Micro Services

Type of micro services?

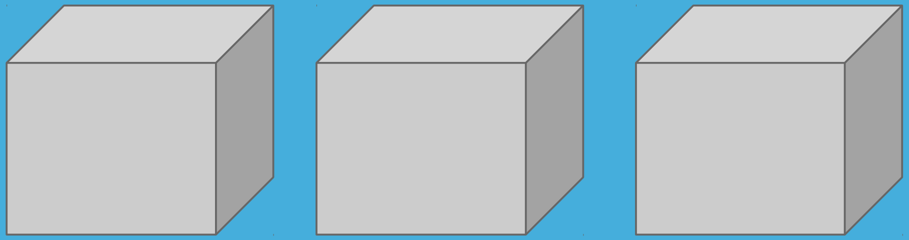
Front end micro services.
Back end micro services.

Benefits

- Split large applications into small containers.
- Each container can use any programming language and framework.
- Containers are portable.
- Small container spin-up or shutdown fast.

How we can run together?

We use container to run each services separately on same page. Each container app can use different framework.



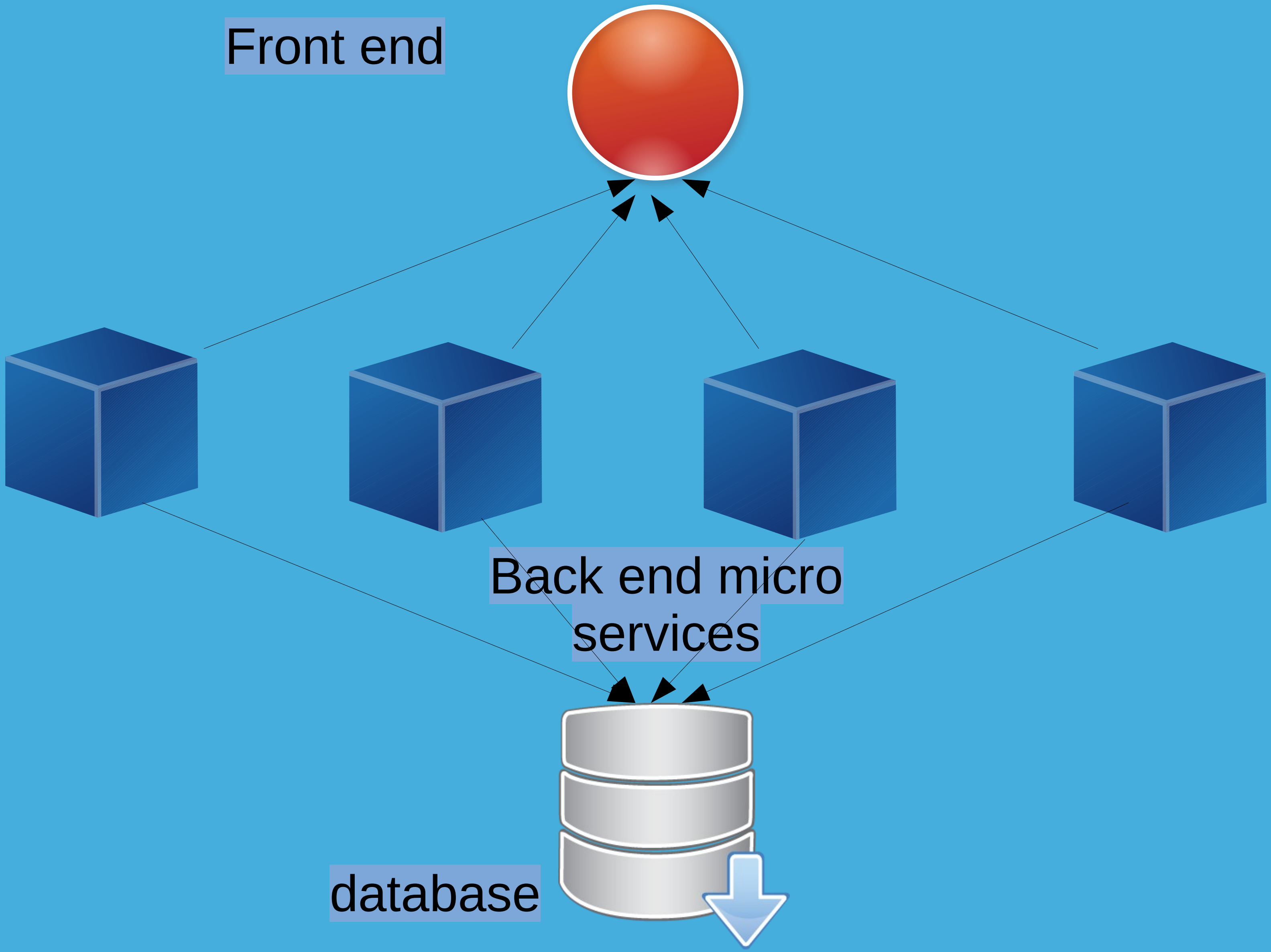
MICRO SERVICES

Splitting large and complex applications into smaller components with a single function

MICRO BACK END

We can use one front end and multiple back ends micro services. Because back end needs heavy computation, so we can divide load for back end multiple micro services

Architecture # 1

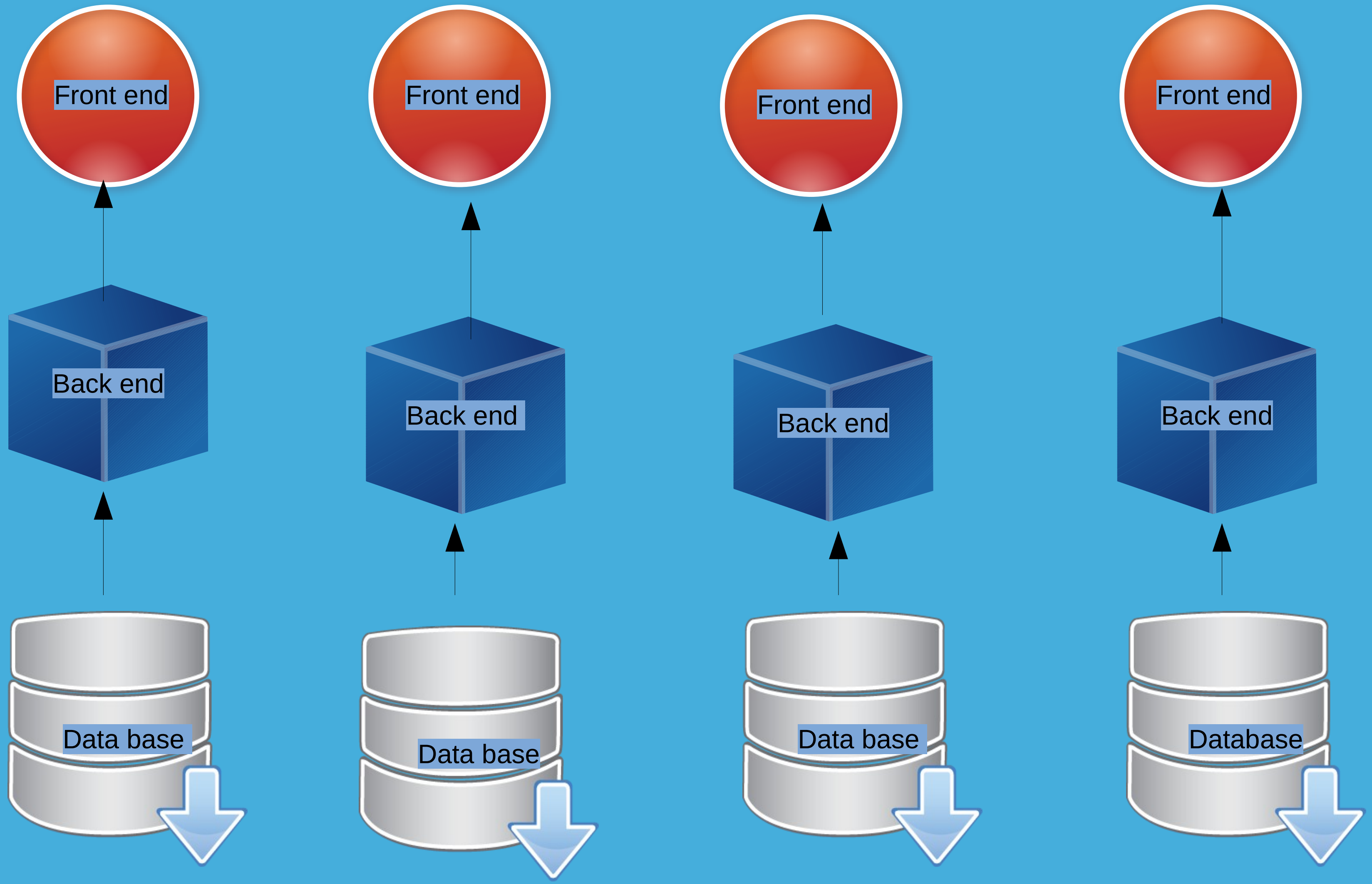


Front end

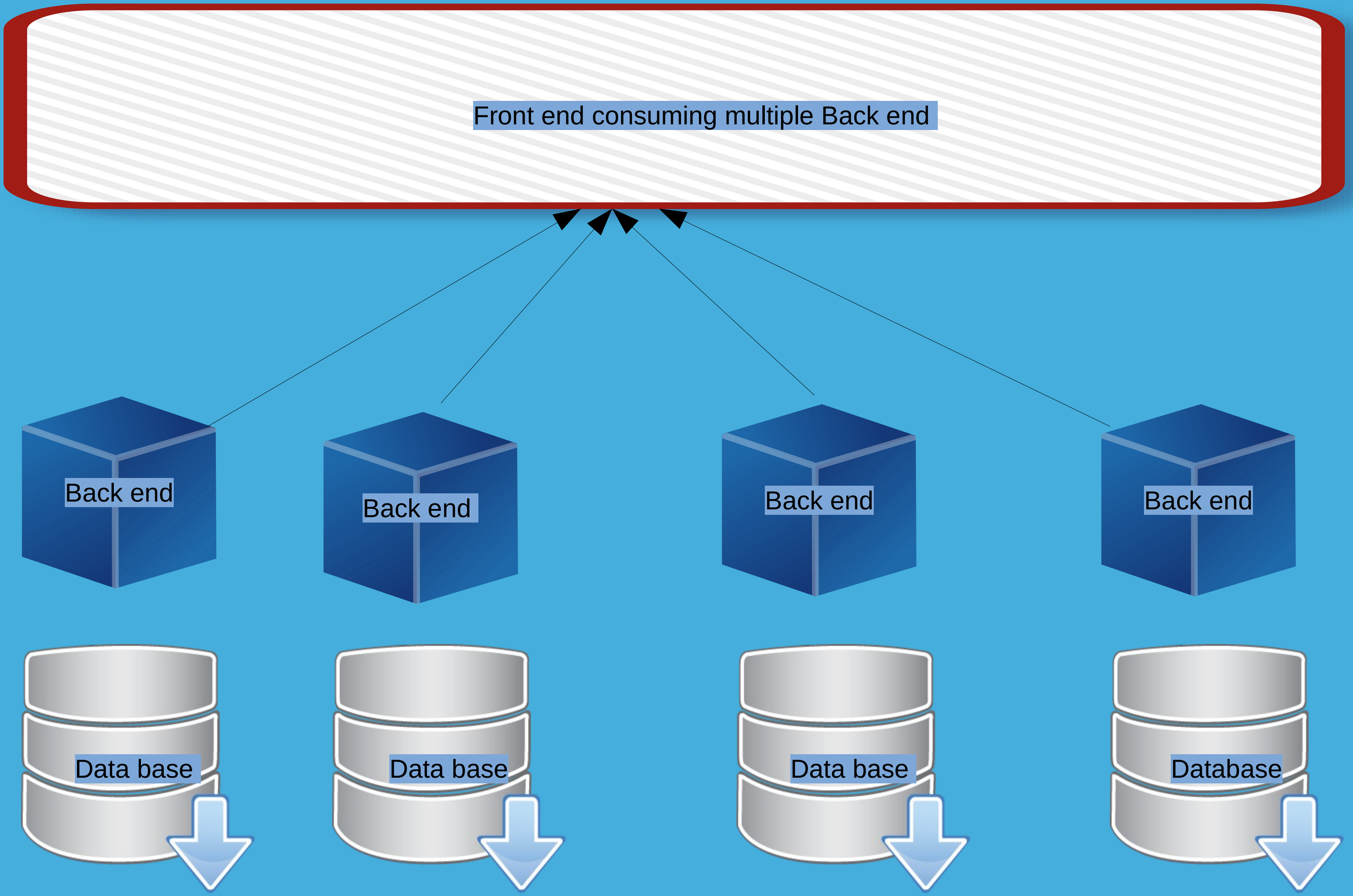
Back end micro services

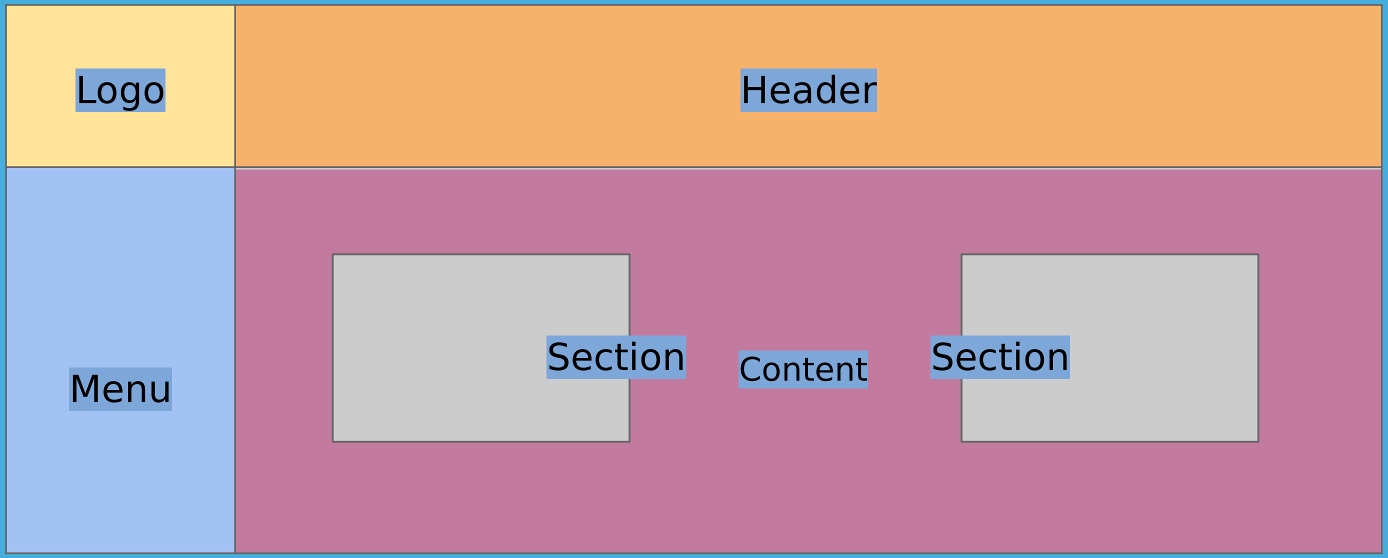
database

Architecture # 2



Architecture # 3





Logo

Header

Menu

Section

Content

Section

MICRO Fronted

Splitting large UIs into smaller web modules and web components

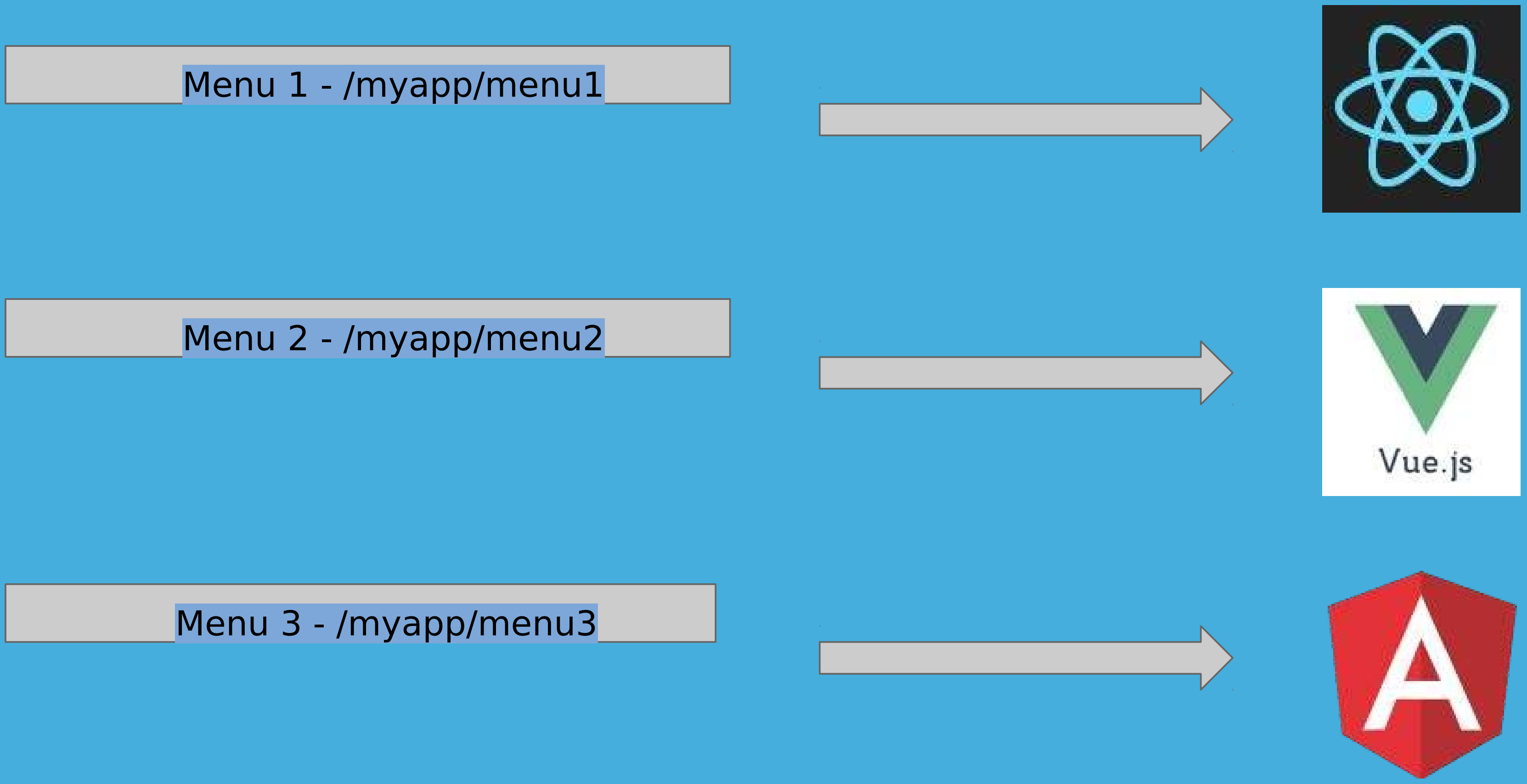
Principles

- Stand-alone run
- Independent development
- Stand-alone deployment

Routing

- Each route is a different project
- Use HTTP server routing to redirect multiple apps
- Easy implementation
- Independent development

Routing



Menu 1 - /myapp/menu1

Menu 2 - /myapp/menu2

Menu 3 - /myapp/menu3

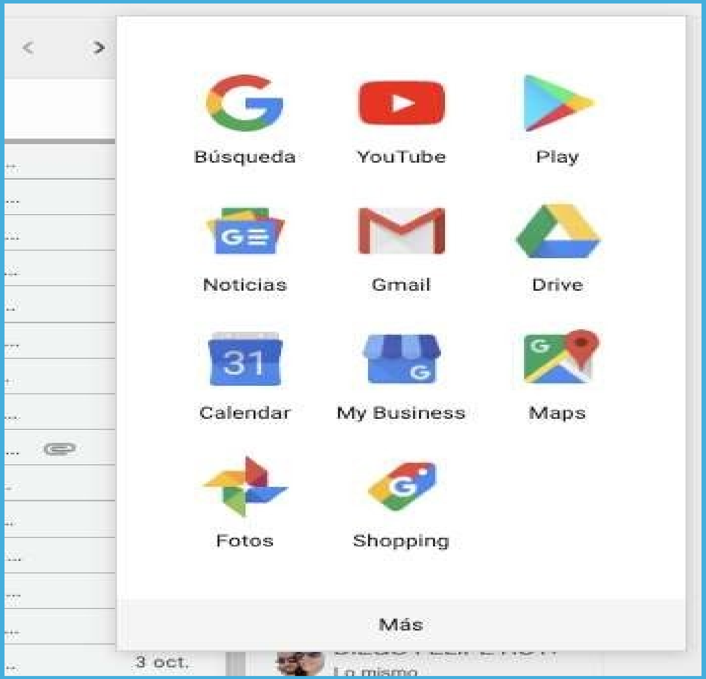
i Frame

- Embedded modules and projects
- Easy to implement
- Complex to maintain
- Very useful in legacy projects

Micro-Apps

- Fast distributed development
- Challenging integration
- Few reusable components
- Independent development

Micro-Apps Examples:



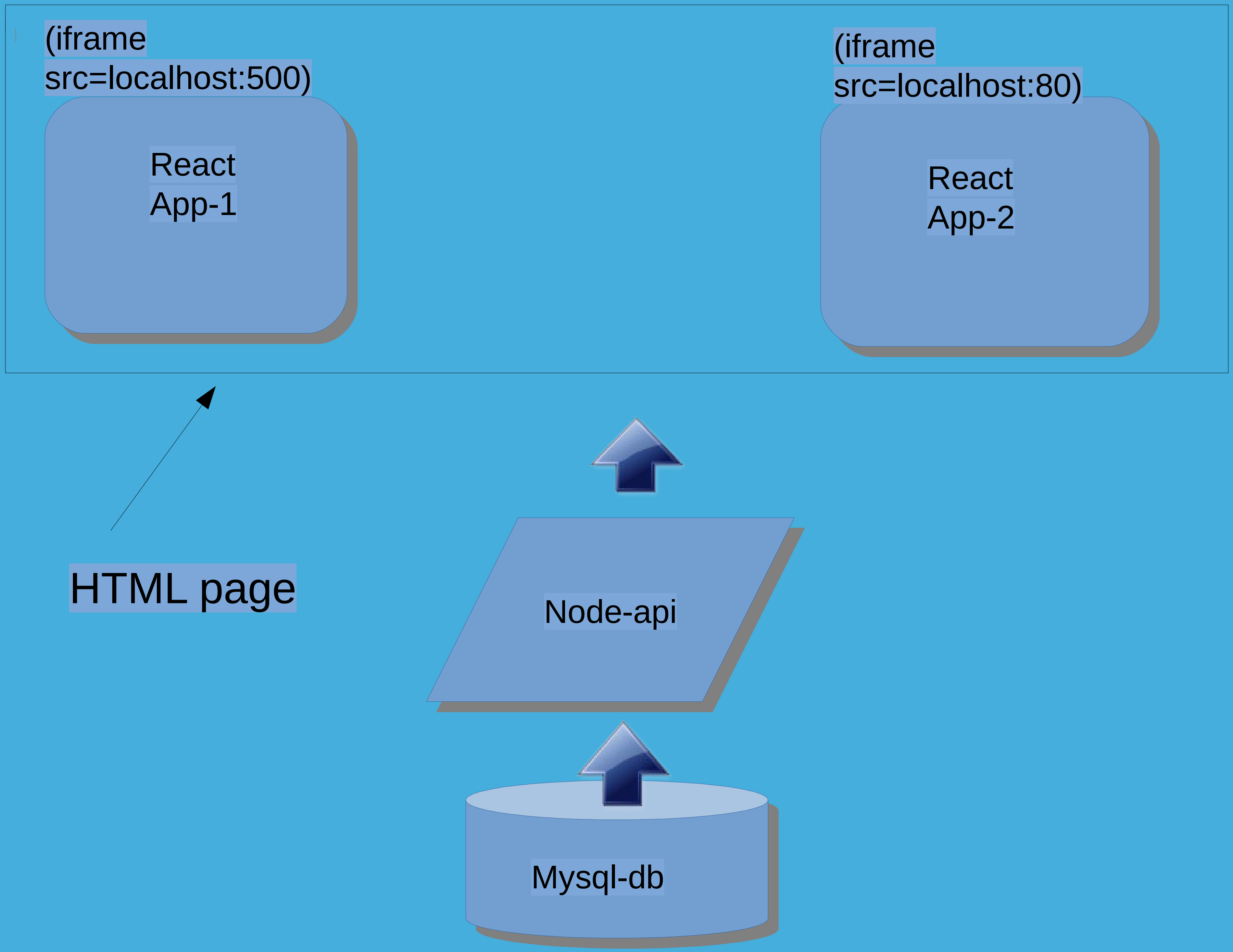
Pure components

- Javascript functions
- Internal libraries
- Npm, unpkg, etc.
- Advanced JS knowledge is required

Frameworks make life EASY

Luig, Single spa,

Demo App infrastructure



(iframe
src=localhost:500)

React
App-1

(iframe
src=localhost:80)

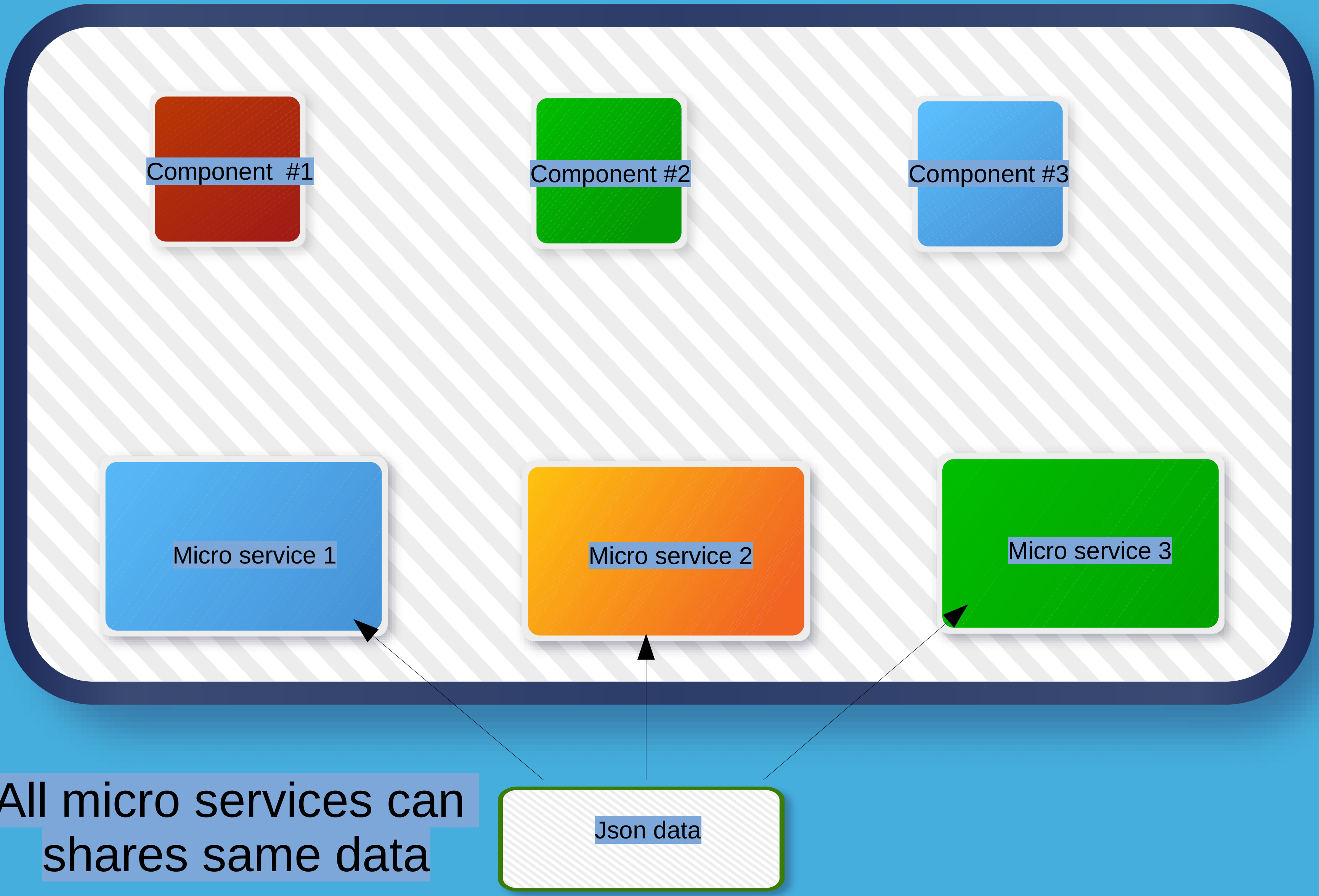
React
App-2

HTML page

Node-api

Mysql-db

HTML page holding iframes for microservices



Component #1

Component #2

Component #3

Micro service 1

Micro service 2

Micro service 3

Json data

All micro services can shares same data

THANKS!