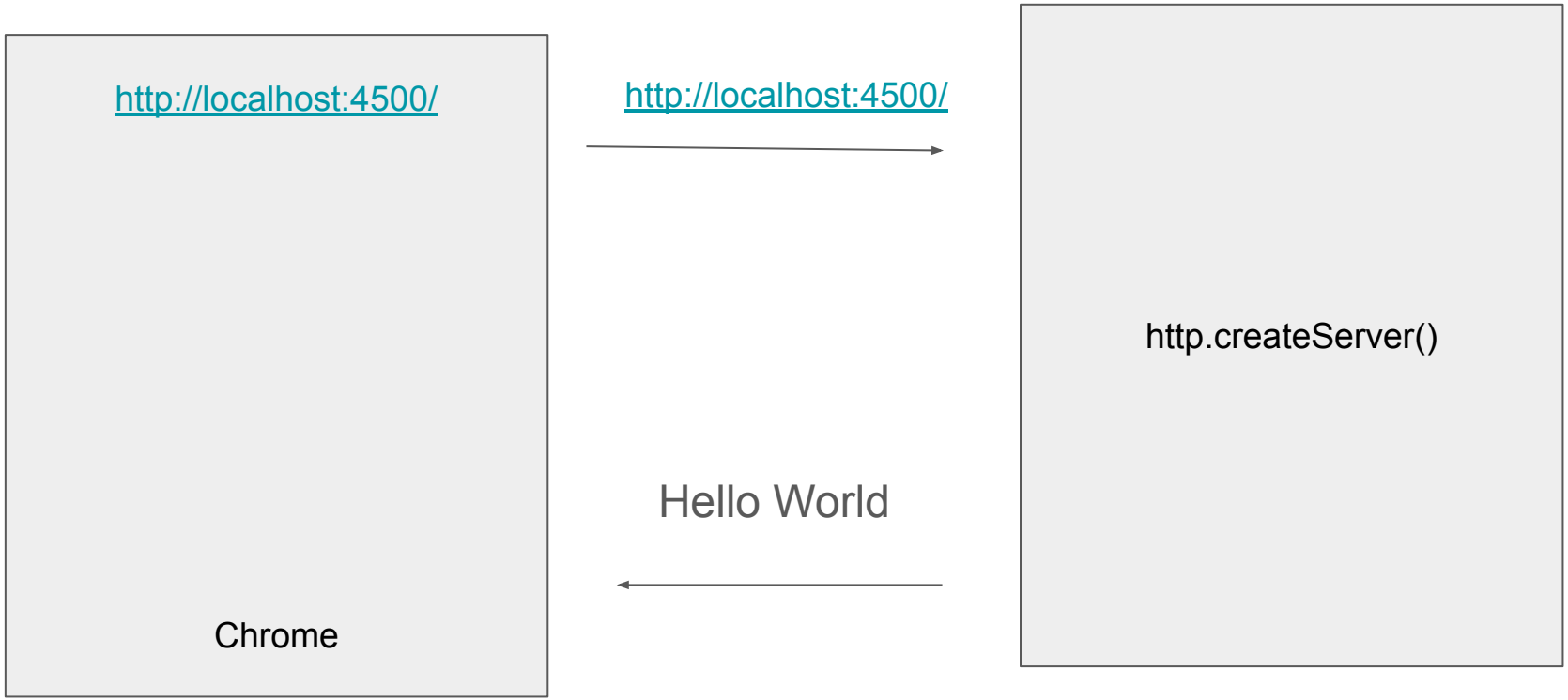
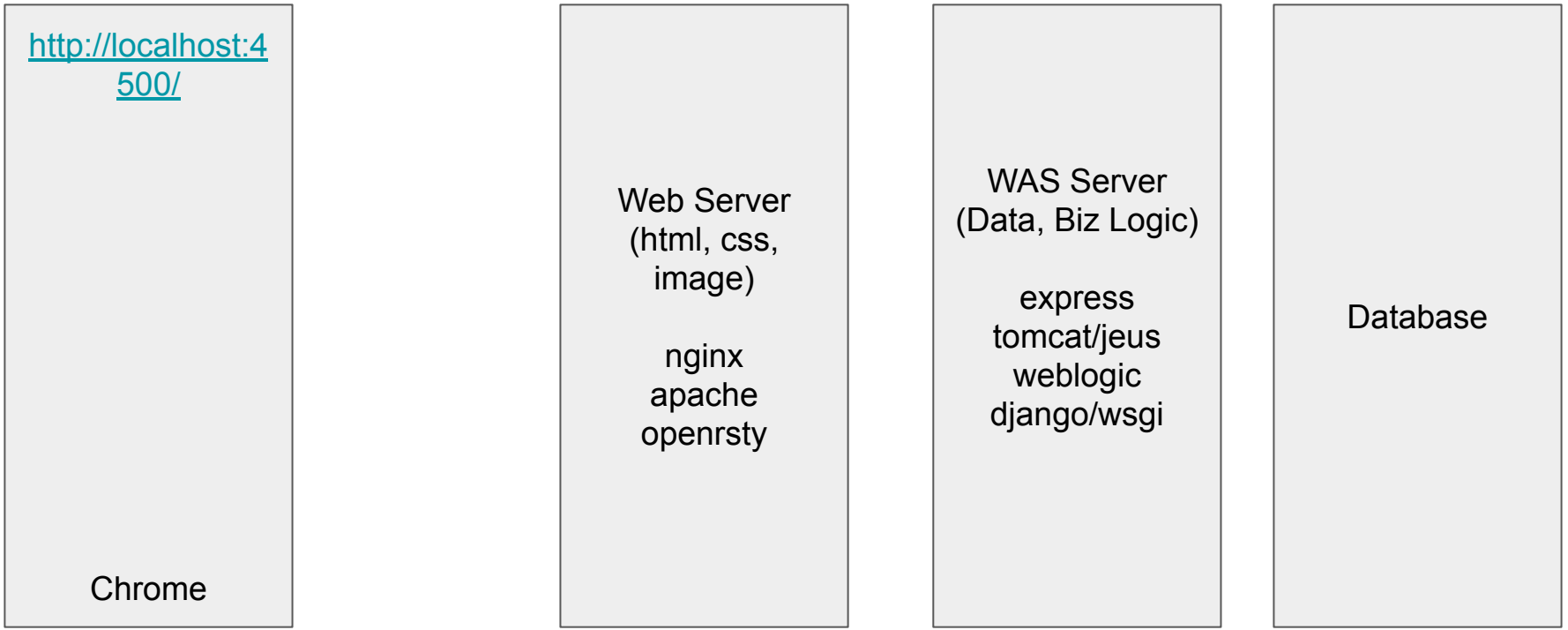

Main
Thread
1. print
2. print(data)
Sub Thread
2. get db()
Process
(python server.py)
Process
(node server.js)


http://localhost:4500/
Chrome
http://localhost:4500/
Hello World
http.createServer()

&


http://localhost:4500/
Chrome
Web Server
(html, css,
image)
nginx
apache
openrsty
WAS Server
(Data, Biz Logic)
express
tomcat/jeus
weblogic
django/wsgi
Database

http://82cook.com/write

Chrome

요청 파리미터(GET)
http://82cook.com/?title=오늘날씨는어때요&content=블라블라블라

요청 본문(POST)
title = 오늘날씨는 어때요 & content =
블라블라블발브블라블라블발브블라블라블발브
블라블라블발브블라블라블발브블라블라블발브
블라블라블발브블라블라블발브블라블라블발브
블라블라블발브블라블라블발브

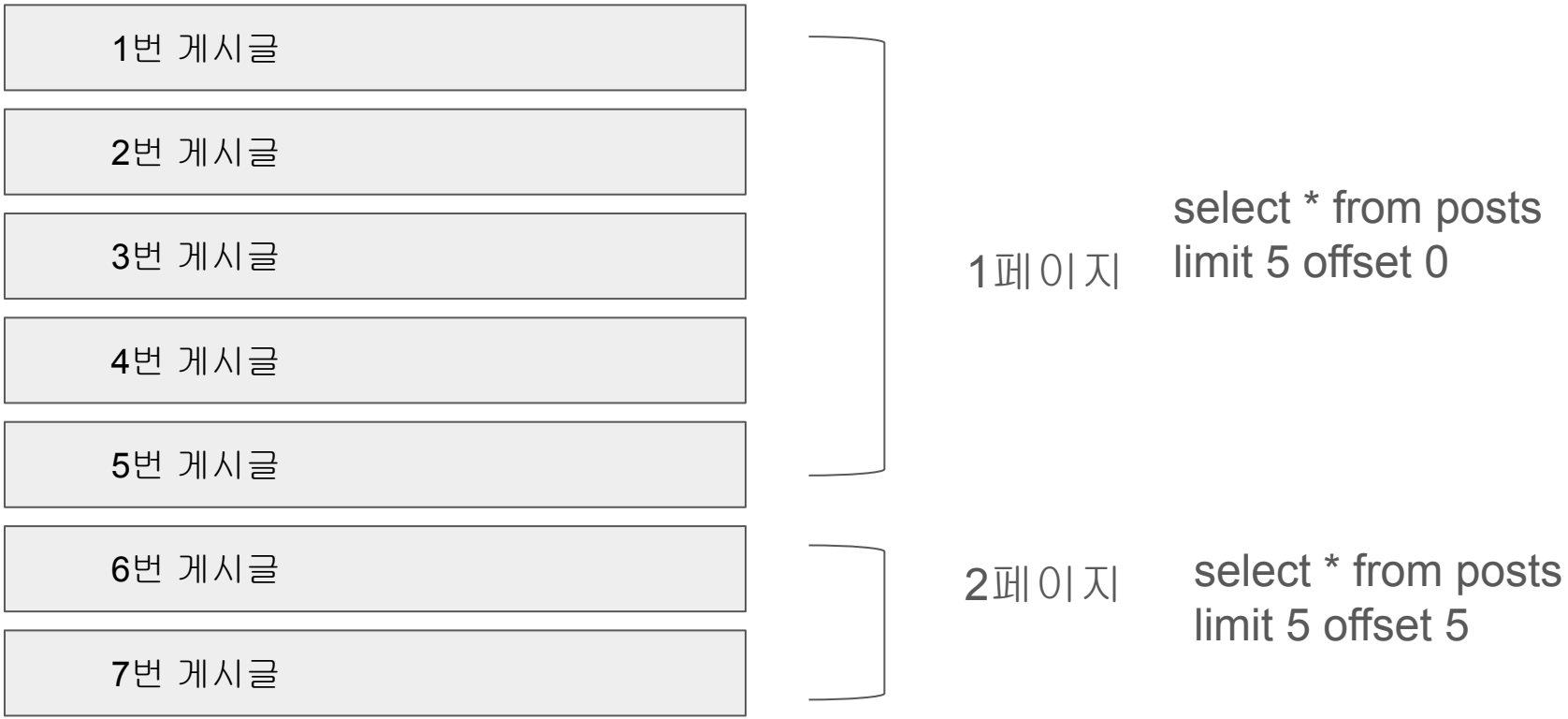
요청 본문(POST)
{“title”: “오늘날씨는어때요?”, “content”:”
블라블라블라"}

Web Server
(html, css,
image)

nginx
apache
openrsty


http://localhost/hello
<html> hello </html>
http://localhost/world
<html> world </html>
Chrome
Web Server(http.createServer)


http://localhost/json
{“title”:”testtitle”, “content”: “content”}
Chrome
Web Server(http.createServer)


1번 게시글
2번 게시글
3번 게시글
4번 게시글
5번 게시글
6번 게시글
7번 게시글
1페이지
select * from posts
limit 5 offset 0
2페이지
select * from posts
limit 5 offset 5

http://localhost:3000

GET/posts

GET /posts/1

POST /posts → 게시글 생성

PUT /posts/1 → 게시글 수정

PATCH /posts/1 → 게시글 일부 업데이트

DELETE /posts/1 → 게시글이 1번인 자원 삭제

GET /post/

{

}

사용자 목록 : /users.

게시글 목록 : /posts

GET /getAllPosts

DELETE /users/123

200 OK 요청 성공

201 자원 생성 성공

204 성공했으나 반환할 데이터가 없다

400 잘못된 요청

401 인증 실패

403 권한이 없다

404 자원을 찾을수 없다

500 서버에 오류

요청 URI : /posts/1

응답 JSON

{“id” : 1, “title”: “테스트 제목", “content”:”테스트 내용"

“links” : {“rel”:“self”, “href”: “/posts/1”, “rel”:”comments”, “href”:”/posts/1/comments”

}

페이징, 필터링, 정렬

페이징 : GET /posts?page=2&limit=20

정렬 : GET /posts?sort=createdAt

필터링 : GET /posts?author=지훈

캐싱

Cache-Control : max-age = 3600 (초) -> 1시간동안 캐싱

보안

JWT (JsonWeb Token) → 로컬 인증

OAuth2 를 이용해서 인증 방식 → 애플 로그인, 구글 로그인, 카카톡 로그인, 네이버 로그인

버전 관리

URI 를 통한 버전 관리 : GET /v1/posts /v2/posts

헤더정보를 통한 버전관리 : GET /posts HEADER → Accept: application/vnd.company.v2+json

공지사항 API

공지사항 목록 : GET /posts

공지사항 상세 : GET /posts/1

공지사항 쓰기 : POST /posts

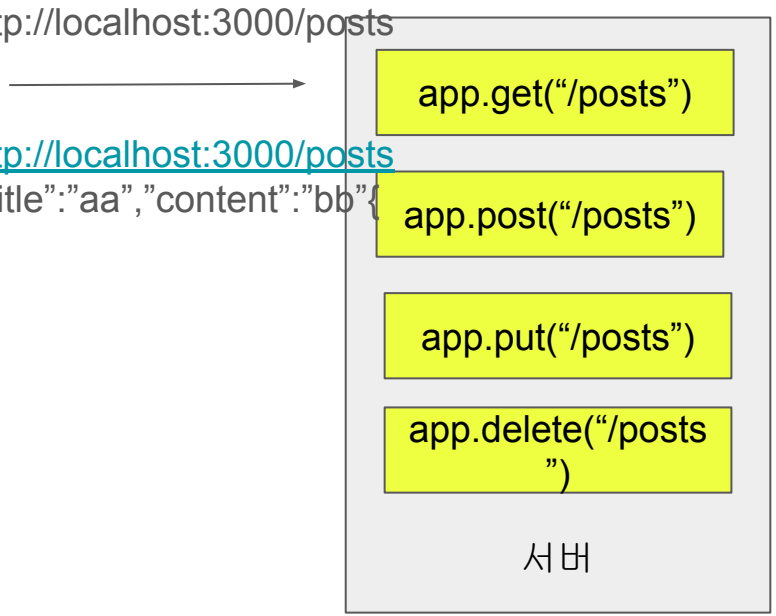
공지사항 수정 : PUT /posts/1

공지사항 삭제 : DELETE /posts/1

GraphQL

RESTful API

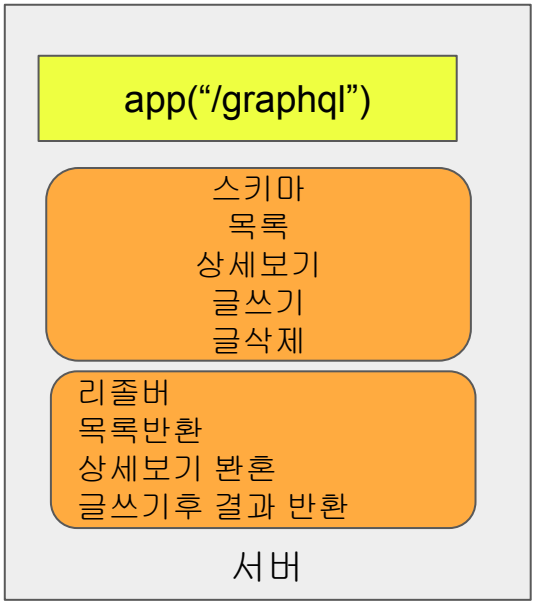
http://localhost:3000/posts



http://localhost:3000/posts
{“title”:”aa”,”content”:”bb”{

GraphQL

요청 구문 { posts
{
title
content
}}
{“data”:
{“tilte”:”aa”,
content: “bbb”}



GraphQL

1. GET http://localhost:3000/posts

id, title, content, author, createAt

2. GET http://localhost:3000/v2/posts

id, title, content, author, createAt, count

```
posts {
  title
  content
  author
}
```

배치 요청

GET http://localhost:3000/posts/2

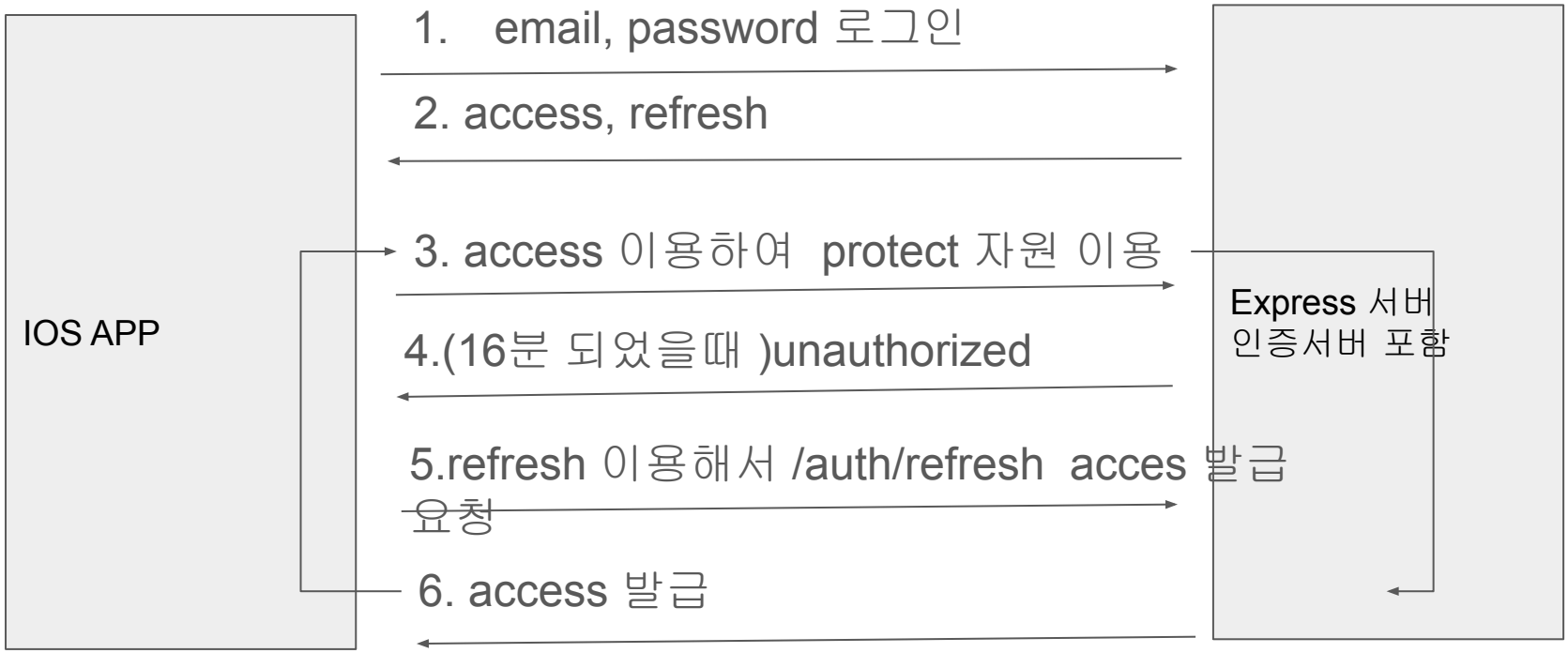
GET http://localhost:3000/posts/2/comments

```
{ getPosts(ID:2) {
  title
content
auth}
 getcomments(ID: 2) {
  content
}
```

스키마 정의

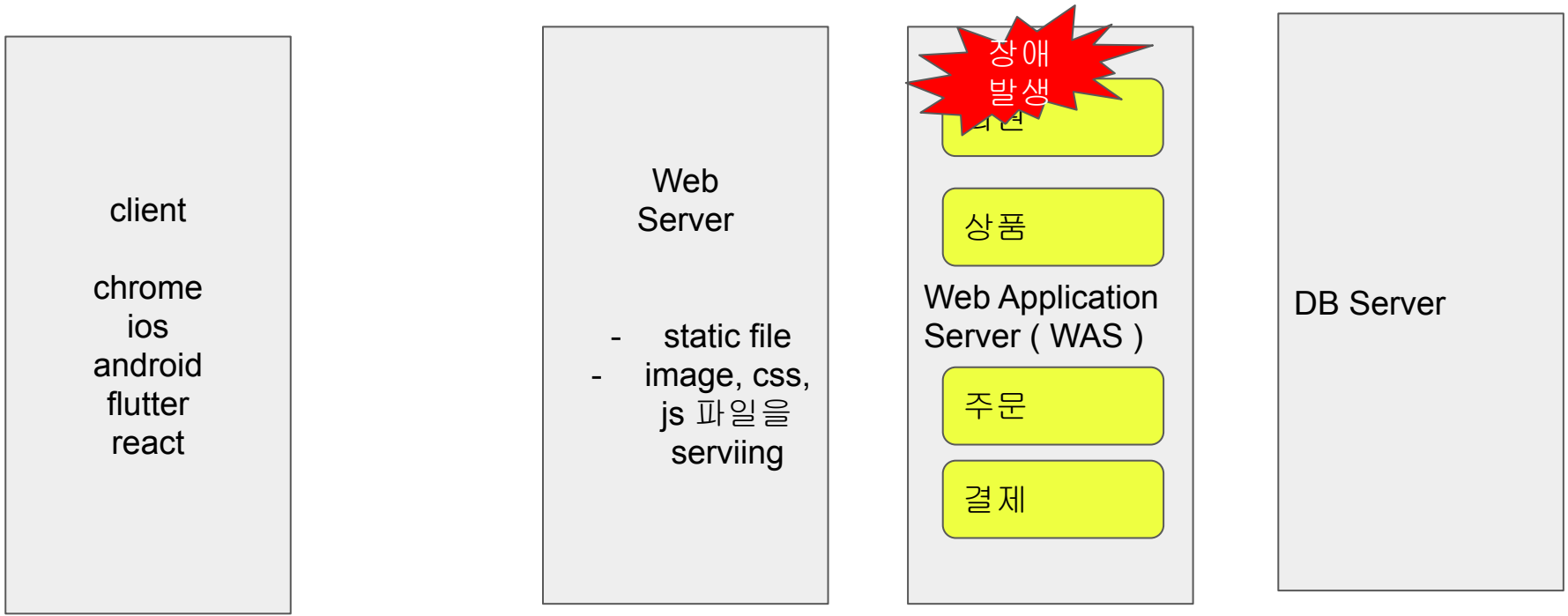
```
type Query {
 hello: String
 getPosts(id: ID) : Post
}
type Post {
  id: ID
  title: String
  content: String
}
```

access token, refresh token 인증

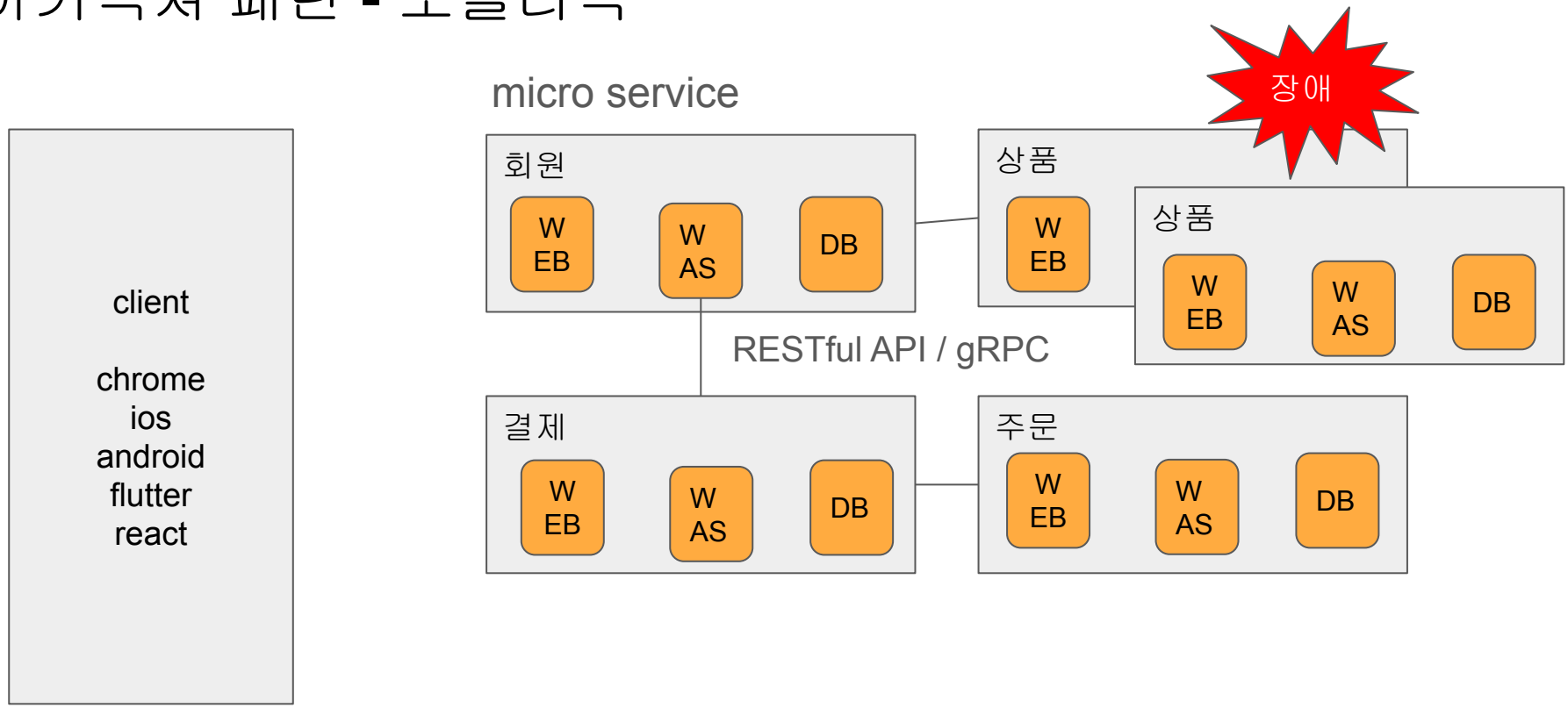


만약 이 작업이 귀찮으면 access token을 ‘14d’ 정도

아키텍쳐 패턴 - 모놀리틱


client
chrome
ios
android
flutter
react
Web
Server
- static file
- image, css, js 파일을 serviing
장애 발생
상품
Web Application Server (WAS)
주문
결제
DB Server

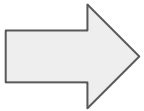
아키텍쳐 패턴 - 모놀리틱


client
chrome
ios
android
flutter
react
micro service
장애
회원
W EB
W AS
DB
상품
W EB
상품
W EB
W AS
DB
RESTful API / gRPC
결제
W EB
W AS
DB
주문
W EB
W AS
DB

group by

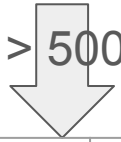
cust_id B	company	city	mileage
1	A 상사	서울	100
2	B 상사	서울	200
3	C 상사	부산	300
4	D 상사	부산	400
5	E 상사	대전	200
6	F 상사	대전	500

group by



city	mileage
서울	300
부산	700
대전	700

having sum(mileage) > 500



city	mileage
서울	300
부산	700

JOIN

select e.name, e.position,d.dept_name from employee e join department d on e.dept_id = d.dept_id

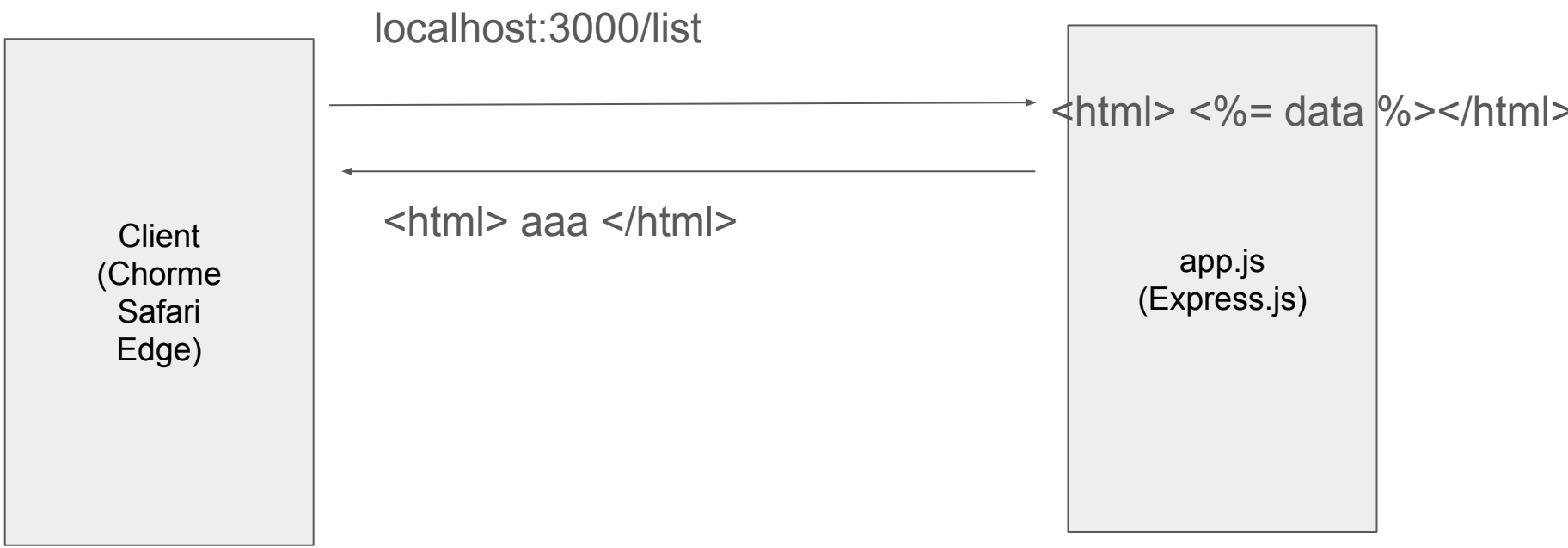
emp_id	name..	dept_id
1	홍길동	1
2	이길동	2
3	삼길동	1

외래키

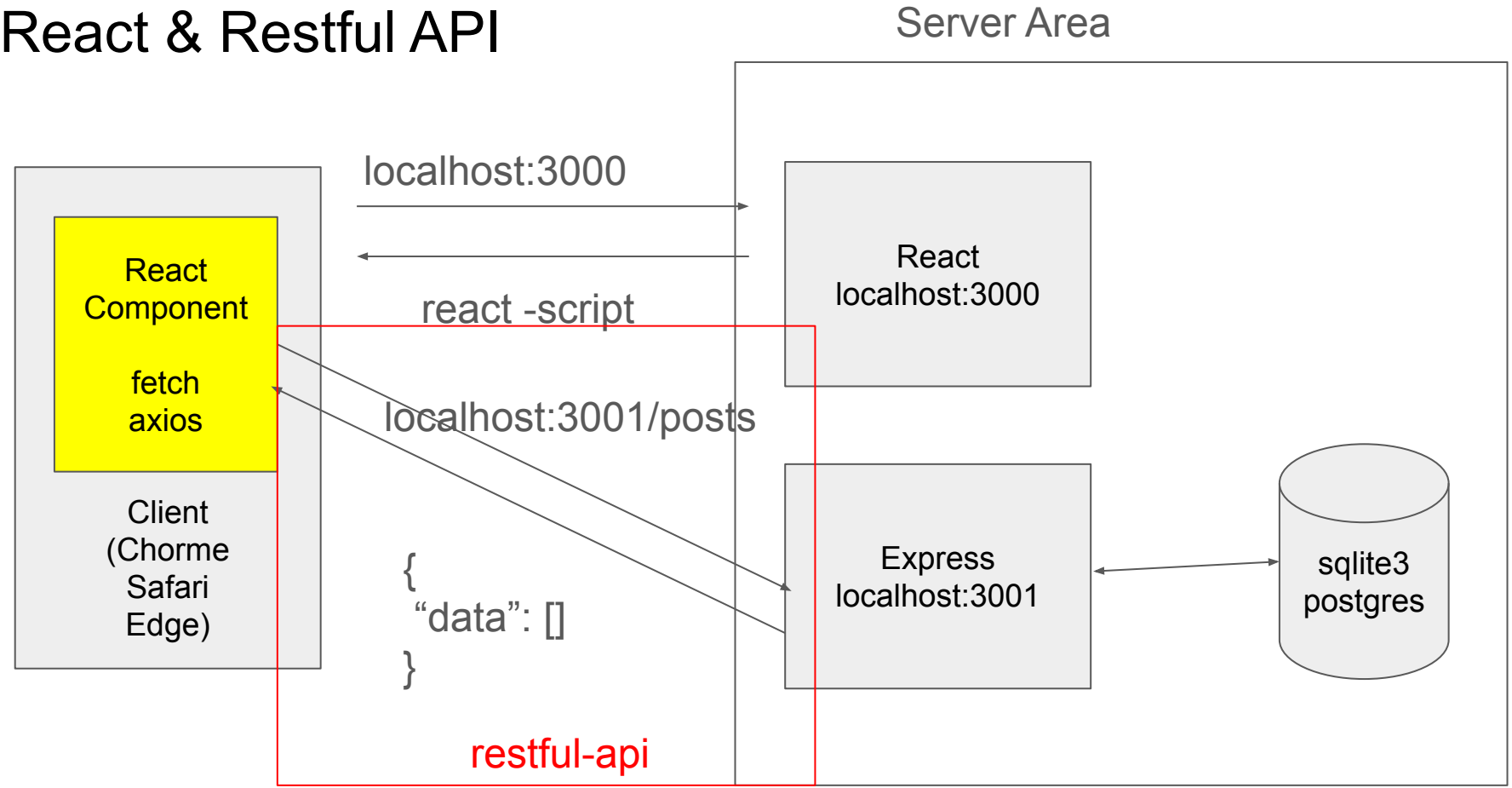
dept_id	name..	dept_id
1	영업부	1
2	인사부	2
3	마케팅	1

기본키

Web 1.0


localhost:3000/list
<html> <%= data %></html>
<html> aaa </html>
Client
(Chorme
Safari
Edge)
app.js
(Express.js)

React & Restful API



React & Restful API