

Fullstack Development

Authentication / Authorization

Part 4: SPA

Backend

- Routes now return json / redirect header instead of html.
- Created `GET /me` route for clients to check their `auth` states.
- Apart from that, there is very minimal change, surprisingly.

FileEditSelectionViewGoRunTerminalHelp

auth-spa

index.mpa.ts ↔ index.ts

backend > src > index.ts > ...

22 hidden lines

23 app.use(passportIns.session());

24

25 // * Endpoints

26 app.get("/", async (req, res, next) => {

27 const sessions = await formatSession(req);

28 res.render("pages/index", {

29 title: "Home",

30 user: req.user,

31 sessions: sessions,

32 });

33 });

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35 app.get("/signup", function (req, res) {

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77 app.get("/login/oauth/github", passportIns.authenticate("github"));

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101 app.post("/logout", function (req, res, next) {

102 // req.logout will not delete the session in db. It will generate new one for the

103 // When the user login again, it will generate new session with the user id.

104 req.logout(function (err) {

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Frontend

- Created (client-side) routing.
- Created logic to query/update `auth`'s state.
- Modified proxy server to take care of `Callback URL` (bypass client-routing).
- Created signup form/login and other UI.

Highlighted packages

```
{  
  "@tanstack/react-query": "^5.52.1",  
  "react-router-dom": "^6.26.1"  
}
```

Client-side routing

src/App.tsx

```
import { createBrowserRouter, RouterProvider } from "react-router-dom";
const router = createBrowserRouter([
  {
    path: "/",
    element: <Layout />,
    children: [
      {
        path: "/",
        element: <Home />,
      },
    ],
  },
]);
```


Client-side routing

src/App.tsx

```
function App() {  
  return (  
    // ...  
    <RouterProvider router={router} />  
    // ...  
  );  
}  
  
export default App;
```

Getting auth state

src/hooks/useAuth.ts

```
import { useQuery } from "@tanstack/react-query";
// ...
function getMe() {
  return axios.get<AuthData>("/api/me");
}

function useAuth() {
  // Queries
  const { data, error, refetch } = useQuery({
    queryFn: getMe,
    // Other options
  });
  return { user: data?.user, sessions: data?.sessions, error, refetch };
}
```

Getting auth state

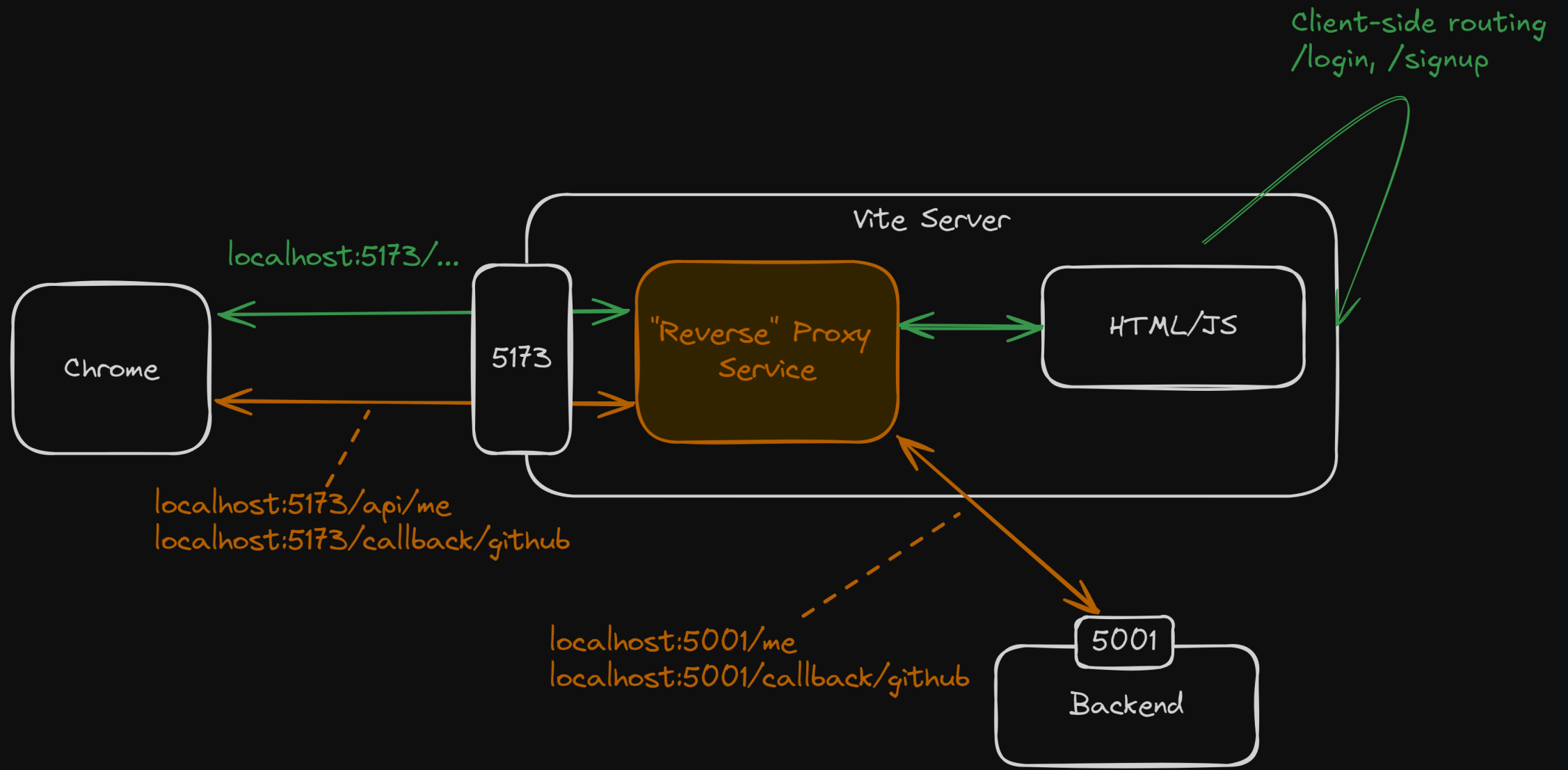
src/components/Nav.tsx

```
const Nav: FC = () => {  
  const { user } = useAuth(); ➡➡➡  
  // ...  
  return (  
    <nav>  
      // ...  
    </nav>  
  );  
};  
  
export default Nav;
```

Handle Callback URL

vite.config.ts

```
export default defineConfig({
  plugins: [react()],
  server: {
    proxy: {
      "/api": {
        // ...
      },
      "/callback": { ➡➡➡
        target: "http://localhost:5002",
      },
    },
  },
});
```



Note

- The use of proxy server solve cookie and CORS issues.
- Cookies for a given host are shared across all the ports on that host.
- The "same-origin policy" used by web browsers isolates content retrieved via different ports.