

This represents a small web app illustrating microfrontends and microservices.

Technologies used are PHP and Vue. Those are dockerized and the requests from the frontend are sent to the gateway, which redirects the call to the appropriate microservice (vue1).

Also, I tried to implement Module Federation using Webpack and to implement 'vue2' project as a remote component, but as you can see in the printscreen below, the module did not want to install at all. I searched on every possible website for a solution, but no luck at this moment on this PC.

```
Administrator: Command Prompt
C:\Windows\system32>cd C:\xampp\htdocs\project-soa\vue1
C:\xampp\htdocs\project-soa\vue1>npm install --save-dev https://github.com/webpack/webpack#module-federation-plugin
npm ERR! code 1
npm ERR! The git reference could not be found
npm ERR! command git --no-replace-objects checkout module-federation-plugin
npm ERR! error: pathspec 'module-federation-plugin' did not match any file(s) known to git

npm ERR! A complete log of this run can be found in:
npm ERR!   C:\Users\coman\AppData\Local\npm-cache\_logs\2023-02-22T17_25_12_459Z-debug-0.log

C:\xampp\htdocs\project-soa\vue1>git clone https://github.com/module-federation/module-federation-examples.git
Cloning into 'module-federation-examples'...
remote: Enumerating objects: 49950, done.
remote: Counting objects: 100% (4516/4516), done.
remote: Compressing objects: 100% (589/589), done.
Receiving objects: 100% (49950/49950), 257.48 MiB | 15.25 MiB/s, done.
Resolving deltas: 100% (38064/38064), done.
Updating files: 100% (3064/3064), done.

C:\xampp\htdocs\project-soa\vue1>cd module-federation-examples
C:\xampp\htdocs\project-soa\vue1>module-federation-examples>cd ..
C:\xampp\htdocs\project-soa\vue1>npm install @module-federation/client
npm ERR! code E404
npm ERR! 404 Not Found - GET https://registry.npmjs.org/@module-federation%2fclient - Not found
npm ERR! 404
npm ERR! 404 '@module-federation/client@*' is not in this registry.
npm ERR! 404
npm ERR! 404 Note that you can also install from a
npm ERR! 404 tarball, folder, http url, or git url.

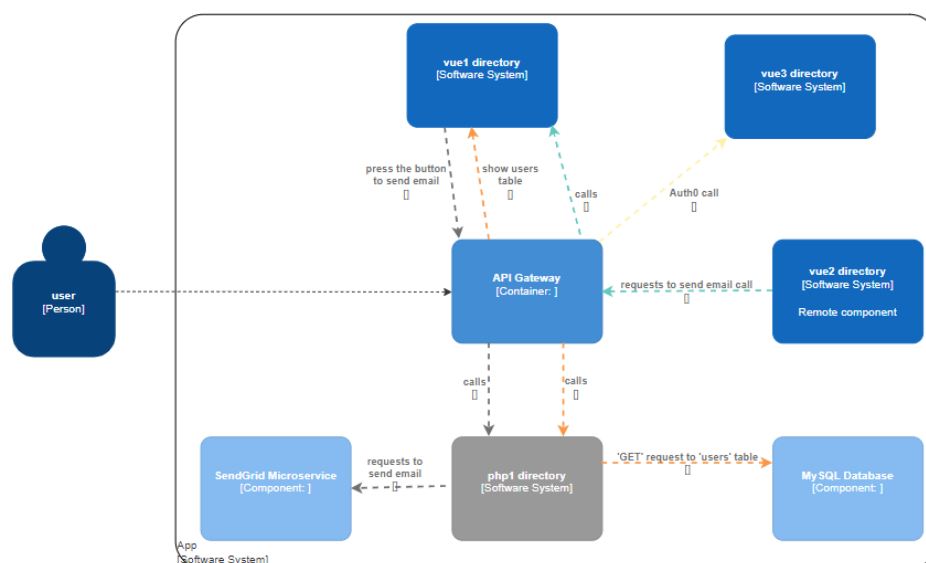
npm ERR! A complete log of this run can be found in:
npm ERR!   C:\Users\coman\AppData\Local\npm-cache\_logs\2023-02-22T17_30_45_023Z-debug-0.log

C:\xampp\htdocs\project-soa\vue1>
```

Architecture: User enters the webpage at localhost:8080. This acts as the shell for the microfrontend: contains a Login component defined in the same module and uses a Remote component as well, importing it using Webpack Module Federation. The requests from the frontend are sent to the gateway, which redirects the call to the appropriate microservice.

I used a cloud-based solution processes, SendGrid, as a 3rd party for emailing and MySQL as database for PHP usages, also Auth0 for authentication process.

System Diagram



Run '*npm run serve*' in each vue folder for app to run.