

C**KIE-APP**

**Convergent Capstone Design 1
15th Week Progress Report**

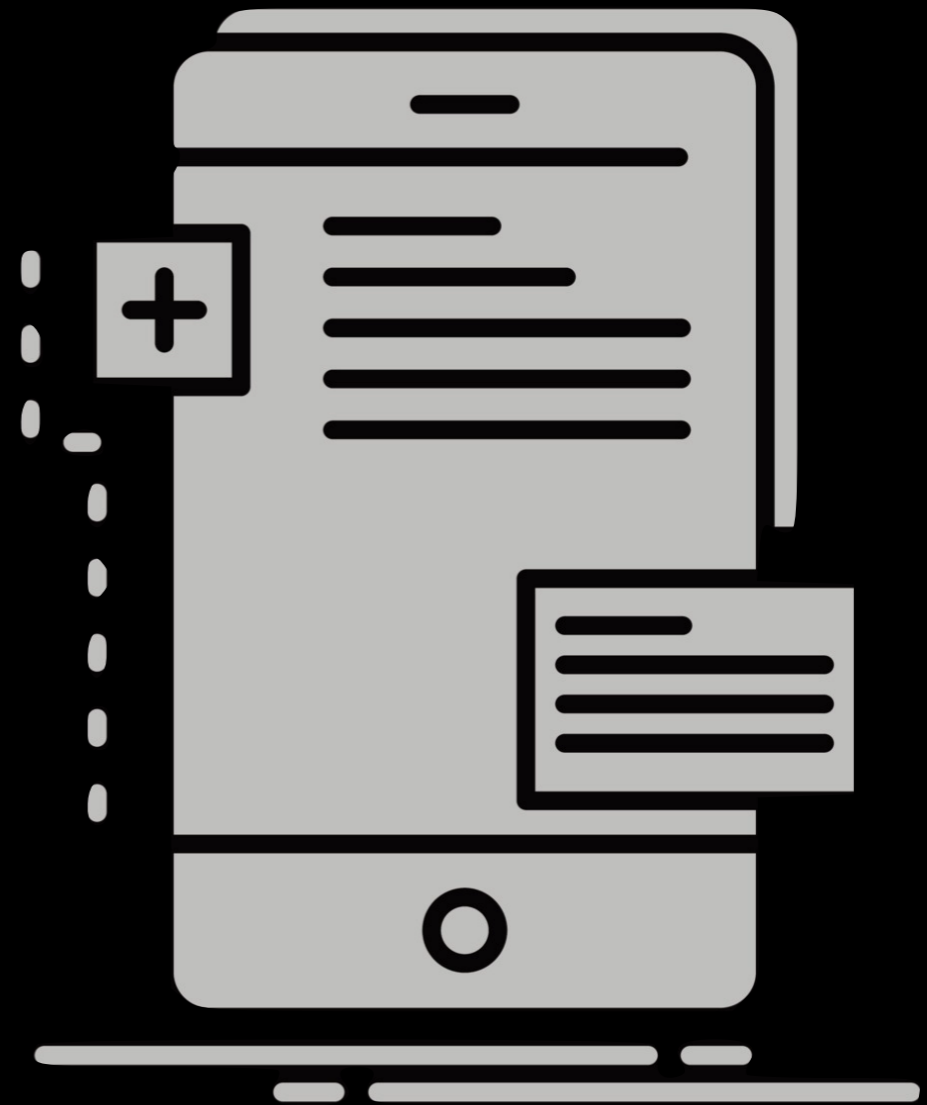
Group 5 Park JongBeum & Baek SeungHeon, May 22nd 2023

Recall

Front End

What we did last week

- Refactoring
- Multipart Form
- Initialization Progress
- Improve Maps tab



Back End

What we did last week

- JWT Middleware Verification
- API: GET FriendList
- Upload Profile Image via Multipart Form

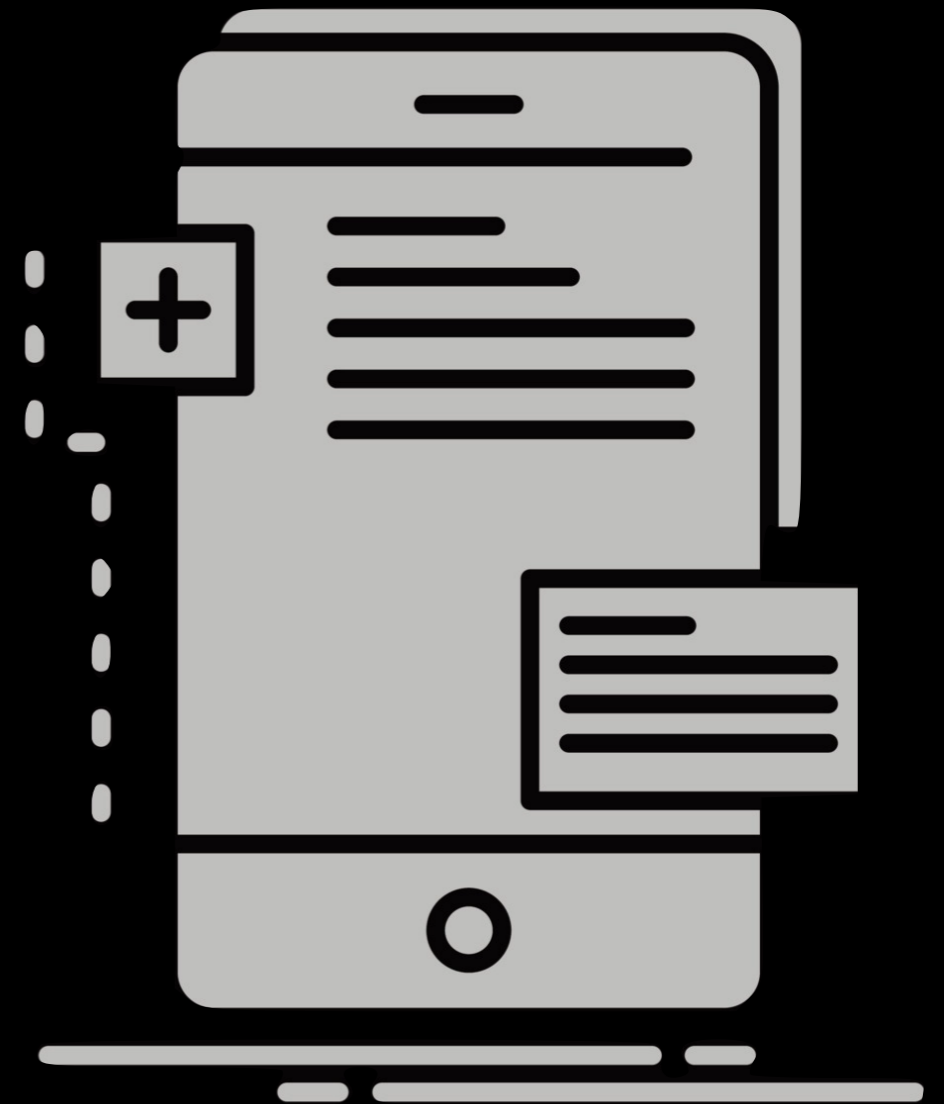


Frontend

Front End

What Our Team Have Done

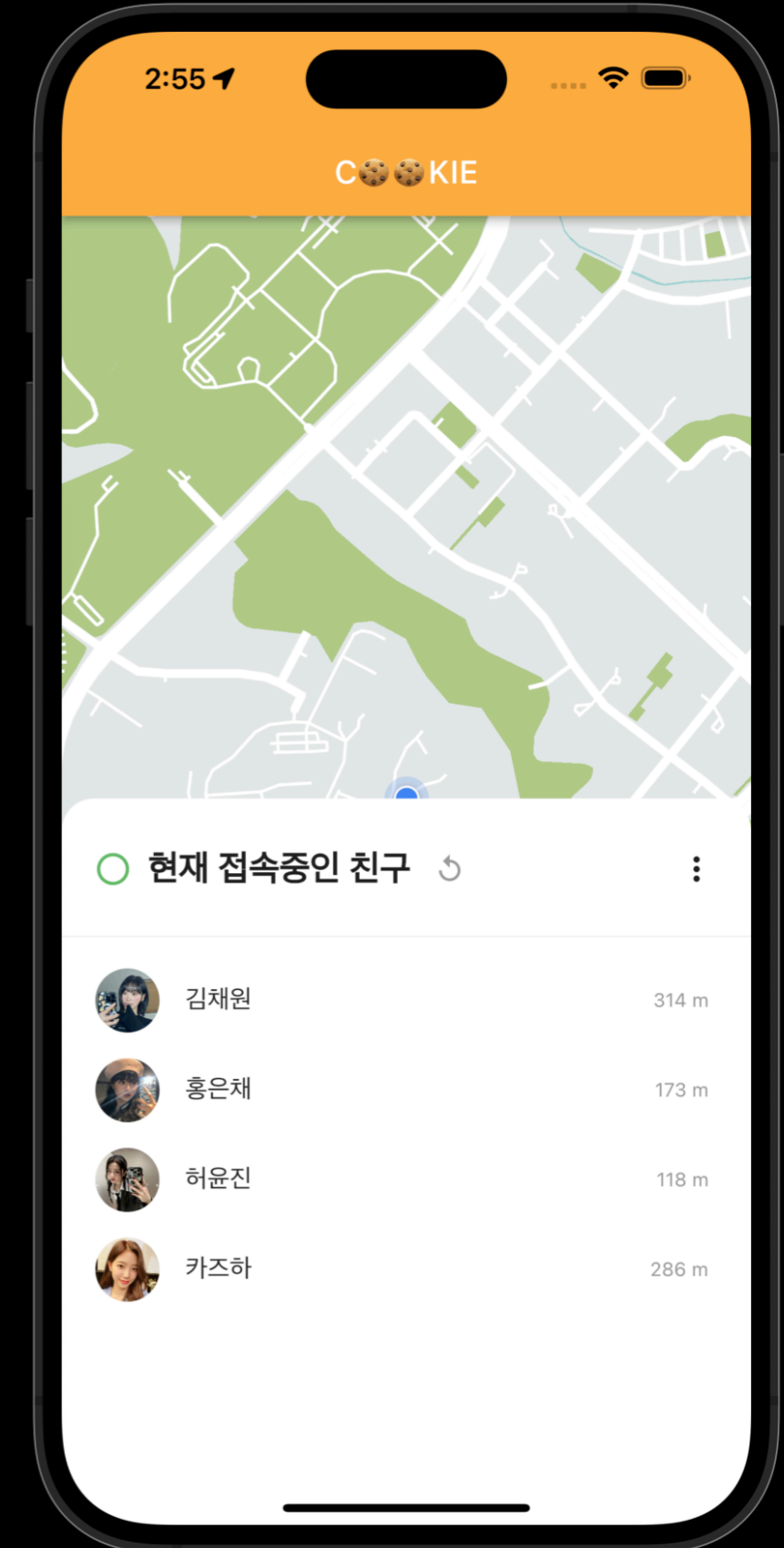
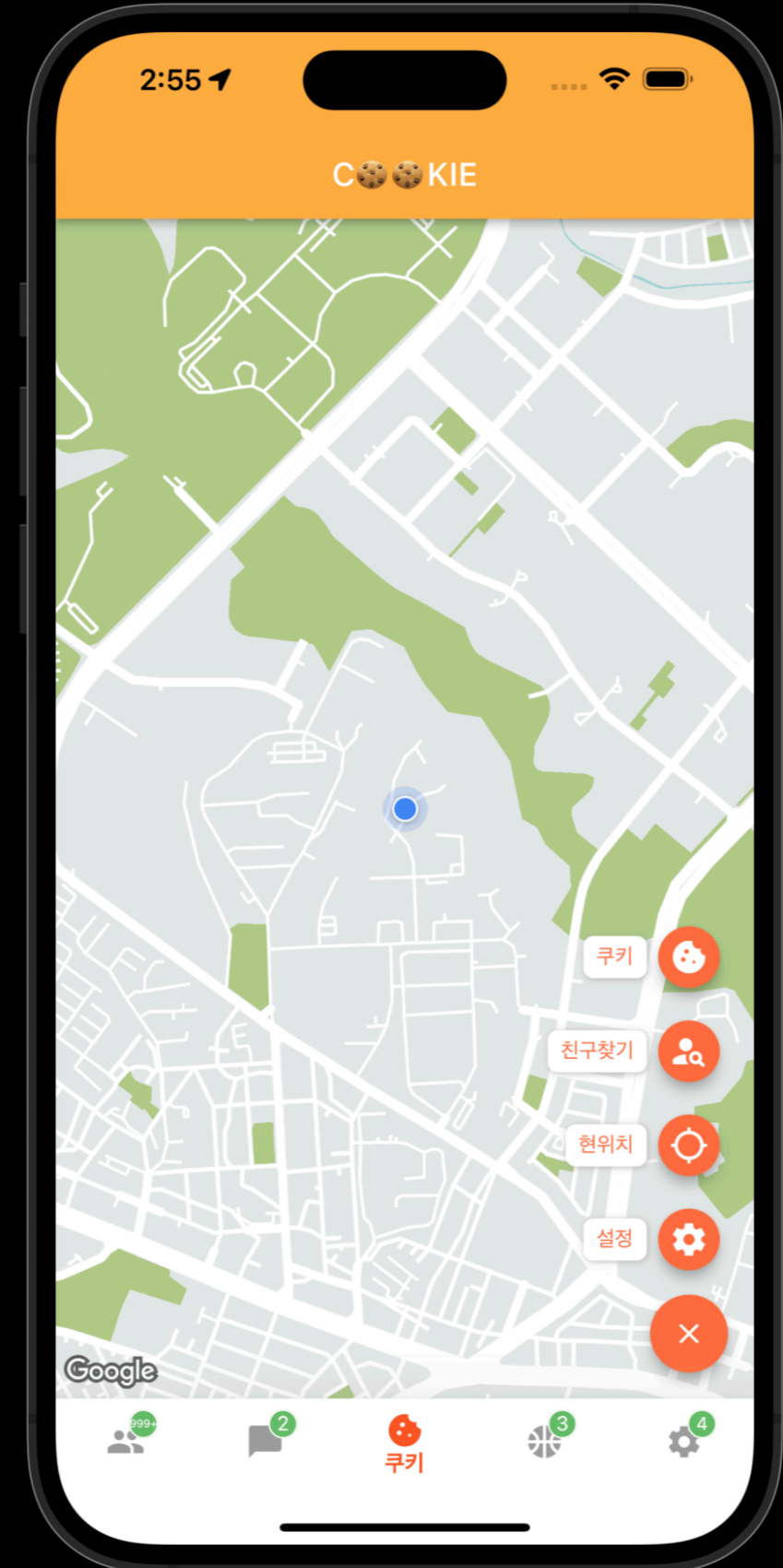
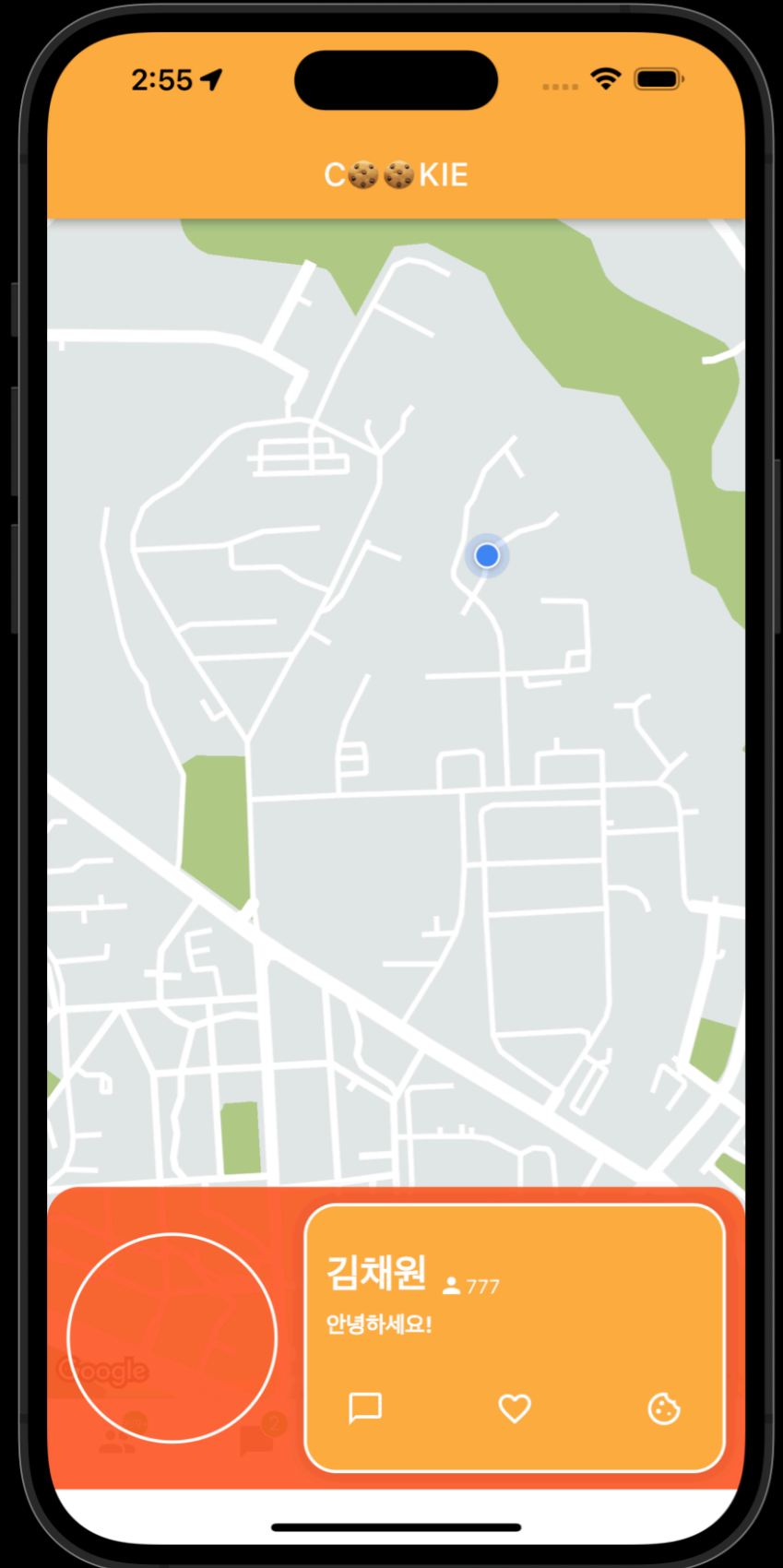
- Maps tab
 - Controls Camera
 - Share your location with friends
- Application state management
 - Apply "Provider" package
- Current Account loaded in global memory



Maps tab

- Control the camera
- Use "Speed dial" widget
 - Perform a variety of actions
- Interact with other users
 - Indicates whether the application is running
 - Location information sharing





State management

State management

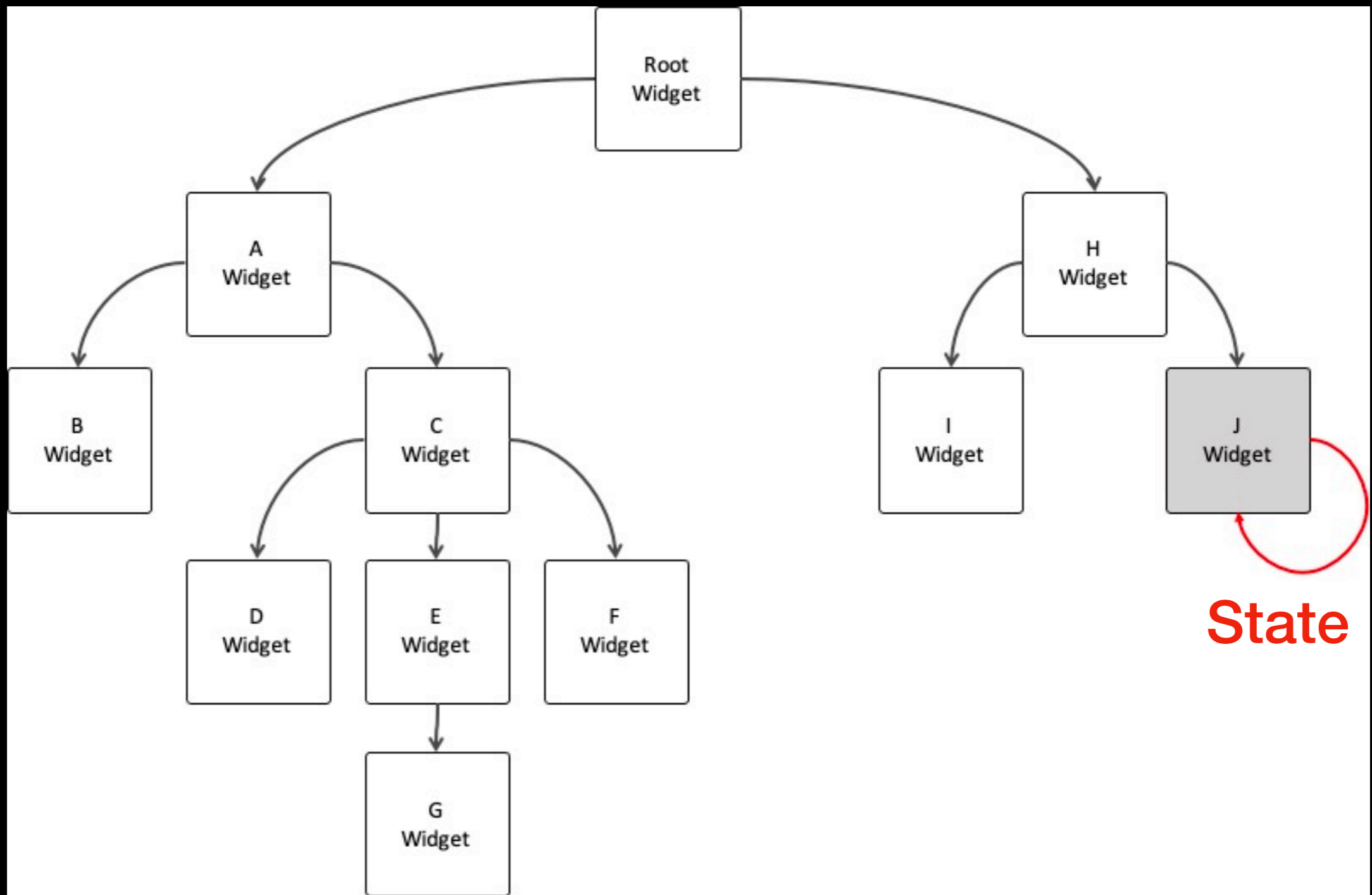
Why do we need it?

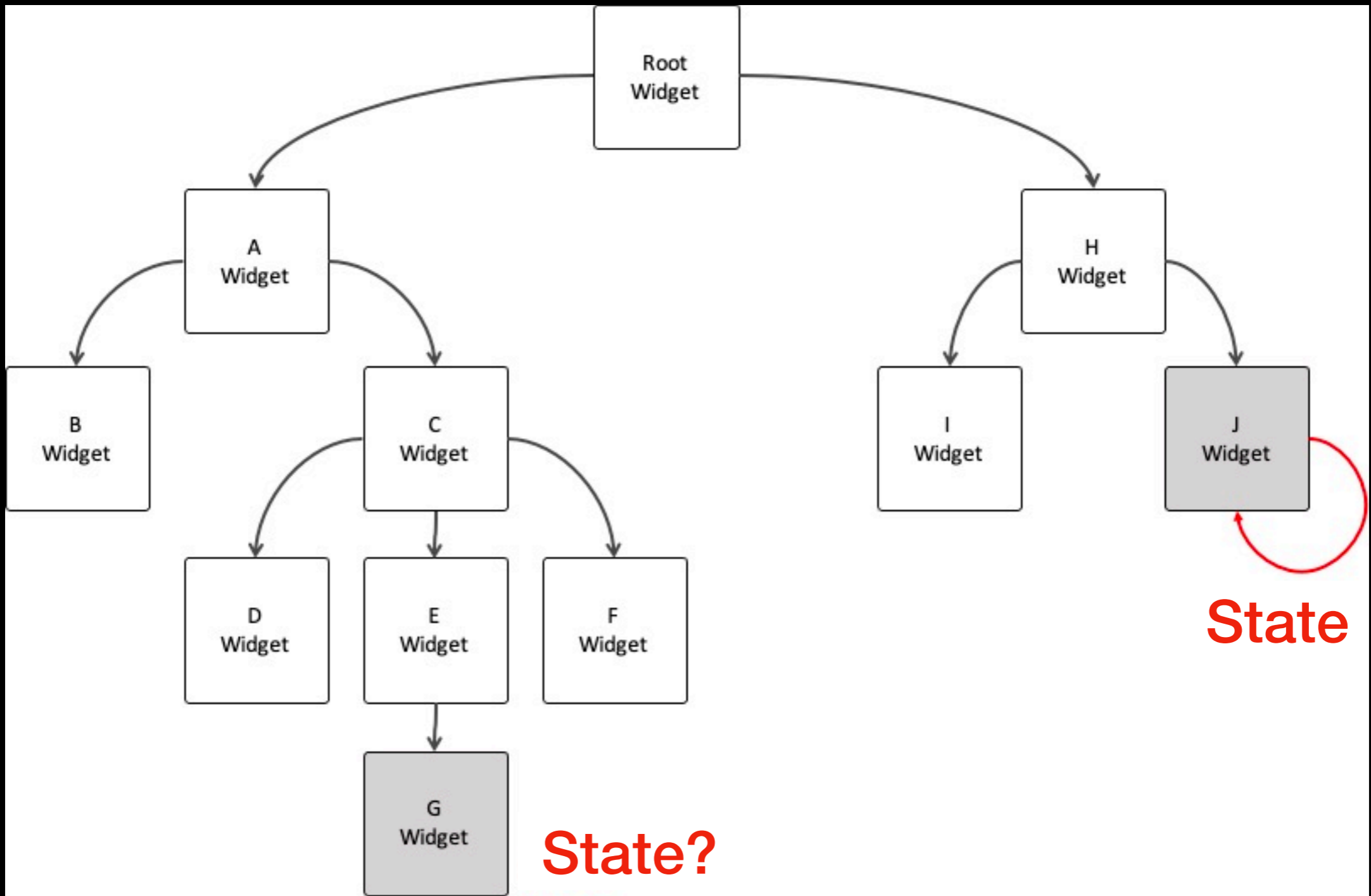
- Centralize your data
 - Consistency / Durability
- Improve performance
- Easy code management

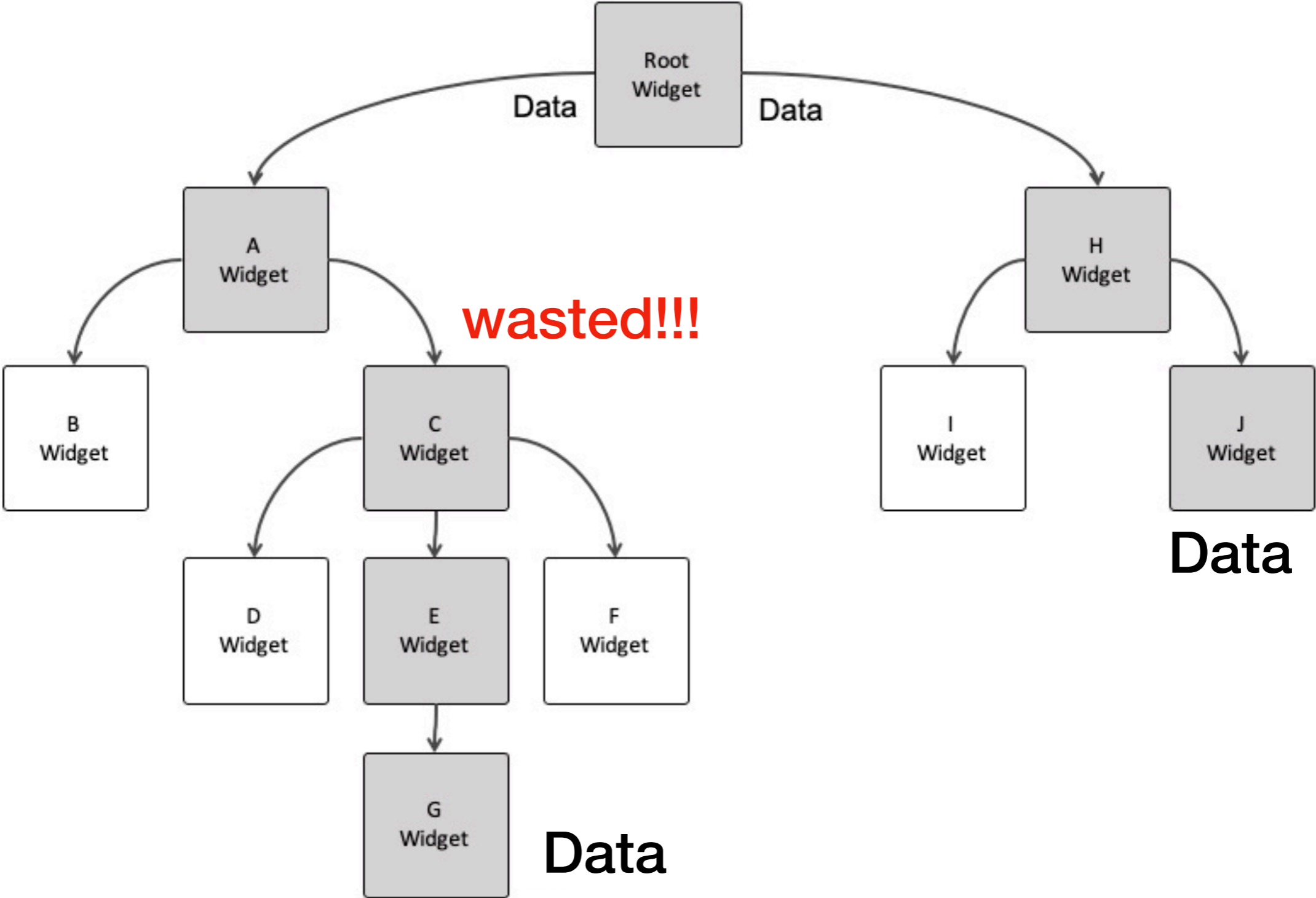
State management

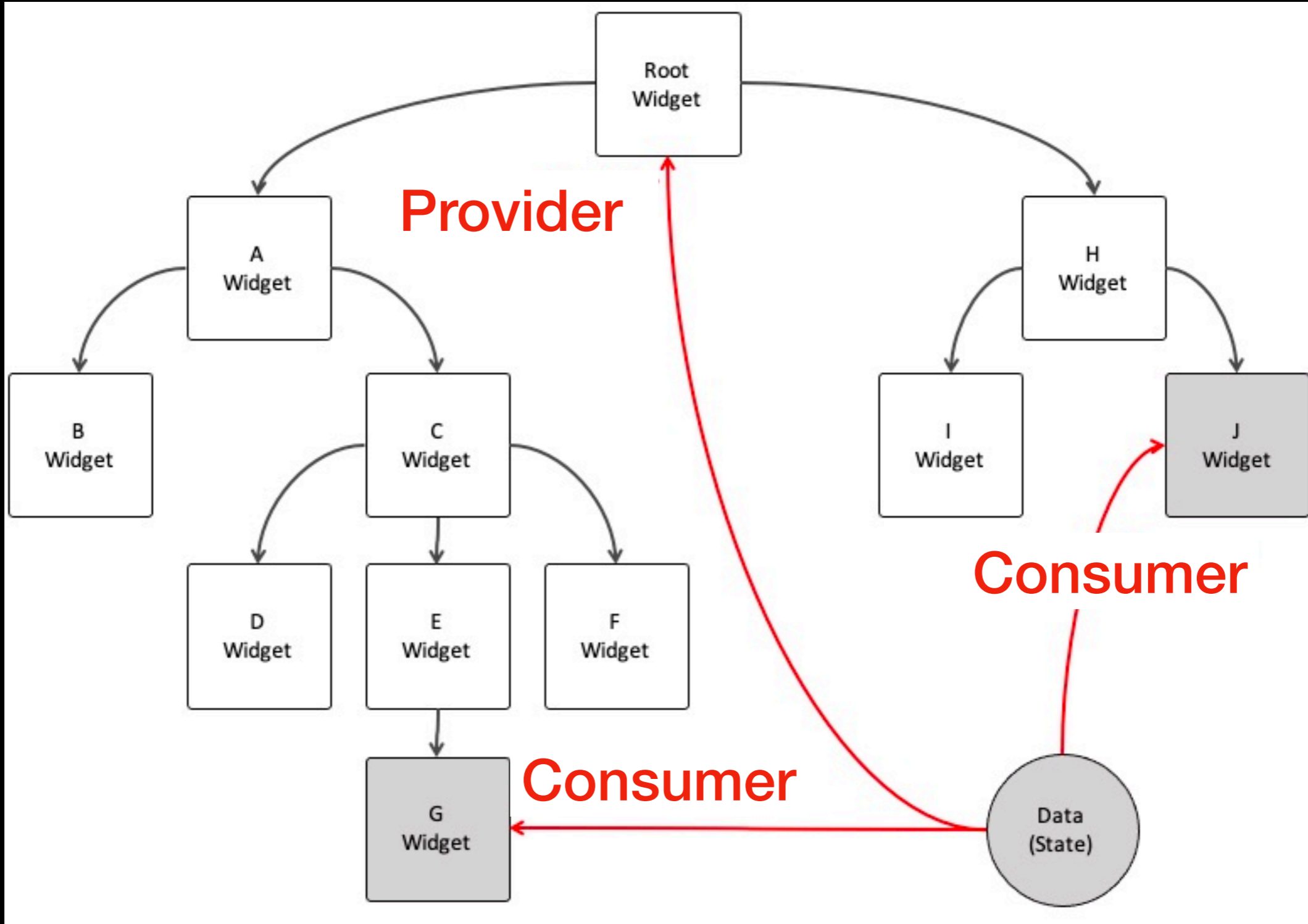
Some packages

- Provider (most used)
- BLoC
- Redux
- InheritedWidget
- GetX
- RiverPod







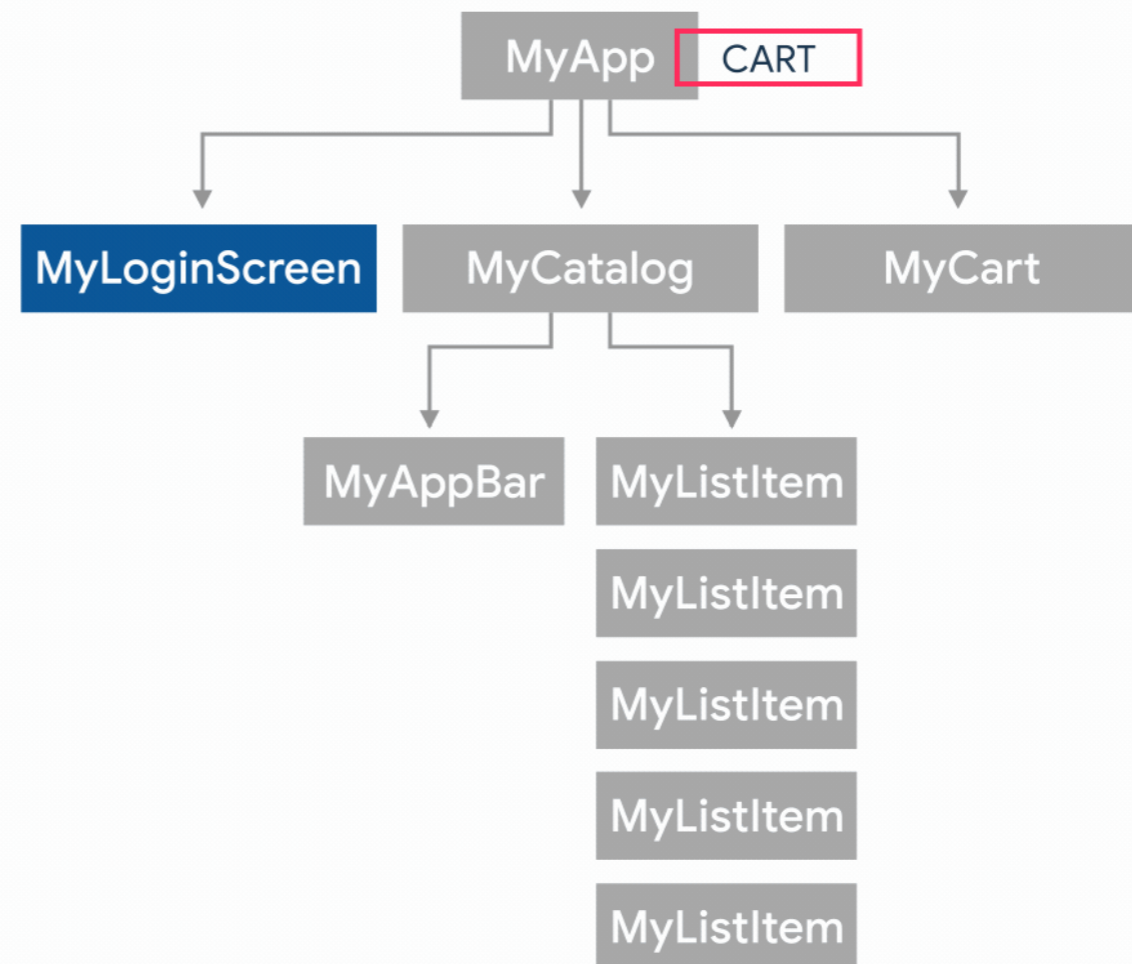


Welcome

Login

Password

Enter



async / await

myinfo.dart

Login

- Stores my account information in memory while app is in use
- Cached on account.json for AutoLogin
- Asynchronous processing is needed when loading file from storage

Process A

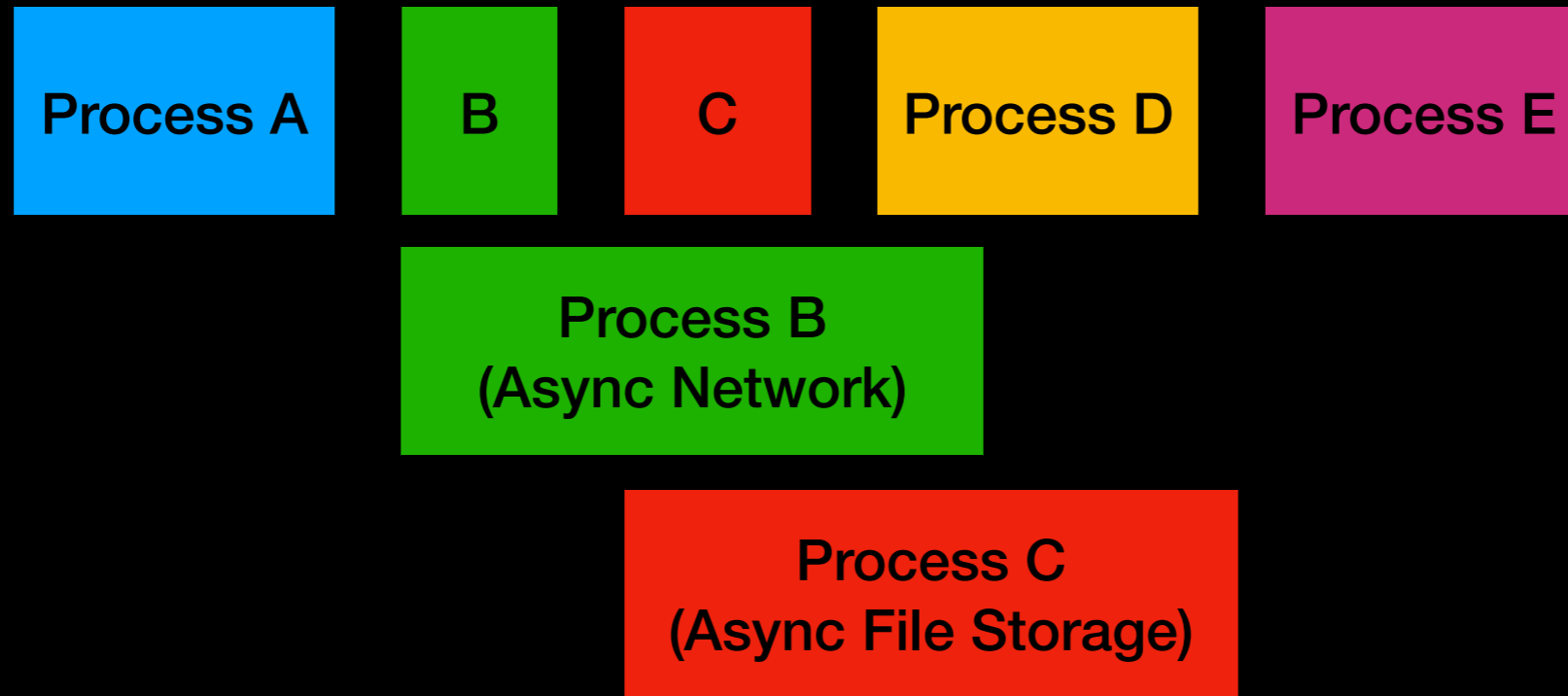
Process B
(Sync Network)

Process C
(Sync File Storage)

Process D

Process E

Synchronous Processing



Asynchronous Processing



```
1 console.log("before fetch()");  
2 fetch("https://dummyjson.com/products/1")  
3   .then((res) => res.json())  
4   .then(console.log);  
5 console.log("after fetch()");
```

```
before fetch()
after fetch()
{
  id: 1,
  title: 'iPhone 9',
  description: 'An apple mobile which is nothing like apple',
  price: 549,
  discountPercentage: 12.96,
  rating: 4.69,
  stock: 94,
  brand: 'Apple',
  category: 'smartphones',
  thumbnail: 'https://i.dummyjson.com/data/products/1/thumbnail.jpg',
  images: [
    'https://i.dummyjson.com/data/products/1/1.jpg',
    'https://i.dummyjson.com/data/products/1/2.jpg',
    'https://i.dummyjson.com/data/products/1/3.jpg',
    'https://i.dummyjson.com/data/products/1/4.jpg',
    'https://i.dummyjson.com/data/products/1/thumbnail.jpg'
  ]
}
```



```
1 const func = async () => {  
2   const response = await fetch("https://dummyjson.com/products/1");  
3   // await Promise<Response> => Response  
4   const json = await response.json();  
5   // await Promise<any> => any  
6   console.log(json);  
7 };  
8  
9 func();
```



```
1 const func = async () => {
2   const response = await fetch("https://dummyjson.com/products/1");
3   // await Promise<Response> => Response
4   const json = await response.json();
5   // await Promise<any> => any
6   console.log(json);
7 };
8
9 const async_fetcher = async () => {
10  console.log("before func()");
11  await func();
12  console.log("after func()");
13 };
14
15 async_fetcher();
```


before func()

```
{  
  id: 1,  
  title: 'iPhone 9',  
  description: 'An apple mobile which is nothing like apple',  
  price: 549,  
  discountPercentage: 12.96,  
  rating: 4.69,  
  stock: 94,  
  brand: 'Apple',  
  category: 'smartphones',  
  thumbnail: 'https://i.dummyjson.com/data/products/1/thumbnail.jpg',  
  images: [  
    'https://i.dummyjson.com/data/products/1/1.jpg',  
    'https://i.dummyjson.com/data/products/1/2.jpg',  
    'https://i.dummyjson.com/data/products/1/3.jpg',  
    'https://i.dummyjson.com/data/products/1/4.jpg',  
    'https://i.dummyjson.com/data/products/1/thumbnail.jpg'  
  ]  
}
```

after func()



```
1 const func = async () => {
2   const response = await fetch("https://dummyjson.com/products/1");
3   // await Promise<Response> => Response
4   const json = await response.json();
5   // await Promise<any> => any
6   console.log(json);
7 };
8
9 const sync_fetcher = () => {
10  console.log("before func()");
11  func();
12  console.log("after func()");
13 };
14
15 sync_fetcher();
```

```
before func()
after func()
{
  id: 1,
  title: 'iPhone 9',
  description: 'An apple mobile which is nothing like apple',
  price: 549,
  discountPercentage: 12.96,
  rating: 4.69,
  stock: 94,
  brand: 'Apple',
  category: 'smartphones',
  thumbnail: 'https://i.dummyjson.com/data/products/1/thumbnail.jpg',
  images: [
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    'https://i.dummyjson.com/data/products/1/3.jpg',
    'https://i.dummyjson.com/data/products/1/4.jpg',
    'https://i.dummyjson.com/data/products/1/thumbnail.jpg'
  ]
}
```

Backend

Back End

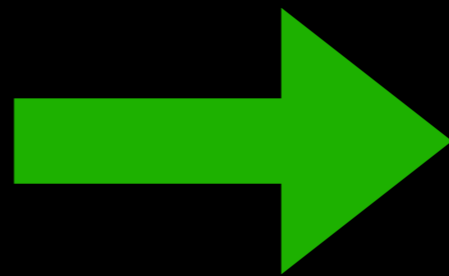
What Our Team Have Done

- TypeScript
- socket.io ready

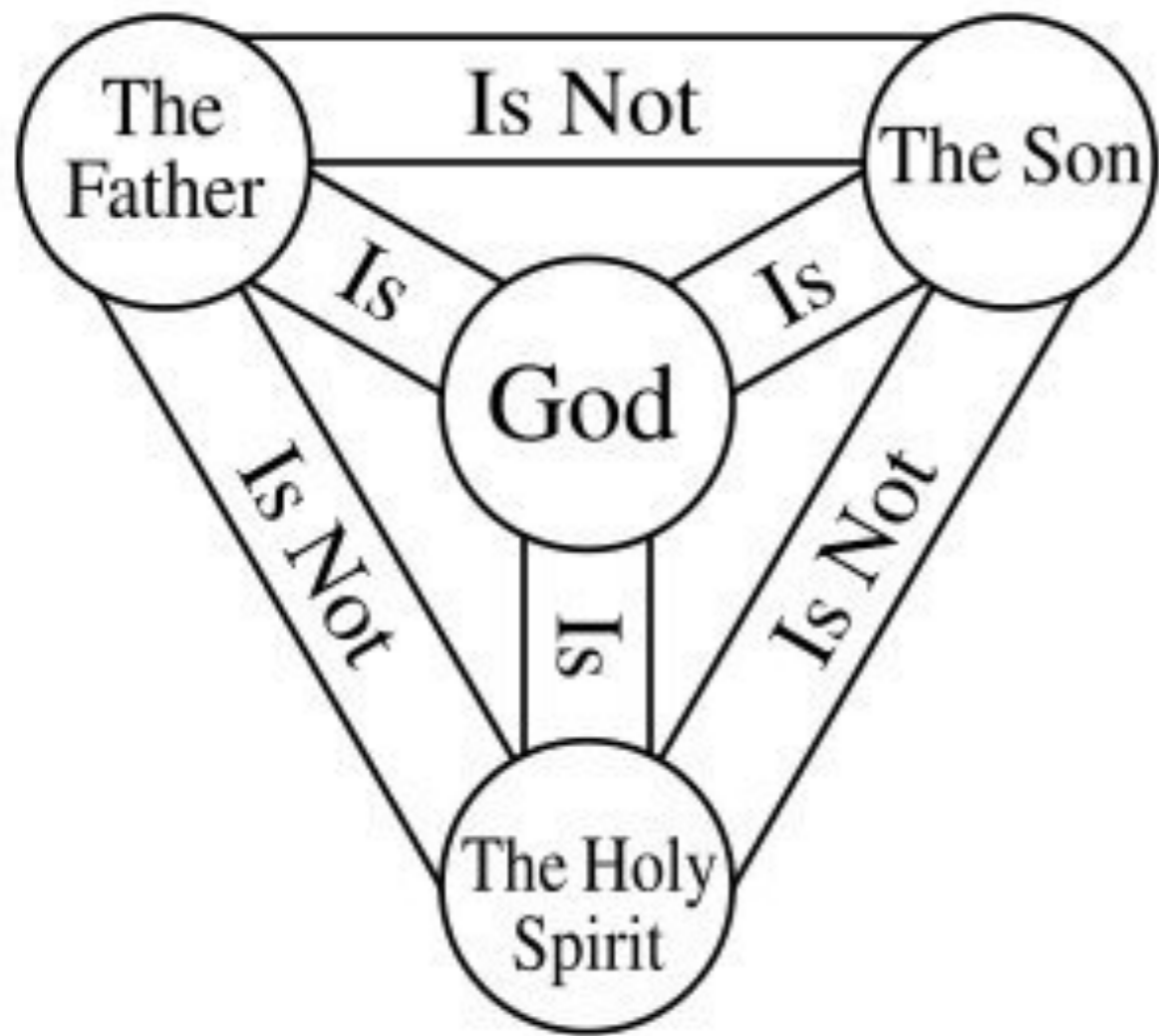


TypeScript Migration

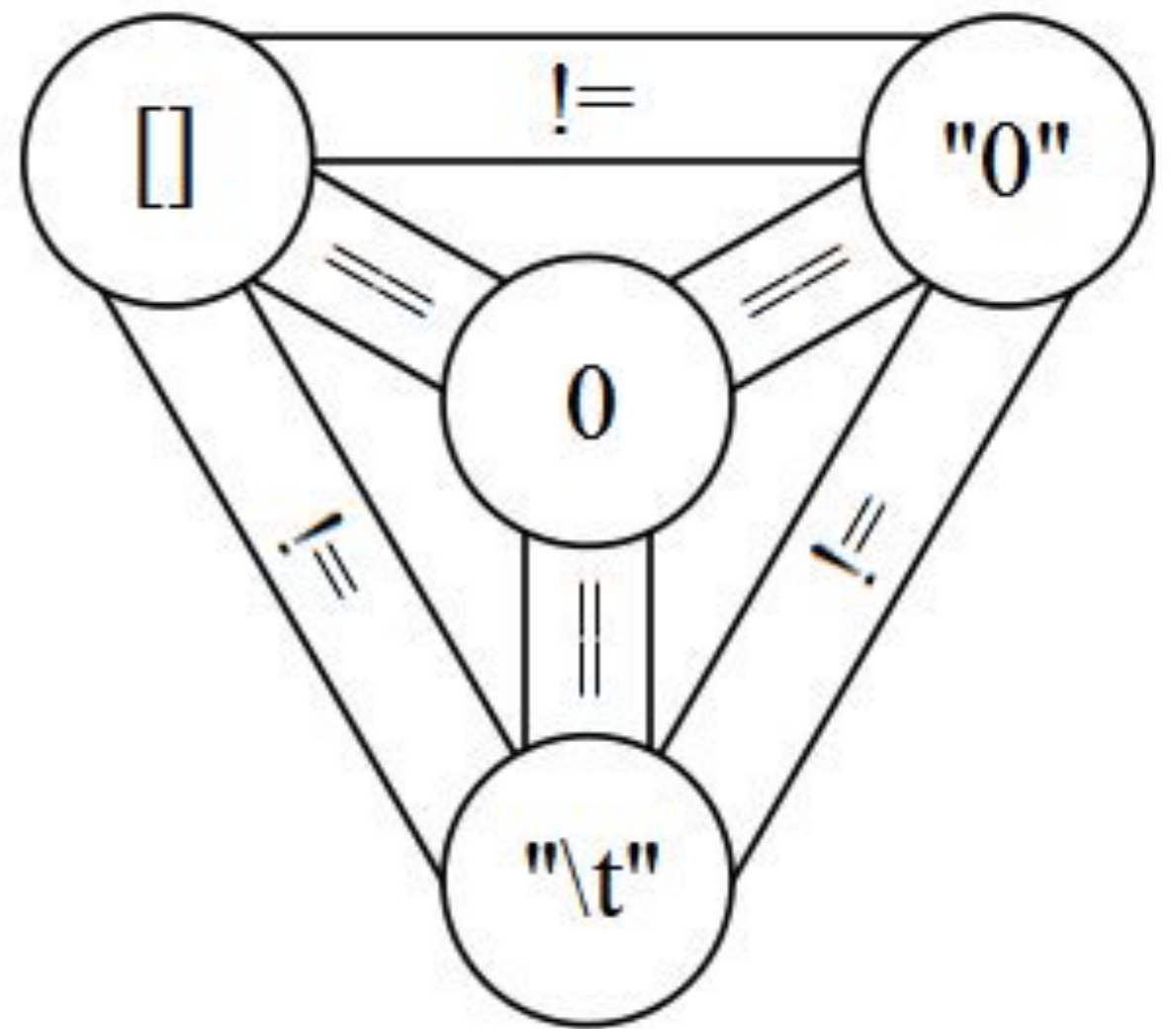
JS



TS



Christianity



JavaScript

@hsjoih

Why TypeScript?

- “Typed” JavaScript
- Prevent error before compile
- Code AutoCompletion

```
1 // math.js
2 function sum(a, b) {
3   return a + b;
4 }
5
6 // math.ts
7 function sum(a: number, b: number) {
8   return a + b;
9 }
10
11 sum(10, 20) // result: 30
12 sum('10', '20') // result: 1020
```

```
function sum(a: number, b: number) {
  re
}
sum('10', '20');
```

error

error TS2345: Argument of type '"10"' is not assignable to parameter of type 'number'.
"10" 형식의 인수는 'number' 형식의 매개 변수에 할당될 수 없습니다. ts(2345)

문제 보기 빠른 수정을 사용할 수 없음

Thank You

Questions are welcome