Embed a Phoenix page into WordPress

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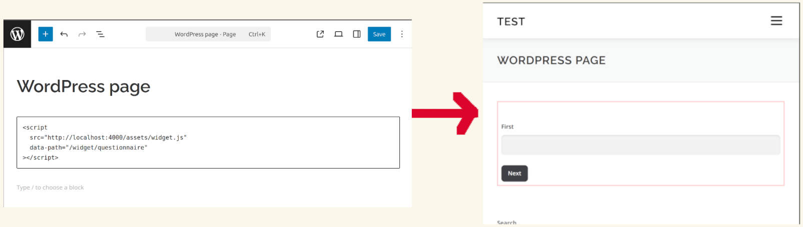
Goal

- Embed a small html sniped into WP that renders the LiveView page.



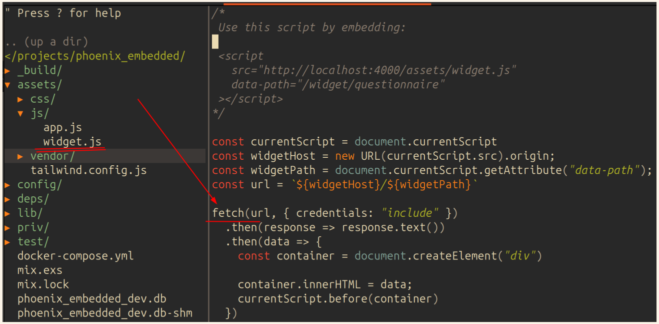
```
<script
  src="http://localhost:4000/assets/widget.js"
  data-path="/widget/questionnaire"
></script>
```

Steps needed to render a LiveView page

- Load html though a normal http request.
- Mound LiveSocket through a js script.

Fetch html

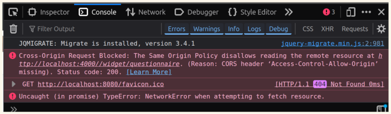
- Fetch html.
- Create container.
- Add fetched html as innerHtml to the container.
- Attach container above script.



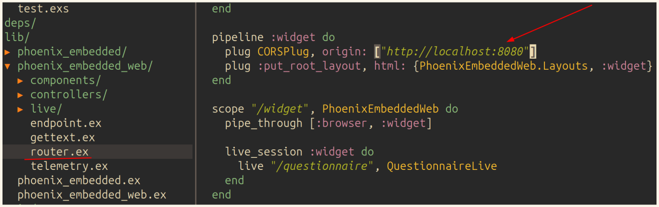
```
" Press ? for help

.. (up a dir)
</projects/phoenix_embedded/
▸ _build/
▾ assets/
  ▸ css/
  ▾ js/
      app.js
      widget.js
  ▸ vendor/
    tailwind.config.js
▸ config/
▸ deps/
▸ lib/
▸ priv/
▸ test/
  docker-compose.yml
  mix.exs
  mix.lock
  phoenix_embedded_dev.db
  phoenix_embedded_dev.db-shm
```

```
/*
 Use this script by embedding:

 <script
   src="http://localhost:4000/assets/widget.js"
   data-path="/widget/questionnaire"
 ></script>
*/

const currentScript = document.currentScript
const widgetHost = new URL(currentScript.src).origin;
const widgetPath = document.currentScript.getAttribute("data-path");
const url = `${widgetHost}/${widgetPath}`

fetch(url, { credentials: "include" })
  .then(response => response.text())
  .then(data => {
    const container = document.createElement("div")

    container.innerHTML = data;
    currentScript.before(container)
  })
```

Fix cors error



```
JQMIGRATE: Migrate is installed, version 3.4.1                    jquery-migrate.min.js:2:981
Cross-Origin Request Blocked: The Same Origin Policy disallows reading the remote resource at h
ttp://localhost:4000//widget/questionnaire. (Reason: CORS header ‘Access-Control-Allow-Origin’
missing). Status code: 200. [Learn More]
GET http://localhost:8080/favicon.ico                           [HTTP/1.1 404 Not Found 0ms]
Uncaught (in promise) TypeError: NetworkError when attempting to fetch resource.
```

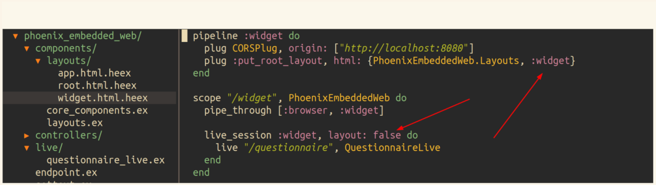


```
  test.exs
deps/
lib/
▶ phoenix_embedded/
▼ phoenix_embedded_web/
  ▶ components/
  ▶ controllers/
  ▶ live/
    endpoint.ex
    gettext.ex
    router.ex
    telemetry.ex
  phoenix_embedded.ex
  phoenix_embedded_web.ex
```

```
  end

  pipeline :widget do
    plug CORSPlug, origin: ["http://localhost:8080"]
    plug :put_root_layout, html: {PhoenixEmbeddedWeb.Layouts, :widget}
  end

  scope "/widget", PhoenixEmbeddedWeb do
    pipe_through [:browser, :widget]

    live_session :widget do
      live "/questionnaire", QuestionnaireLive
    end
  end
```

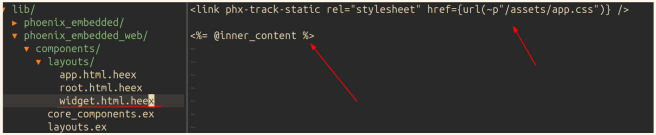
Use separate layout

- Layout without header or body.
- Without LiveView layout.
- With stylesheet link.



```
▼ phoenix_embedded_web/
  ▼ components/
    ▼ layouts/
        app.html.heex
        root.html.heex
        widget.html.heex
      core_components.ex
      layouts.ex
  ▸ controllers/
  ▼ live/
      questionnaire_live.ex
    endpoint.ex
```

```
pipeline :widget do
  plug CORSPlug, origin: ["http://localhost:8080"]
  plug :put_root_layout, html: {PhoenixEmbeddedWeb.Layouts, :widget}
end

scope "/widget", PhoenixEmbeddedWeb do
  pipe_through [:browser, :widget]

  live_session :widget, layout: false do
    live "/questionnaire", QuestionnaireLive
  end
end
```

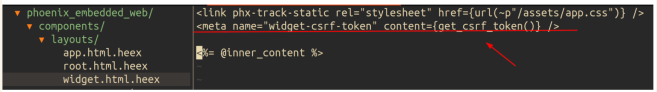


```
▼ lib/
  ▸ phoenix_embedded/
  ▼ phoenix_embedded_web/
    ▼ components/
      ▼ layouts/
          app.html.heex
          root.html.heex
          widget.html.heex
        core_components.ex
        layouts.ex
```

```
<link phx-track-static rel="stylesheet" href={url(~p"/assets/app.css")} />

<%= @inner_content %>
```

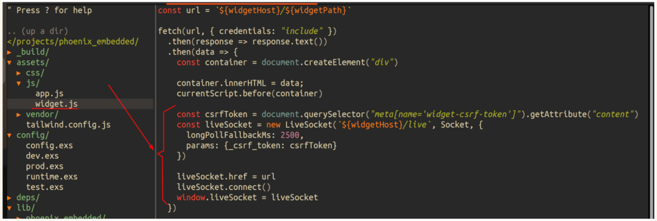
Mount LiveSocket

- Copy LiveSocket code from app.js.
- Add csrf token to layout.



```
▾ phoenix_embedded_web/
  ▾ components/
    ▾ layouts/
        app.html.heex
        root.html.heex
        widget.html.heex
```

```
<link phx-track-static rel="stylesheet" href={url(~p"/assets/app.css")} />
<meta name="widget-csrf-token" content={get_csrf_token()} />

<%= @inner_content %>
~
~
```



```
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▸ _build/
▾ assets/
  ▸ css/
  ▾ js/
      app.js
      widget.js
  ▸ vendor/
    tailwind.config.js
▾ config/
    config.exs
    dev.exs
    prod.exs
    runtime.exs
    test.exs
▸ deps/
▾ lib/
```
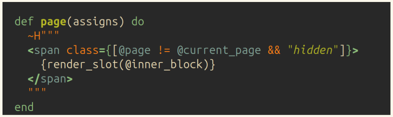
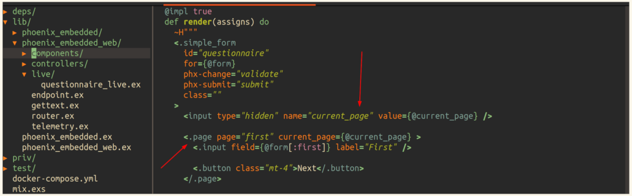

```
const url = `${widgetHost}/${widgetPath}`

fetch(url, { credentials: "include" })
  .then(response => response.text())
  .then(data => {
    const container = document.createElement("div")

    container.innerHTML = data;
    currentScript.before(container)

    const csrfToken = document.querySelector("meta[name='widget-csrf-token']").getAttribute("content")
    const liveSocket = new LiveSocket(`${widgetHost}/live`, Socket, {
      longPollFallbackMs: 2500,
      params: {_csrf_token: csrfToken}
    })

    liveSocket.href = url
    liveSocket.connect()
    window.liveSocket = liveSocket
  })
```

Multi step form

- Use one LiveView page.
- Hide/show parts when one clicks on next.
- Use global form to make reconnection work correctly.
- Use hidden fields for internal assigns.



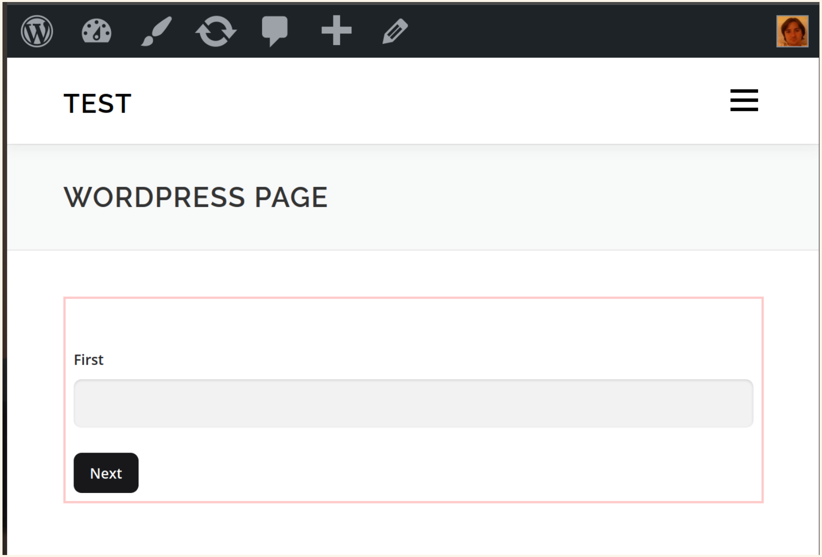
```
def page(assigns) do
  ~H"""
  <span class={[@page != @current_page && "hidden"]}>
    {render_slot(@inner_block)}
  </span>
  """
end
```



```
▸ deps/
▾ lib/
  ▸ phoenix_embedded/
  ▾ phoenix_embedded_web/
    ▸ components/
    ▸ controllers/
    ▾ live/
        questionnaire_live.ex
      endpoint.ex
      gettext.ex
      router.ex
      telemetry.ex
    phoenix_embedded.ex
    phoenix_embedded_web.ex
▸ priv/
▸ test/
  docker-compose.yml
  mix.exs
```

```
@impl true
def render(assigns) do
  ~H"""
  <.simple_form
    id="questionnaire"
    for={@form}
    phx-change="validate"
    phx-submit="submit"
    class=""
  >
    <input type="hidden" name="current_page" value={@current_page} />

    <.page page="first" current_page={@current_page} >
      <.input field={@form[:first]} label="First" />

      <.button class="mt-4">Next</.button>
    </.page>
```

Demo


TEST

WORDPRESS PAGE

First

Next

Debug

- Open external page.
- Open console.
- Paste something like the following in the console.

```
// remove current page content
main = document.querySelectorAll("main")[0]
new_main = document.createElement("main")
main.replaceWith(new_main)

// load LiveView page
script = document.createElement("script")
script.src = "http://localhost:4000/assets/widget.js"
script.setAttribute("data-path", "/widget/questionnaire")
new_main.appendChild(script)
```

Thank You!

Questions?

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