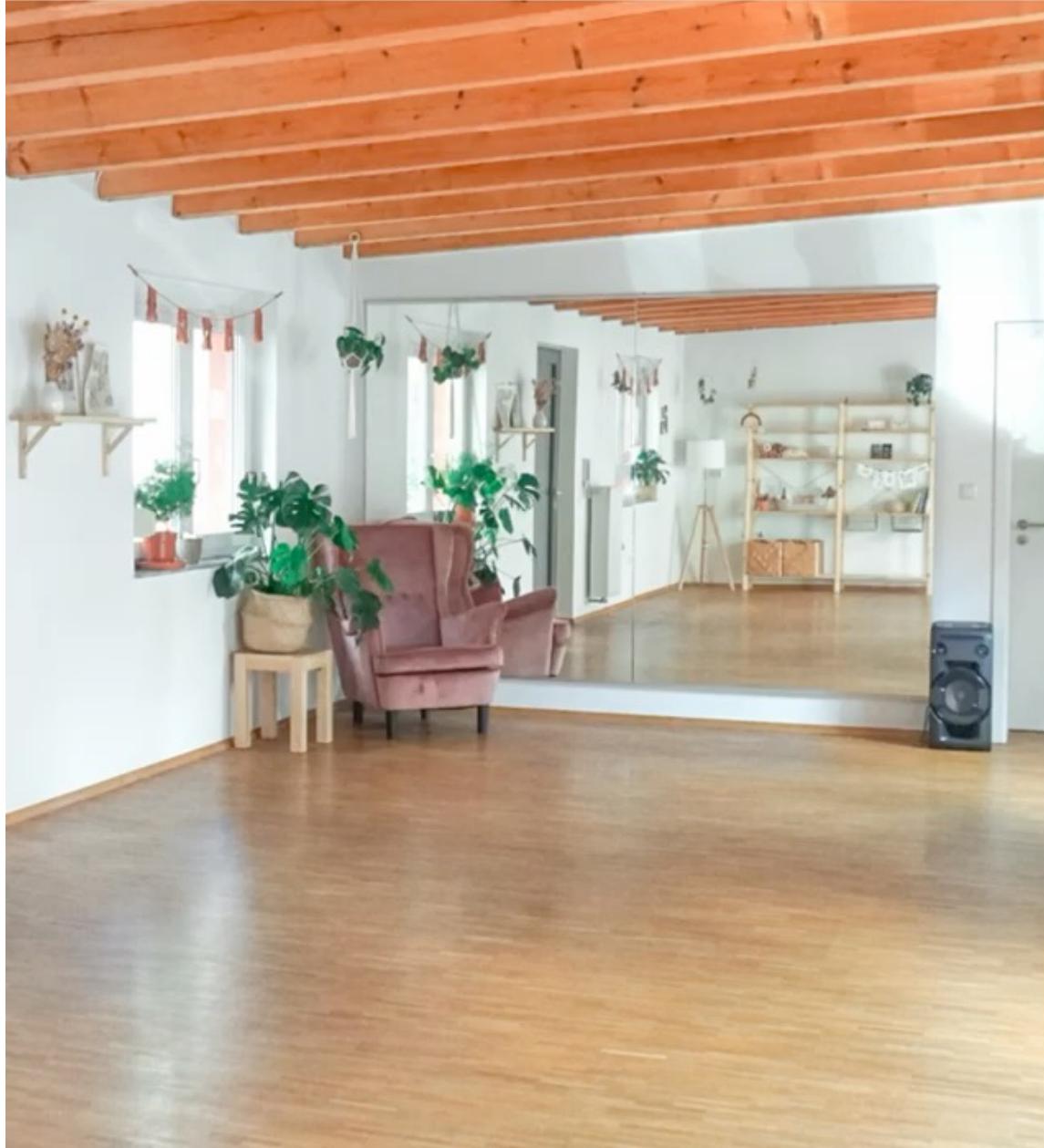
Bis

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[Verfügbarkeit prüfen](#)

[Impressum](#) | [Datenschutz](#)

View on Github <https://github.com/sonjafeitsch/meine-nische-booking>



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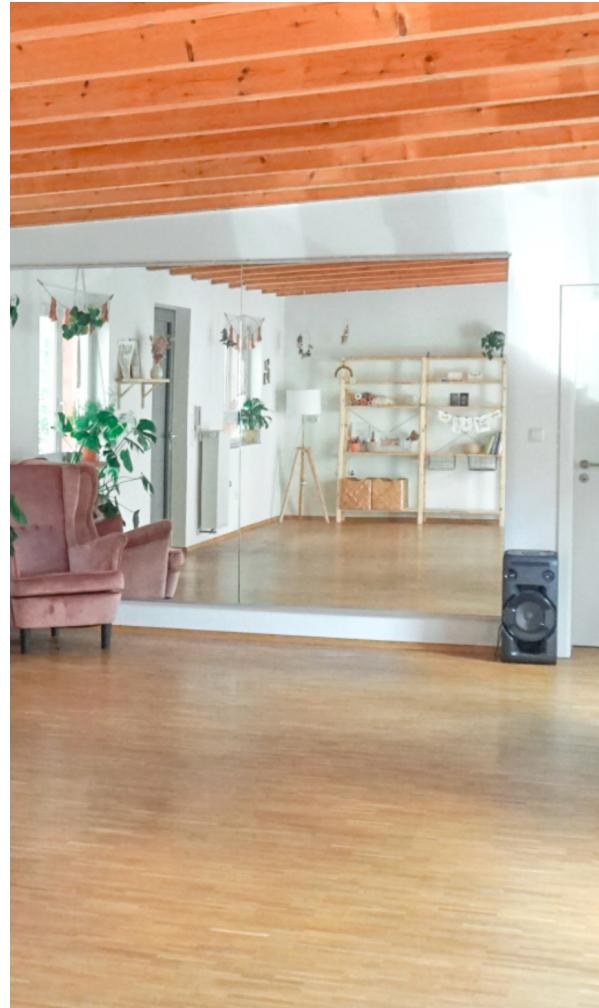
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How to handle user
interaction?

[Impressum](#) | [Datenschutz](#)

View on Github <https://github.com/sonjafeitsch/meine-nische-booking>

Remix: Handle user interaction

Structure of _index.tsx

```
function IndexPage({ error }: { error?: string }) {
  const { state } = useNavigation();
  const actionData = useActionData<typeof action>();

  return (
    <>
      <Form method="post">
        <TextField label="Von" id="start" name="start" type="datetime-local" />
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          {state === "submitting"
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export async function action({ request }: ActionArgs) {
  const formData = await request.formData();
  const start = formData.get("start");
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  if (!start || !end) {
    return json({ events: [] });
  }

  invariant(typeof start === "string", "Startdatum muss ein Text sein.");
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Remix: Handle user interaction

Handle loading state of form

Render form

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action is called when form is submitted, form values are sent via POST method

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Client

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Server

What makes a SPA so powerful?

State management: the glitter dust of an interactive SPA

The state is an important part of what makes the application dynamic and interactive.

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And with Remix? 🤔

No more state management 😱

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Possible Solution: store state of different views in URL

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Other solutions:

- Cookies
- LocalStorage
- Remix offers helpers for form submission and validation error state

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Developing with Remix feels like
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Developing with Remix feels like
web development 15 years ago
– **but with more comfort**

Developing with Remix feels like web development 15 years ago – but with more comfort

- Easy setup & easy deployment
- Good framework for simple web apps & SEO optimized applications
- Simply add some code around the existing "server side view" without changing how it works fundamentally
- Differs from classic React and you have to reconsider common patterns



A group of developers discussing whether they should implement a single page application or a server side application • generated by [Midjourney](#)

Closing thoughts

- Fullstack frameworks add more variety to develop applications
- Consider type of application: static site, mostly static or dynamic web app
- What are the use cases and who should bear the costs?