

# Fullstack Development

# Preflight project - frontend

[Github Repo](#)

# Frontend framework

Tool that enables you to develop the frontend of your applications

## Why?

- You don't have to everything code from scratch.
- You can collaborate with others more easily.

# Frontend JS framework

- [State of JS 2024](#)
- [Stack Overflow Survey 2024](#)

# Frontend tooling

- Code bundler ("*build tools*")
- Development server
  - Hot module replacement (HMR)

# Frontend tooling

- Vite
- Webpack
- Parcel
- Rollup

# Setup

- React
  - `pnpm create vite@latest` (*Follow the instruction*)
- Additional libraries
  - `pnpm i dayjs axios @picocss/pico`

# Files

- Remove all `css` files
- `./vite.config.ts` [\(Link\)](#)
- Modify `./tsconfig.node.json` [\(Link\)](#)
- Modify `./package.json` [\(Link\)](#)
- `./src/main.ts` [\(Link\)](#)
- `./src/types.ts` [\(Link\)](#)
  - I use [Quicktype](#) to generate this.



# Minimal example

- `./src/App.ts` [\(Link\)](#)
- Start dev
  - `npm run dev`

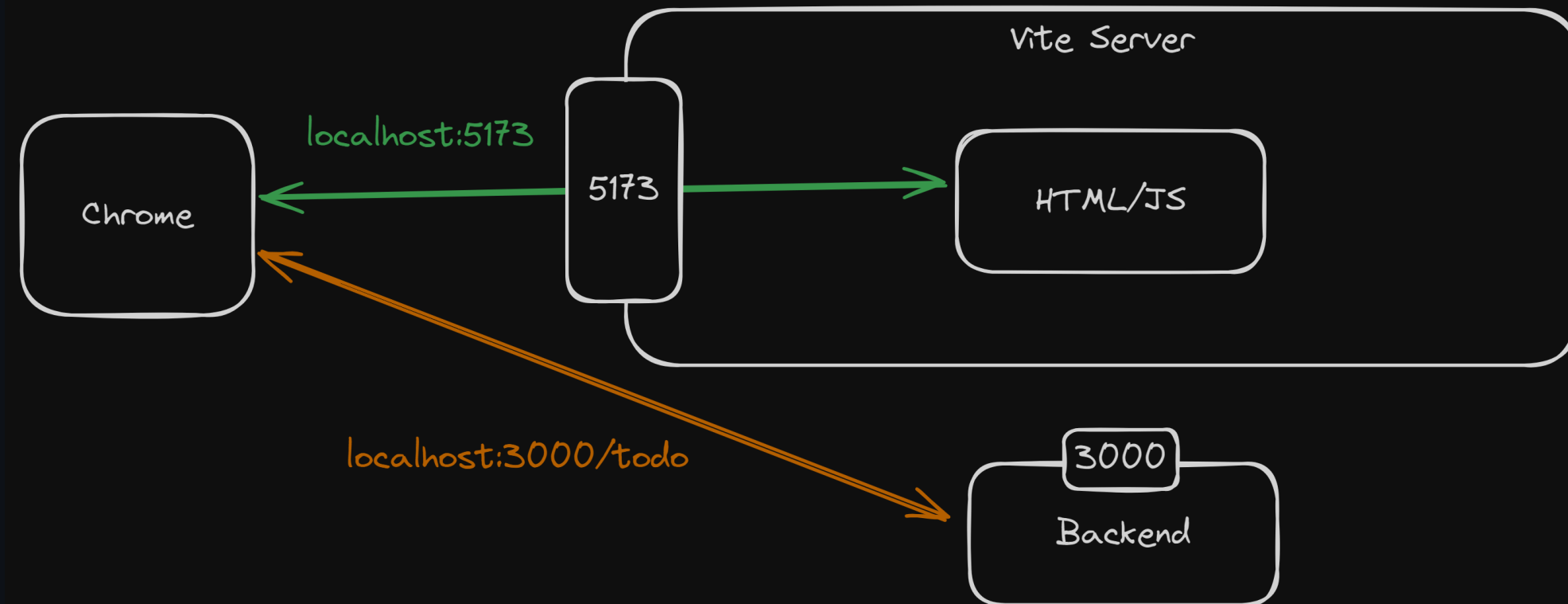
# Full example

- `./src/App.ts` [\(Link\)](#)
- Build
  - `npm run build`
- Preview
  - `npm run preview`

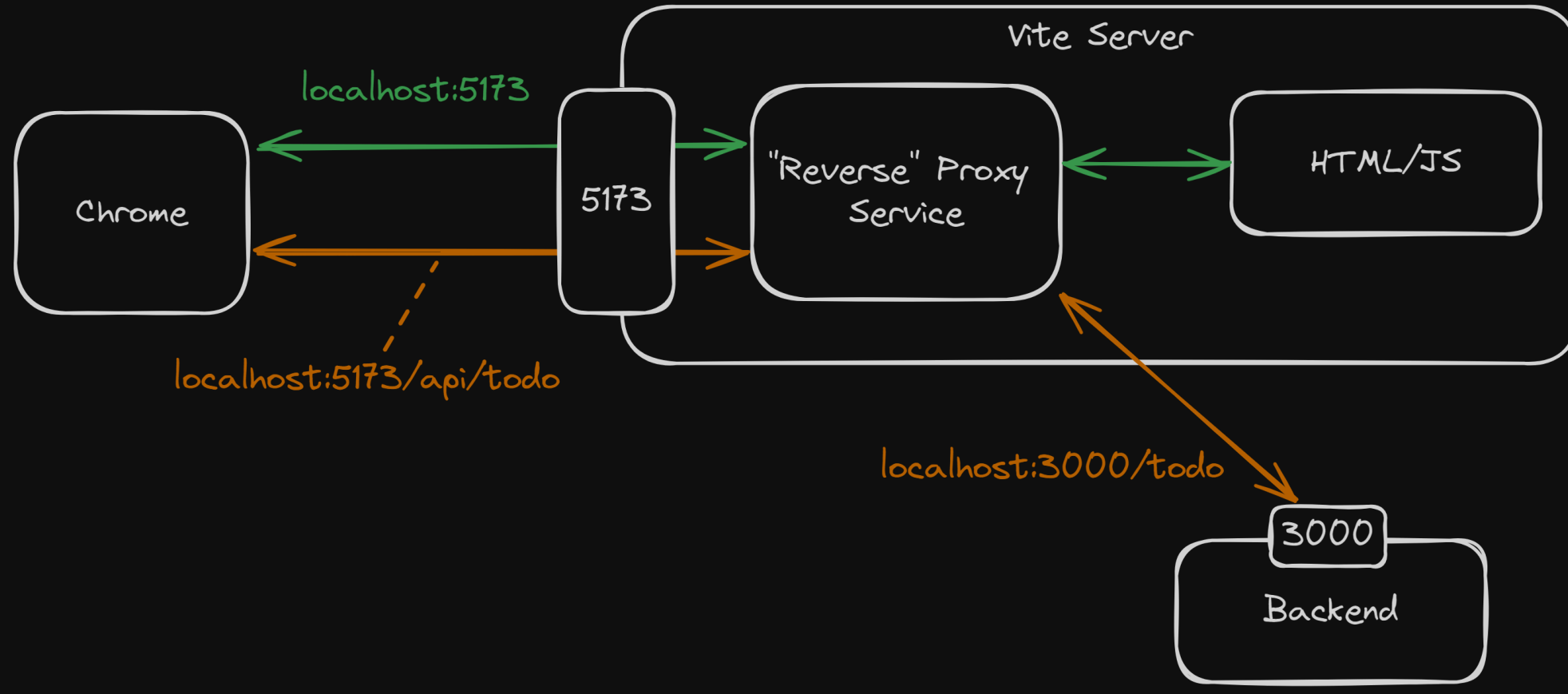
# Why reverse proxy?

- No need to expose your backend to the internet.
- No issues with CORS and cookies.

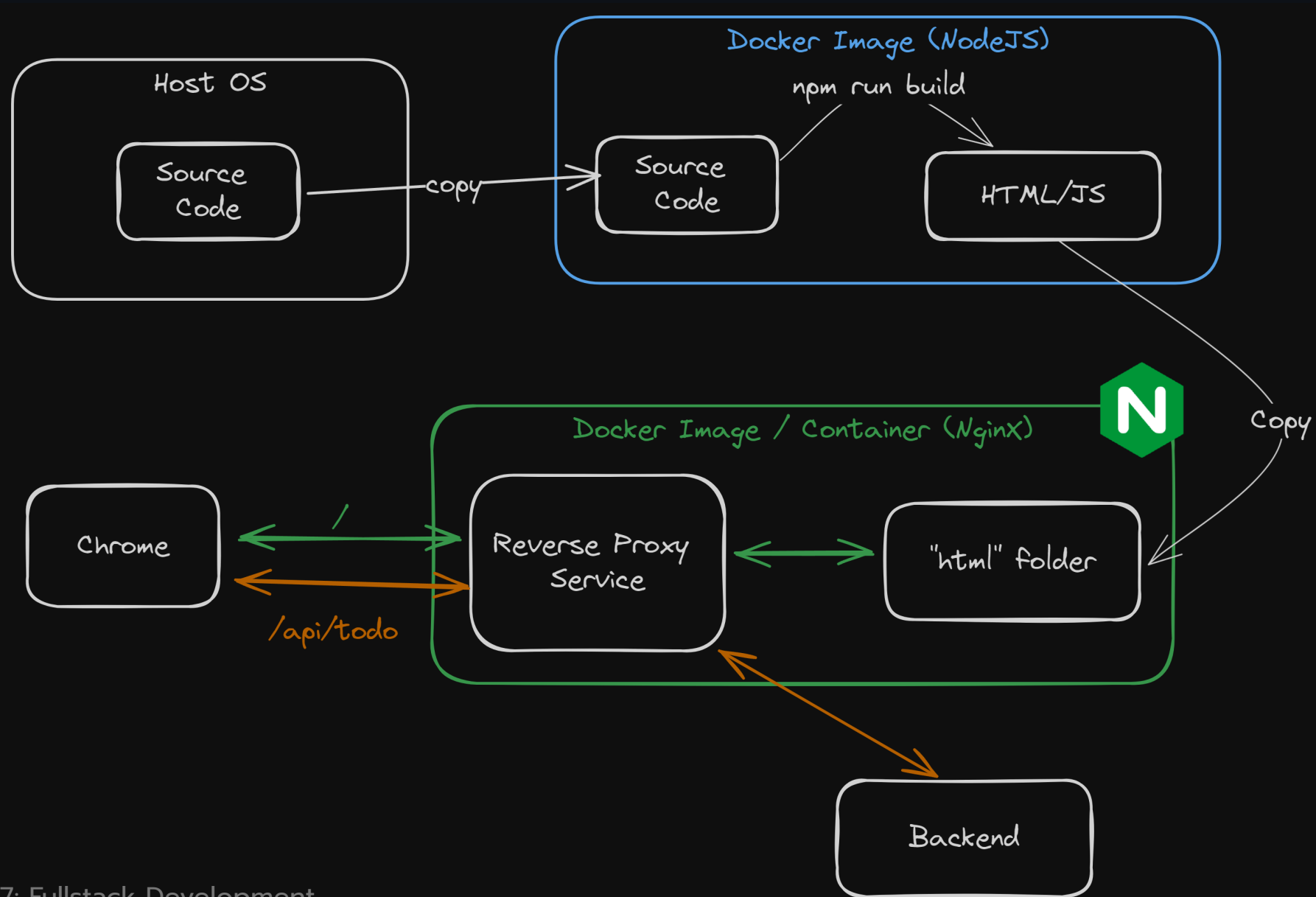
# Without reverse proxy









# With reverse proxy



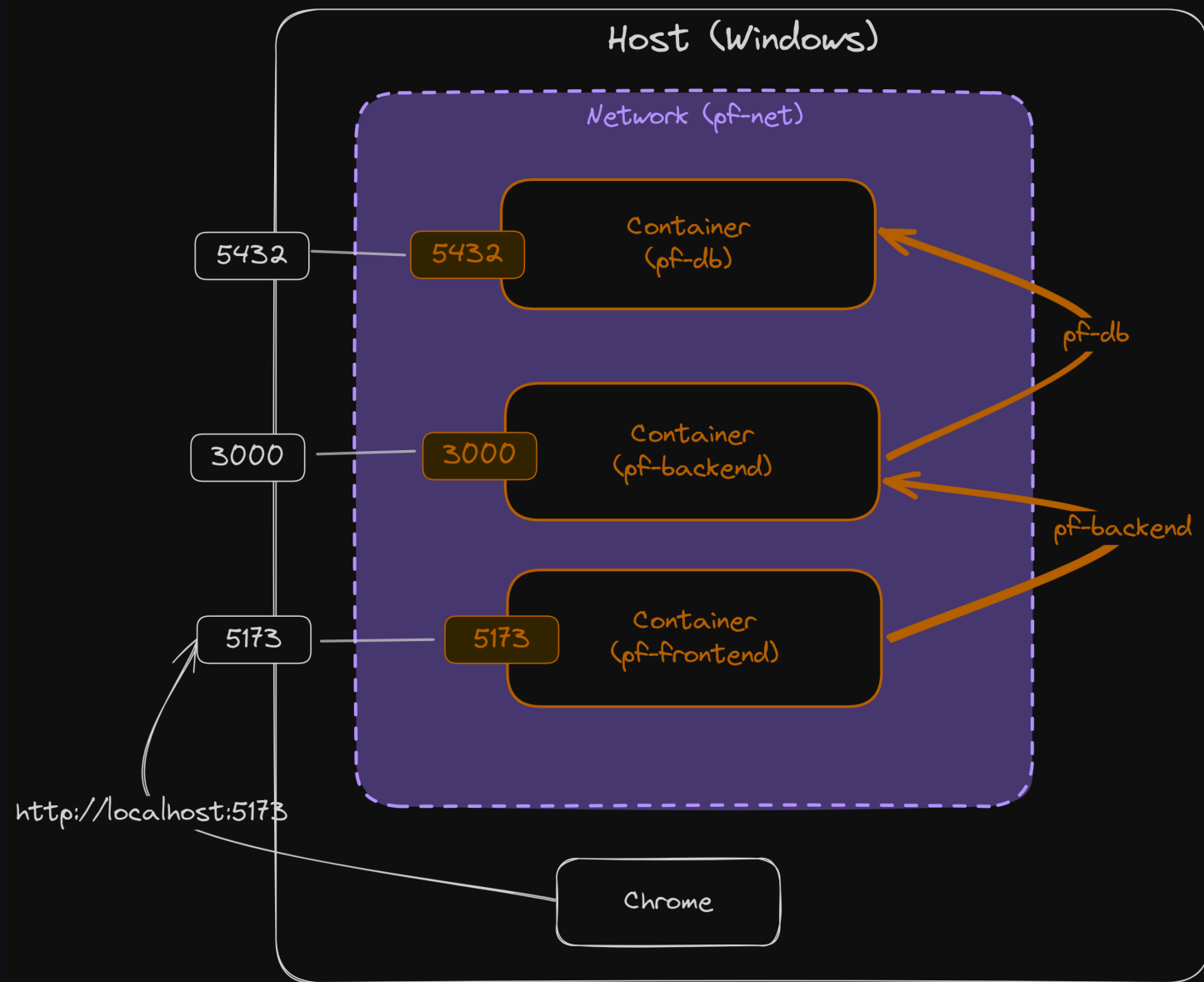
# Containerization



# Steps

-  Make `./.env.test` from `./.env.test.example` ([Link](#))
-  `./Dockerfile` ([Link](#))
-  `./.dockerignore` ([Link](#))
-  `./nginx.conf.template` ([Link](#)) ([Why](#))
-  `./docker-compose.yml` ([Link](#))
-  `docker compose --env-file ./.env.test up -d --force-recreate --build`





# Push to Dockerhub

- Create an account at <https://hub.docker.com>.
- Create repository called `preflight-frontend`.
- Tag image
  - `docker tag preflight-frontend [DOCKERHUB_ACCOUNT]/preflight-frontend:latest`
- Login (if you have not done so)
  - `docker login -u [DOCKERHUB_ACCOUNT]`
- Push image
  - `docker push [DOCKERHUB_ACCOUNT]/preflight-frontend:latest`