inertia x rails = 🖖

How to build modern monolithic SPAs 😇

Let's start our exploration \rightarrow



It allows you to build

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It allows you to build fully client-side rendered SPA, without the complexity.

It allows you to build **fully client-side rendered SPA**, **without the complexity**.

It allows you to build **fully client-side rendered SPA**, **without the complexity**. By leveraging existing server-side patterns that you already know & love.

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- Write react/vue/svelte components while sticking to rails conventions

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Think of inertia.js as the glue between your Rails backend and the JS frontend of your choice (react, vue, svelte..).

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Think of inertia.js as the glue between your Rails backend and the JS frontend of your choice (react, vue, svelte..).

Allowing you to leverage the JS native ecosystem rails is still missing out on.

A new approach to building classic server-driven web apps

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- Click an inertia powered <Link> or submit a form with inertia <Router> → intercepted, made via
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- Server returns JSON (component name + props) instead of HTML
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Smooth SPA experience 🥟

Regular request / response cycle rendering HTML

1 REQUEST
2 GET: http://showcase.stellaire.studio/startup
3 Accept: text/html, application/xhtml+xml

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1 RESPONSE
2 HTTP/1.1 200 OK
3 Content-Type: text/html; charset=utf=
```

```
1 RESPONSE
2 HTTP/1.1 200 OK
3 Content-Type: text/html; charset=utf-8
```

```
RESPONSE
HTTP/1.1 200 OK
Content-Type: text/html; charset=utf-8
      <title>Startups showcase</title>
      <link href="/css/app.css" rel="stylesheet">
      <script src="/js/app.js" defer></script>
  </head>
```

```
RESPONSE
HTTP/1.1 200 OK
Content-Type: text/html; charset=utf-8
              "description": "Because each second counts.",
              "preview image url": "/images/startups/1.jpg"
              "id": 2,
              "name": "kwali",
              "description": "The best after sale service you will ever give.",
              "preview image url": "/images/startups/2.jpg"
          "filters": {
            "sort": "newest"
        "url": "/startups",
        "version": "c32b8e4965f418ad16eaebba1d4e960f"
      }'></div>
```

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Under the hood - Subsequent Visits

```
1 REQUEST
2 GET: /startups/1
3 X-Inertia: true
4 X-Inertia-Version: c32b8e.
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```
REQUEST
GET: /startups/1
X-Inertia: true
RESPONSE
HTTP/1.1 200 OK
Content-Type: application/json
   "component": "Startup",
   "props": {
    "startup": {
     "id": 1,
      "name": "Astreinte Vitale",
      "description": "Because each second counts.",
      "preview image url" "/images/startups/1.jpg",
      "team_members": [ ...]
   "url": "/startups/1",
   "version": "c32b8e ... '
```

inertia intercepts the request and returns a JSON response

Documentation

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REQUEST
GET: /startups/1
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RESPONSE
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Under the hood - Protocol flow

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This will:

- Set up vite.js for asset bundling
- Configure TypeScript (optional)
- Install Tailwind CSS (optional)
- Setup the rails app to work with inertia
- Set up example route, controller & view component

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// app/frontend/entrypoints/application.js
import { createInertiaApp } from '@inertiajs/react'
import { createRoot } from 'react-dom/client'

createInertiaApp({
    resolve: (name) ⇒ {
        const pages = import.meta.glob('../pages/**/*.jsx', { eager: true })
        return pages[`../pages/${name}.jsx`]
    },
    setup({ el, App, props }) {
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```

```
startups = Startup.
 featured.
 with attached preview image
render inertia: 'Startups/Index', props: {
 featured startups: startups.as json(
    include: [:id, :name, :description],
   methods: [:preview image url]
startup = Startup.
 with attached preview image.
 find(params[:id])
render inertia: 'Startups/Show', props: {
 startup: startup.as json(
   methods: [:preview image url]
```

```
startups = Startup.
 featured.
 with attached preview image
render inertia: 'Startups/Index', props: {
 featured_startups: startups.as_json(
    include: [:id, :name, :description],
   methods: [:preview image url]
```

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render inertia: 'Startups/Index', props: {
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```

Frontend components

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w/ react

Frontend components

w/react

```
import { Head, Link } from '@inertiajs/react'
export default function Index({ featured startups }) {
     <Head title="Our startups" />
        <h1>0ur startups</h1>
        <div className="grid ...">
          {featured startups.map(startup ⇒ (
            <Link
              key={startup.id}
              href={`/startups/${startup.id}`}
                  src={startup.preview image url}
                  alt={startup.title}
              </div>
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```
<h1>0ur startups</h1>
 <div className="grid ...">
    {featured_startups.map(startup ⇒ (
      <Link
       key={startup.id}
        href={`/startups/${startup.id}`}
            src={startup.preview_image_url}
            alt={startup.title}
        </div>
        <h2>{startup.title}</h2>
      </Link>
 </div>
</div>
```

```
{featured_startups.map(startup ⇒ (
</div>
```

```
<Link
 key={startup.id}
 href={`/startups/${startup.id}`}
```

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src={startup.preview_image_url}
      alt={startup.title}
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                  src={startup.preview image url}
                  alt={startup.title}
              </div>
```

Smart asset versioning

Smart asset versioning

```
REQUEST:
GET: /startups/1
X-Inertia: true
X-Inertia-Version: [old-version]

RESPONSE:
409 Conflict
X-Inertia-Location: /startups/1
```

Smart asset versioning

```
REQUEST:
GET: /startups/1
X-Inertia: true
X-Inertia-Version: [old-version]

RESPONSE:
409 Conflict
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```

Documentation

Performance: partial reloads

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REQUEST

GET: /startups X-Inertia: true X-Inertia-Partial-Data: startups

X-Inertia-Partial-Component: Startups

Performance: partial reloads

```
REQUEST

GET: /startups

X-Inertia: true

X-Inertia-Partial-Data: startups

X-Inertia-Partial-Component: Startups

RESPONSE

Content-Type: application/json
```

Performance: partial reloads

```
REQUEST
GET: /startups
X-Inertia: true
X-Inertia-Partial-Data: startups
RESPONSE
Content-Type: application/json
  "component": "Startups",
  "props": {
    "startups": [ ... ] // included
```

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REQUEST
GET: /startups
X-Inertia: true
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RESPONSE
Content-Type: application/json
  "component": "Startups",
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Documentation

More goodies

• Shared data across components

- Shared data across components
- Deferred props loading

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- Link prefetching

- Shared data across components
- Deferred props loading
- Link prefetching
- Classic rails html.erb views still work (perfect for devise out of the box setup)

```
<div className="grid ...">
  {featured startups.map(startup ⇒ (
   <Link
     key={startup.id}
     href={`/startups/${startup.id}`}
          src={startup.preview image url}
          alt={startup.title}
     </div>
     <h2>{startup.title}</h2>
   </Link>
</div>
```

```
href={`/startups/${startup.id}`}
```

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```

There's a neat solution for this:

There's a neat solution for this: JS from routes

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```
import { startups } from "@/path helpers";
<div className="grid ...">
 {featured_startups.map(startup ⇒ (
   ink
     key={startup.id}
     href={startups.show.path(startup)}
         src={startup.preview image url}
          alt={startup.title}
     </div>
     <h2>{startup.title}</h2>
    </Link>
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```
import { startups } from "@/path_helpers";
```

Additionnal batteries

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<Link
  key={startup.id}
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```

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href={startups.show.path(startup)}
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Additionnal batteries

There's a neat solution for this: JS from routes

```
href={startups.show.path(startup)} We're home now 🤗
```

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Leverage shadon/ui slick & modern components

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- Setup complex frontend interactions (slidesheet, drawer, etc)

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- Leverage shadon/ui slick & modern components
- Setup complex frontend interactions (slidesheet, drawer, etc)
- Never write boilerplate JS yourself ever again

Focus on what matters most.

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Building your product features,

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leveraging the full frontend native DX & UX,

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Now, let's go and build something great #

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Questions?