system.md 2024-05-01

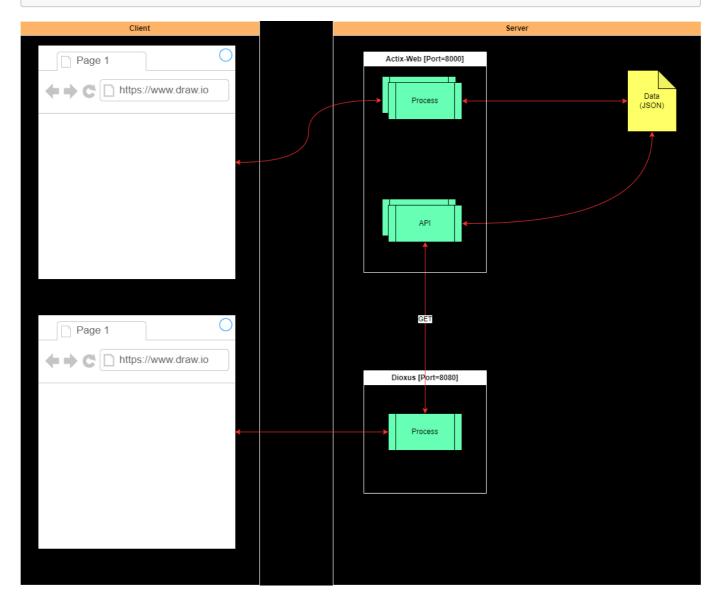
System Overview (システム構成)

As a framework for building web applications in Rust, he refers to a series of articles about Actix-Web and Dioxus. In this series, we need to call an API provided by an application in the same domain (built with Actix-Web) from a web application (built with Dioxus). However, since it is the same domain, when the process of calling is implemented after removing the constraint of CORS, a runtime exception occurs and the call cannot be made well.

RustでWebアプリケーションを構築するフレームワークとして、Actix-WebやDioxusに関する連載記事を参照している。

その連載の中で、あるWebアプリケーション(Dioxusで構築)から同一ドメインにあるアプリケーション(Actix-Webで構築)が提供するAPIを呼び出す必要がある。

しかし、同一ドメインであるため、CORSの制約を外したうえで、呼び出す処理を実装したところ、実行時例外が発生し、呼び出しがうまくできない状況。



Implementation (実装)

1. Calling API (API呼出)

system.md 2024-05-01

```
static BASE_API_URL: &str = "http://localhost:8000/api/posts";

pub async fn call_index() -> Result<ApiResponse, reqwest::Error> {
  let url = format!("{}", BASE_API_URL);
  reqwest::Client::new()
    .get(&url)
    .fetch_mode_no_cors()
    .send()
    .await
    .unwrap()
    .json::<ApiResponse>()
    .await
}
```

2. Provided API (API提供)

```
#[get("/posts")]
pub async fn api_index(query: web::Query<Queries>) -> impl Responder {
  info!("Called index API");
  let param = query.into_inner();
  let posts = data::get_all();
  let mut ary = Vec::new();
  for item in &posts {
    ary.push(item.clone());
  }
  let response = ApiResponse {
    status: "OK".to_string(),
    result: ResponseContent::Items(ary),
  };
  build_response(&param.format, &response)
}
```

Output Message (出力メッセージ)

1. Calling API (API呼出)

```
Uncaught Error: url parse
   at imports.wbg.__wbindgen_throw (dioxus-posts.js:1514:15)
   at wasm_bindgen::throw_str::h98dd5fad0a7aa6aa (dioxus-
posts_bg.wasm:0x4045b7)
   at <core::result::Result<T,E> as
wasm_bindgen::UnwrapThrowExt<T>>::expect_throw::h8bf1f712d43f2da6 (dioxus-
posts_bg.wasm:0x28ade0)
   at reqwest::wasm::client::fetch::{{closure}}::h52c37b8d8f401144 (dioxus-
posts_bg.wasm:0x8f145)
   at reqwest::wasm::request::RequestBuilder::send::
{{closure}}::hac8ab4d8e1c2241f (dioxus-posts_bg.wasm:0x1c3deb)
   at dioxus_posts5::data::call_index::{{closure}}::h41f15c75796fadc5
```

system.md 2024-05-01

```
(dioxus-posts_bg.wasm:0x100066)
    at dioxus_posts5::app::{{closure}}::{{closure}}::h015a59997d1d4e2a
(dioxus-posts_bg.wasm:0x1aa99f)
    at <core::pin::Pin<P> as
core::future::Future>::poll::h74e93854bbd5d8cf (dioxus-posts_bg.wasm:0x3d09c3)
    at
futures_util::future::FutureExt::poll_unpin::h34fb8f04c51ec5bb
(dioxus-posts_bg.wasm:0x3e4e0e)
    at dioxus_hooks::use_resource::use_resource::{{closure}}::{{closure}}::{{closure}}::{{closure}}:
```

2. Provided API (API提供)

[2024-05-01T01:46:23Z INFO actix_sample::handler] Called index API [2024-05-01T01:46:23Z INFO actix_web::middleware::logger] 127.0.0.1 "GET /api/posts HTTP/1.1" 200 1119 "http://localhost:8080/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36 Edg/124.0.0.0" 0.005452