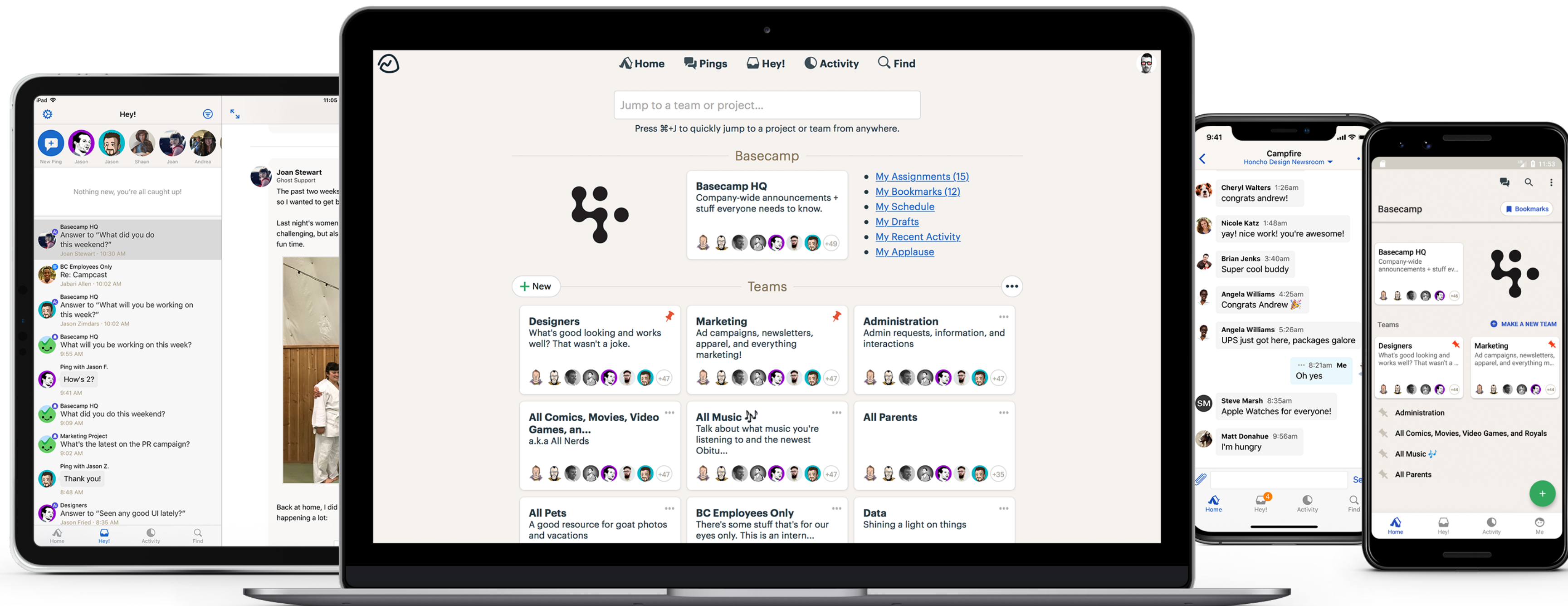
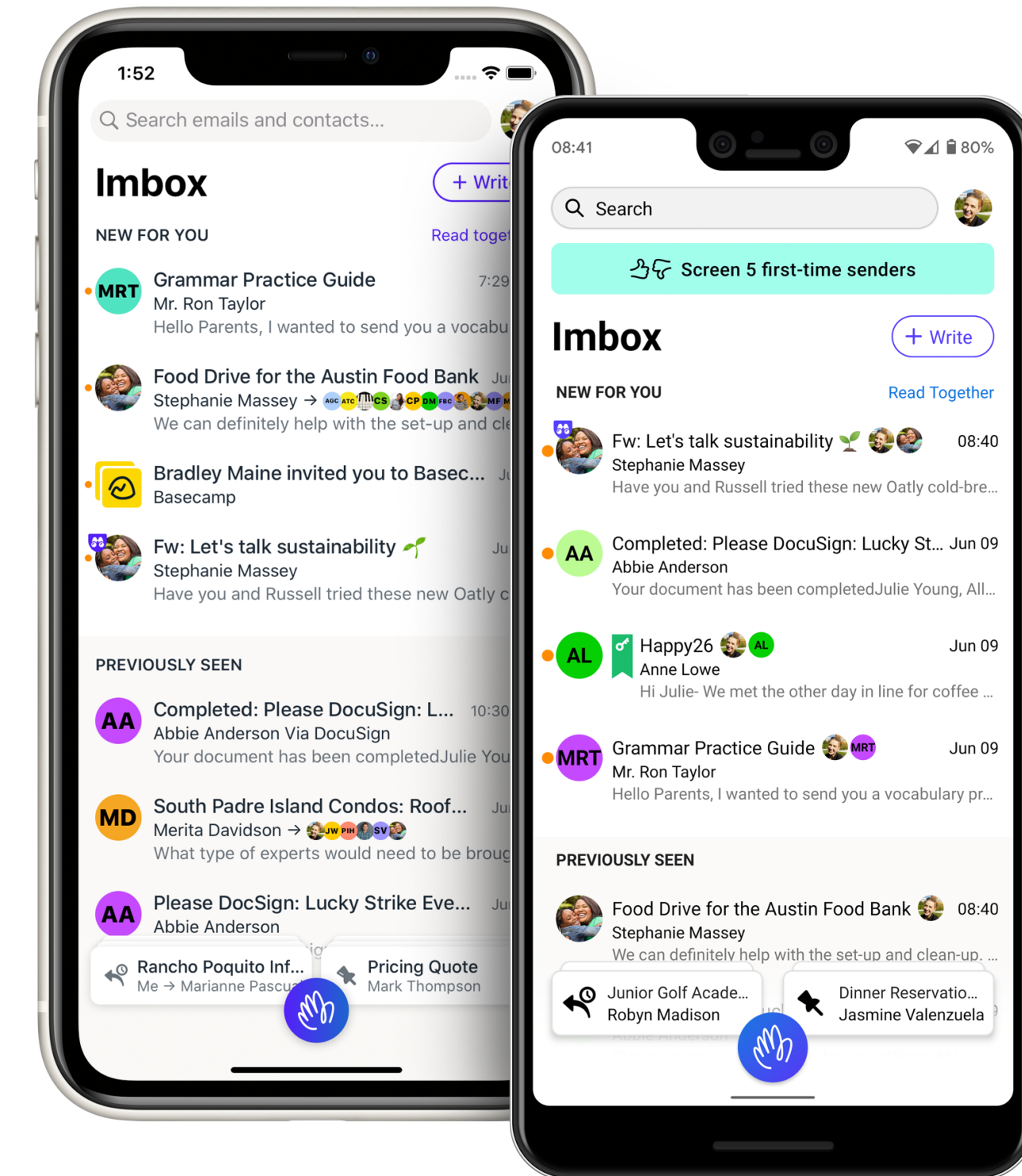
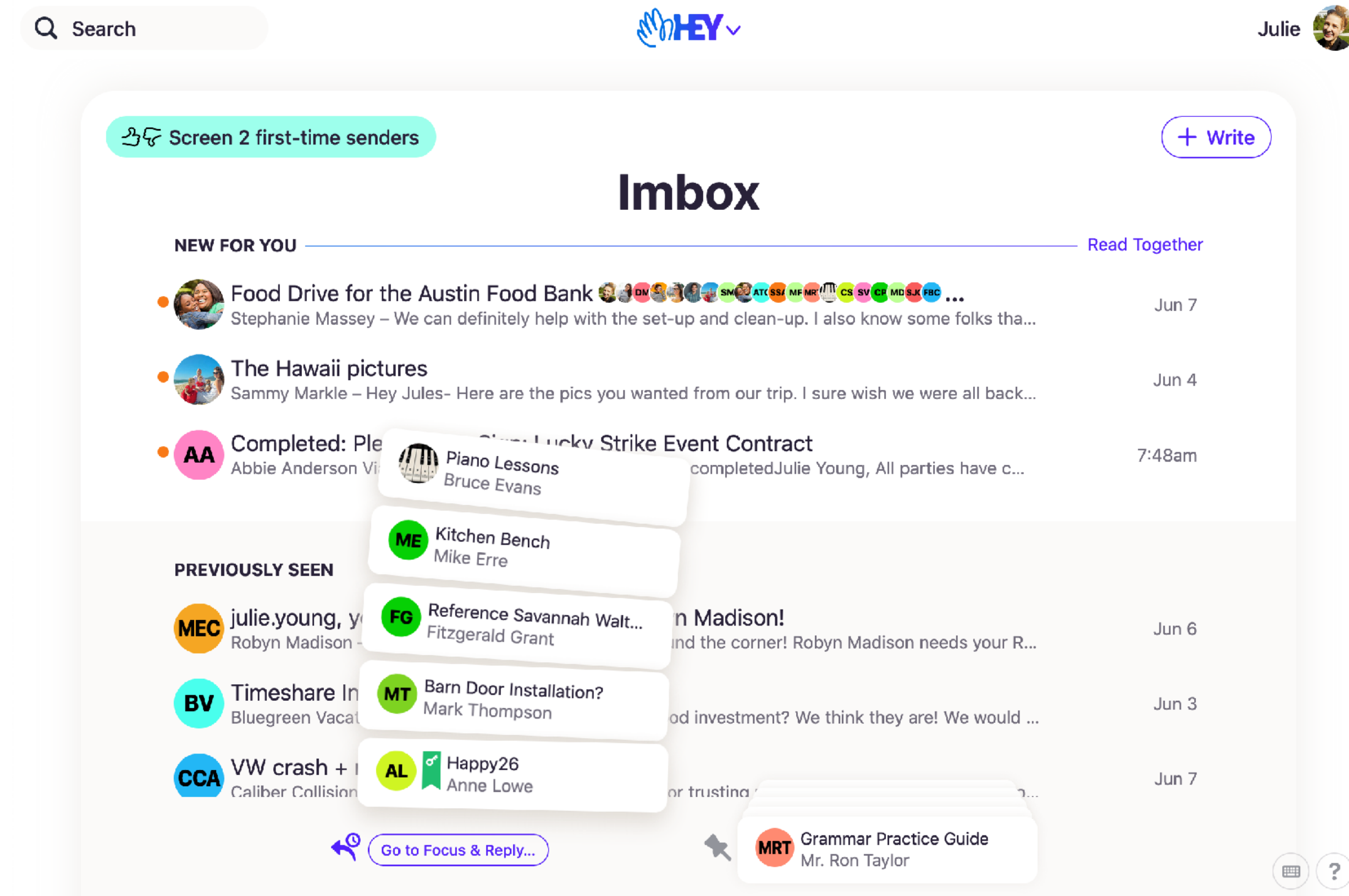


Fighting the merchants of complexity

Jorge Manrubia Díez April 2021



<https://basecamp.com>



<https://hey.com>



Complexity

Single Page Applications

“In general, many users find that **SPAs feel faster**, more responsive and offer a more straightforward experience than traditional multi-page apps.”

“It's also worth noting that SPAs are not only more convenient for the end-user, but **developers typically find them easier** to build and deploy than traditional ecommerce websites.”

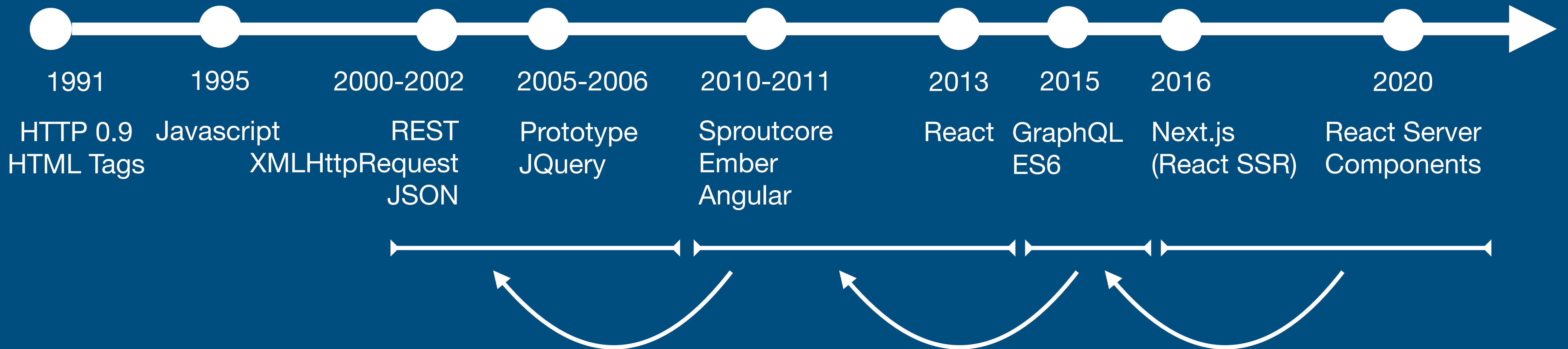
Why Single Page Apps Are the Hottest Trend of 2020

Faster?

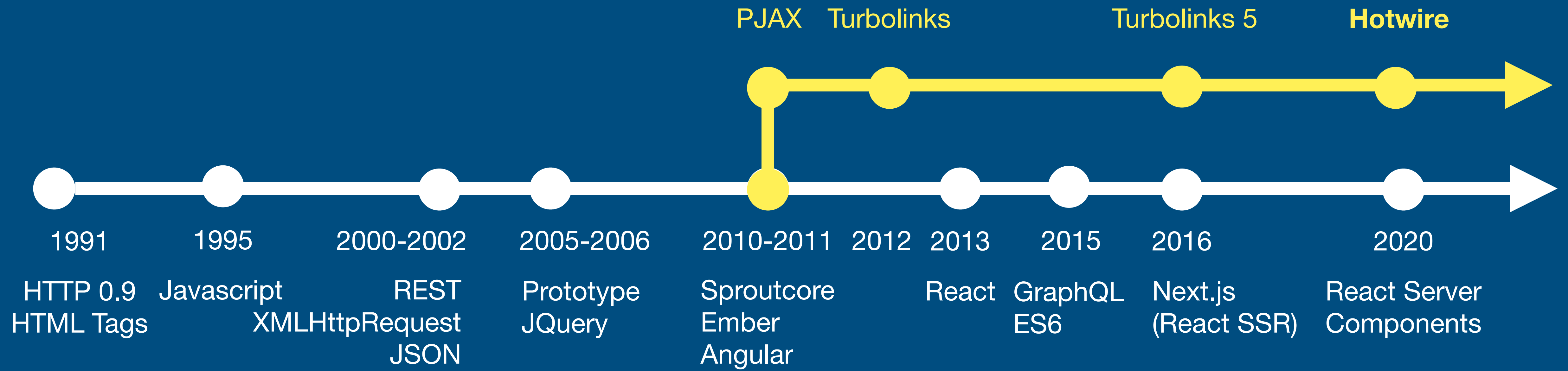
Easier to develop?

Additional app, with special data-interchange needs, that needs to manage its state, presentation and integrity in a persistent process running on an unreliable environment, that requires careful planning to be performant.

How did we end up here?



Problem restatement



Usage surface

<https://hotwire.dev>

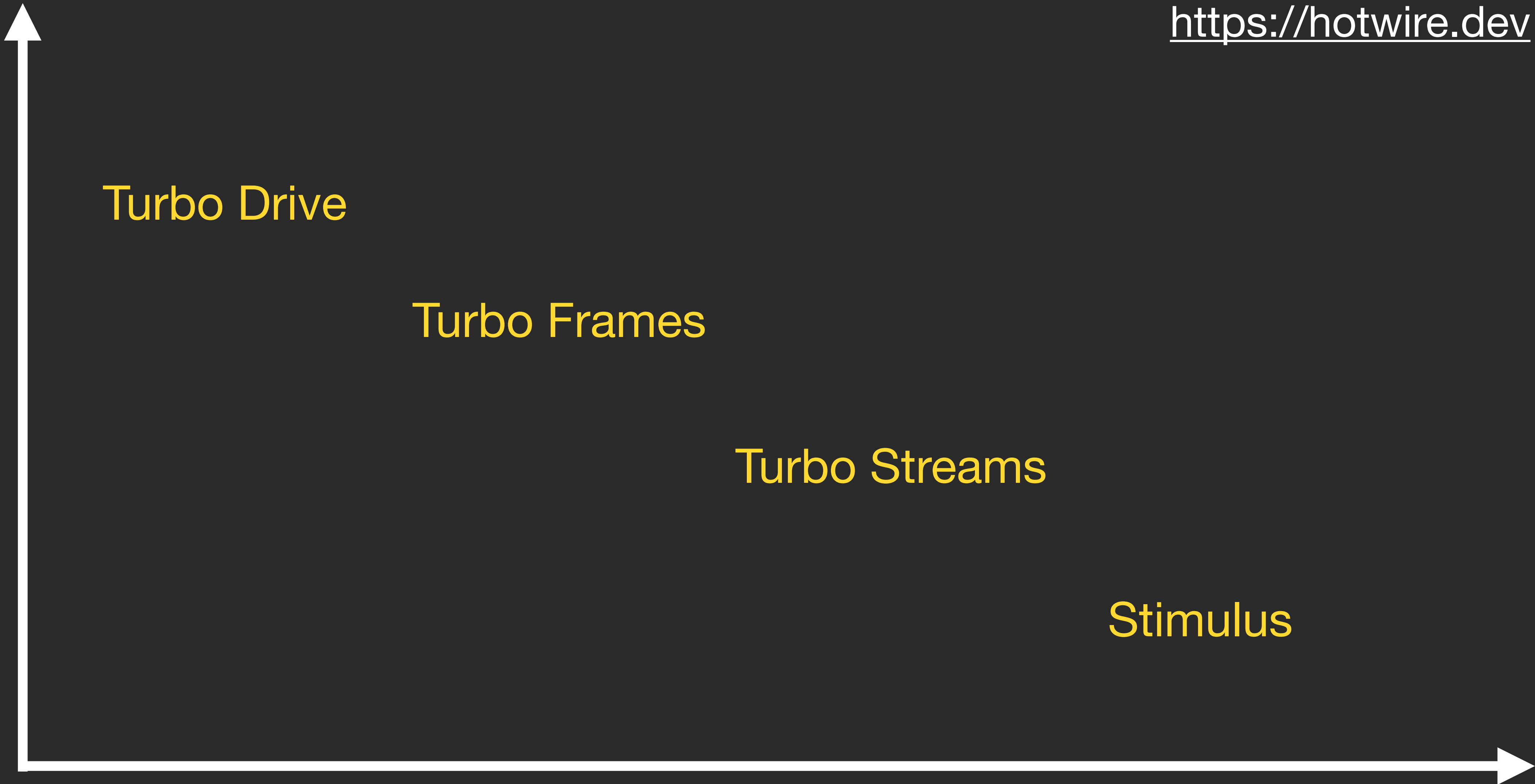
Turbo Drive

Turbo Frames

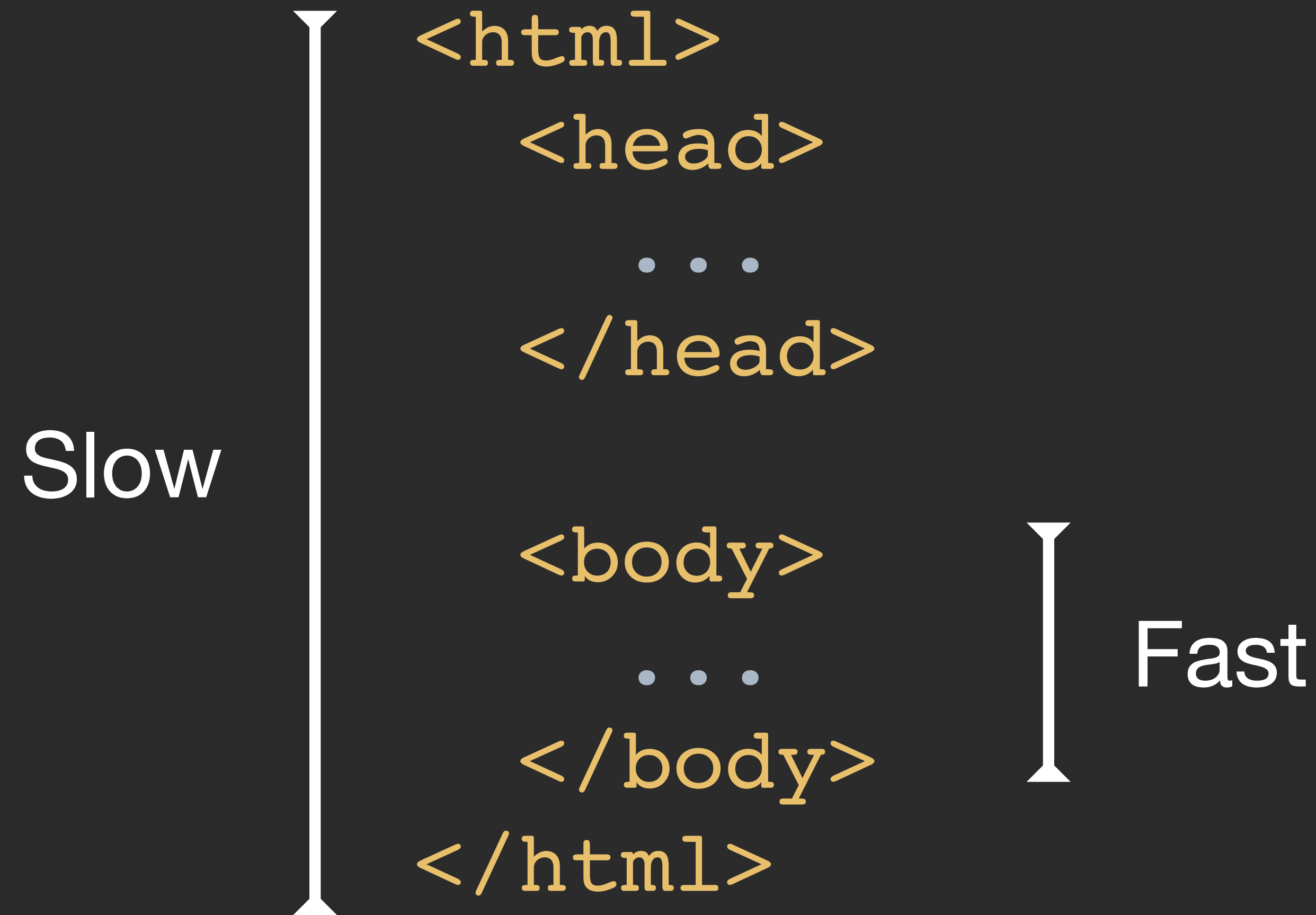
Turbo Streams

Stimulus

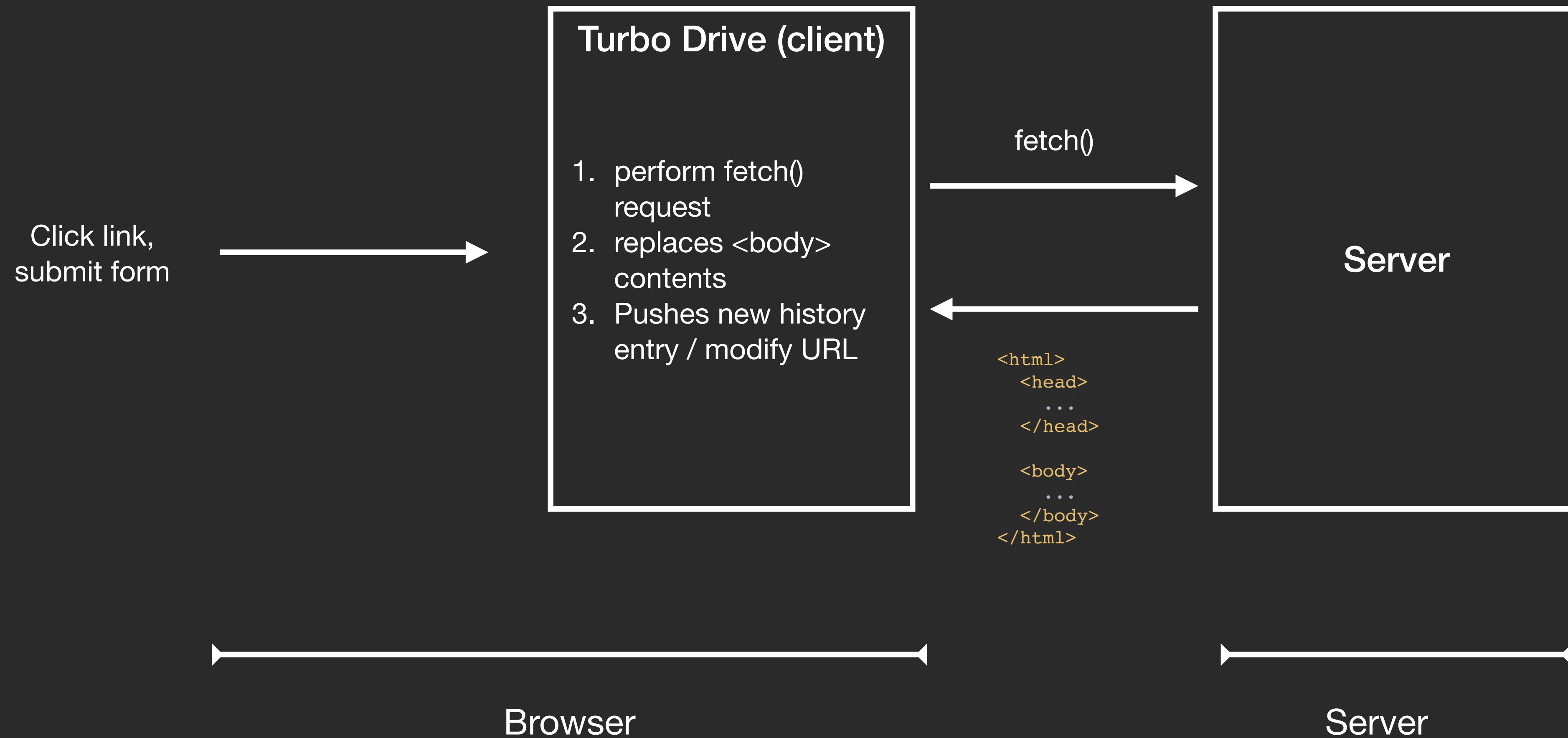
Interactivity needs



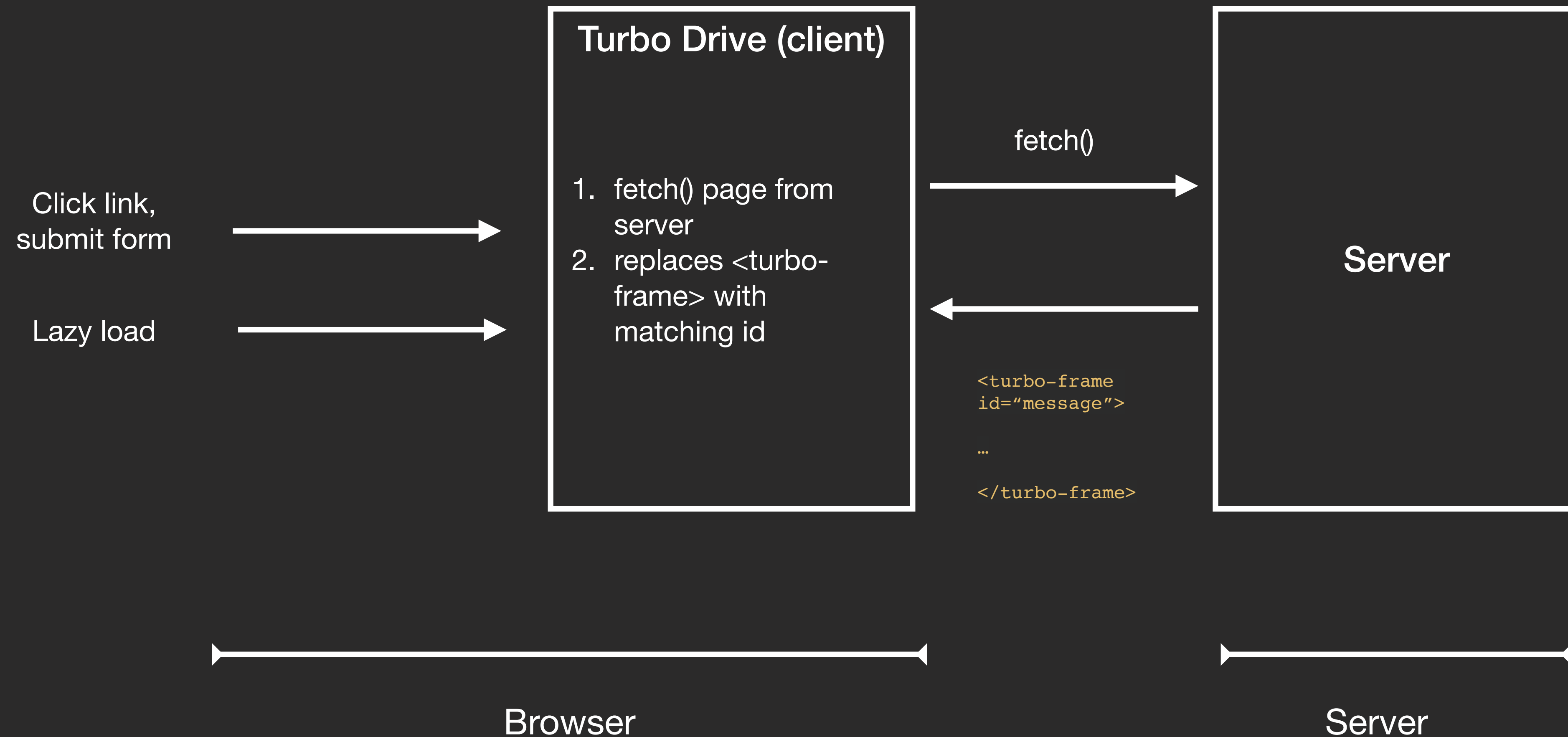
Replacement in a persistent process (without full page reload)



Turbo Drive: fast navigation



Turbo Frame: update parts of page



me_controller.rb

```
class MeController < ApplicationController
  def show
    @users = Current.identity.users.accessible
  end
end
```

me/show.html.erb

```
<div class="sheet sheet--flat@mobile">
  <turbo-frame id="my_stuff" target="_top">
    ...
    <nav class="...">
      <% @users.each do |user| %>
        ...
        <% end %>
      </nav>
    </turbo-frame>
  </div>
```

Turbo Streams: fine-grained predefined updates

```
<turbo-stream action="append" target="messages">
  <template>
    ...
  </template>
</turbo-stream>
```

```
<turbo-stream action="prepend" target="messages">
  <template>
    ...
  </template>
</turbo-stream>
```

```
<turbo-stream action="update" target="unread_count">
  <template>
    ...
  </template>
</turbo-stream>
```

```
<turbo-stream action="remove" target="message_1">
  <template>
    ...
  </template>
</turbo-stream>
```

clearances_controller.rb

```
class ClearancesController < ApplicationController
  ...
  def update
    ...
    respond_to do |format|
      format.turbo_stream
      format.html { redirect_to clearances_url }
    end
  end
  ...
end
```

update.turbo_stream.erb

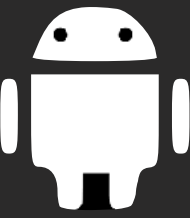
```
<%= turbo_stream.remove(@clearance) %>
```

Turbo Native: hybrid apps



4.7

4047 reviews



4.7

1082 reviews

~~Additional app, with special data~~
~~interchange needs~~, that needs to manage
its ~~state, presentation and integrity~~ in a
persistent process running on an
~~unreliable environment~~, that requires
careful planning to be ~~performant~~.

Development costs

Most of the benefit
Fraction of the effort

jorge@hey.com

<https://jorgemanrubia.com>