

Finding impostor





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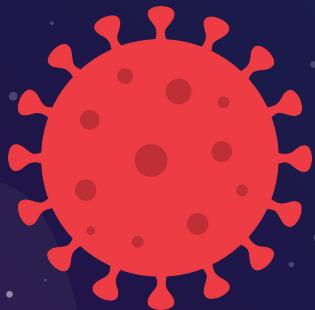


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What is Finding imposter ?

What is Finding imposter ?





Why is Finding imposter ?

Why is Finding imposter ?



Technology

Blockchain



Frontend



Backend



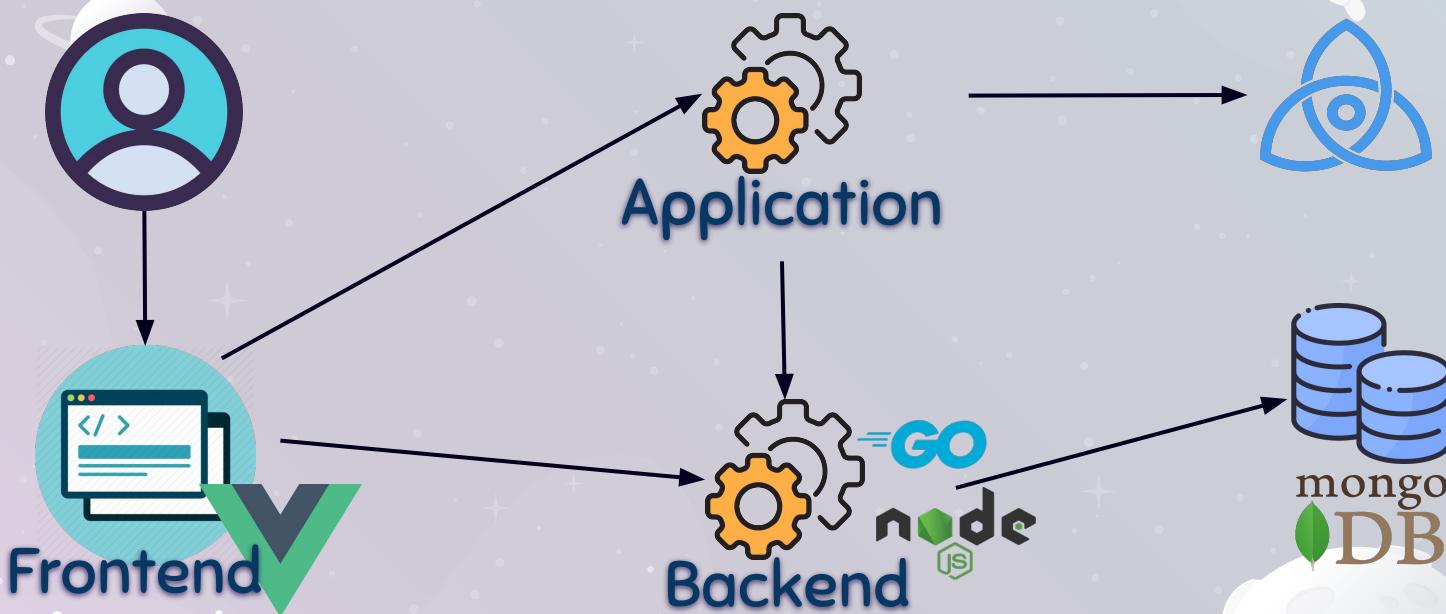
Database



Why do we have “Database”

- Place (id, name)
- Doctor request (address)

Architecture



Features

User

- Checkin / Checkout
- View logs
- View quarantine
- Report covid
- View covid

Features

Doctor

- Request to be a doctor
- Approve / Reject covid

Checkin / Checkout

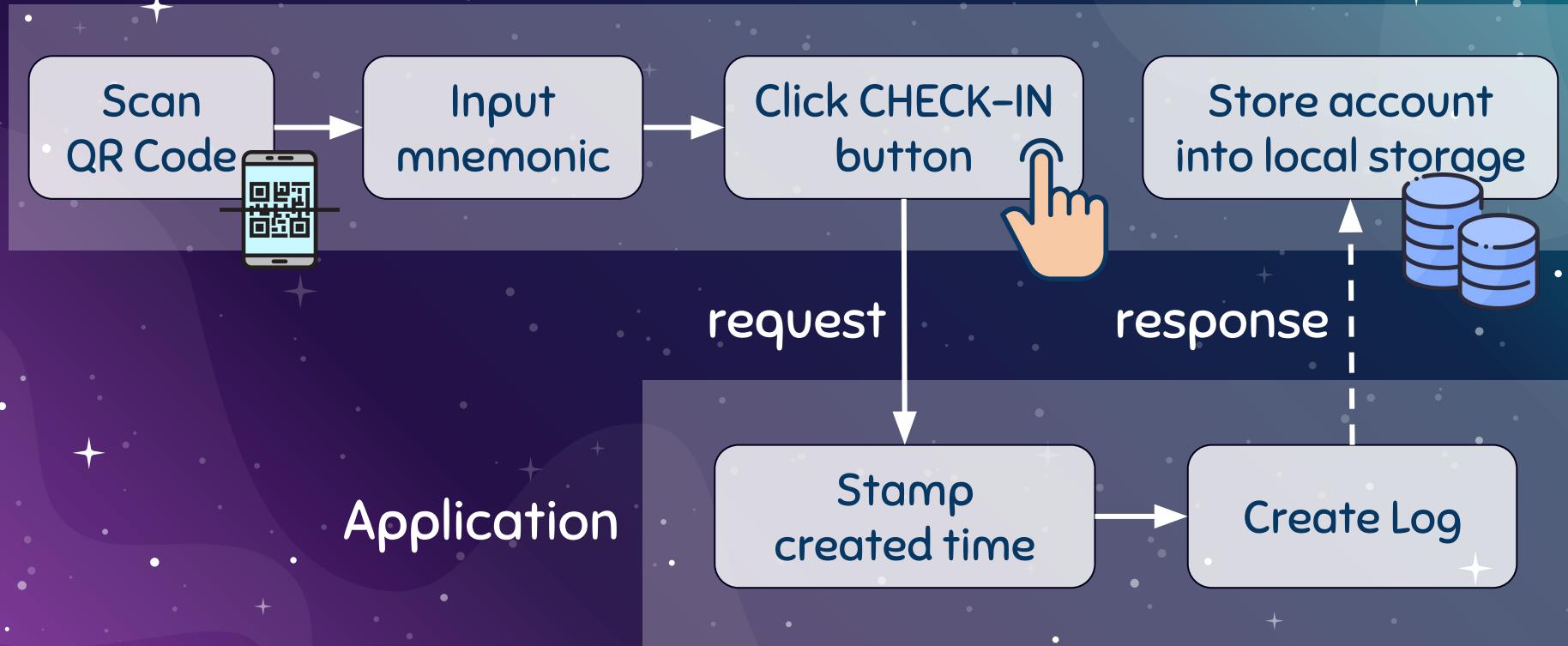


Checkin

1. Scan QR Code
2. Input secret
3. Click CHECK-IN button
4. Send a request to create a log
5. Application fill createdAt
6. Create log
7. Store account into local storage

Checkin

Frontend



Checkout

1. Click CHECK-OUT button
2. Send a request to create a log with account from local storage
3. Application fill createdAt
4. Create log

Checkout

Frontend

Click CHECK-OUT
button



request

Application

Stamp
created time

Create Log



View logs



Log

Place	Check-in	Check-out
I CANTEEN, Chulalongkorn University	22/11/2020 06:10	22/11/2020 06:25

View quarantine



Quarantine

Start at	End at
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22/11/2020 06:12	06/12/2020 06:12
22/11/2020 06:10	06/12/2020 06:10
22/11/2020 06:10	06/12/2020 06:10
22/11/2020 06:11	06/12/2020 06:11

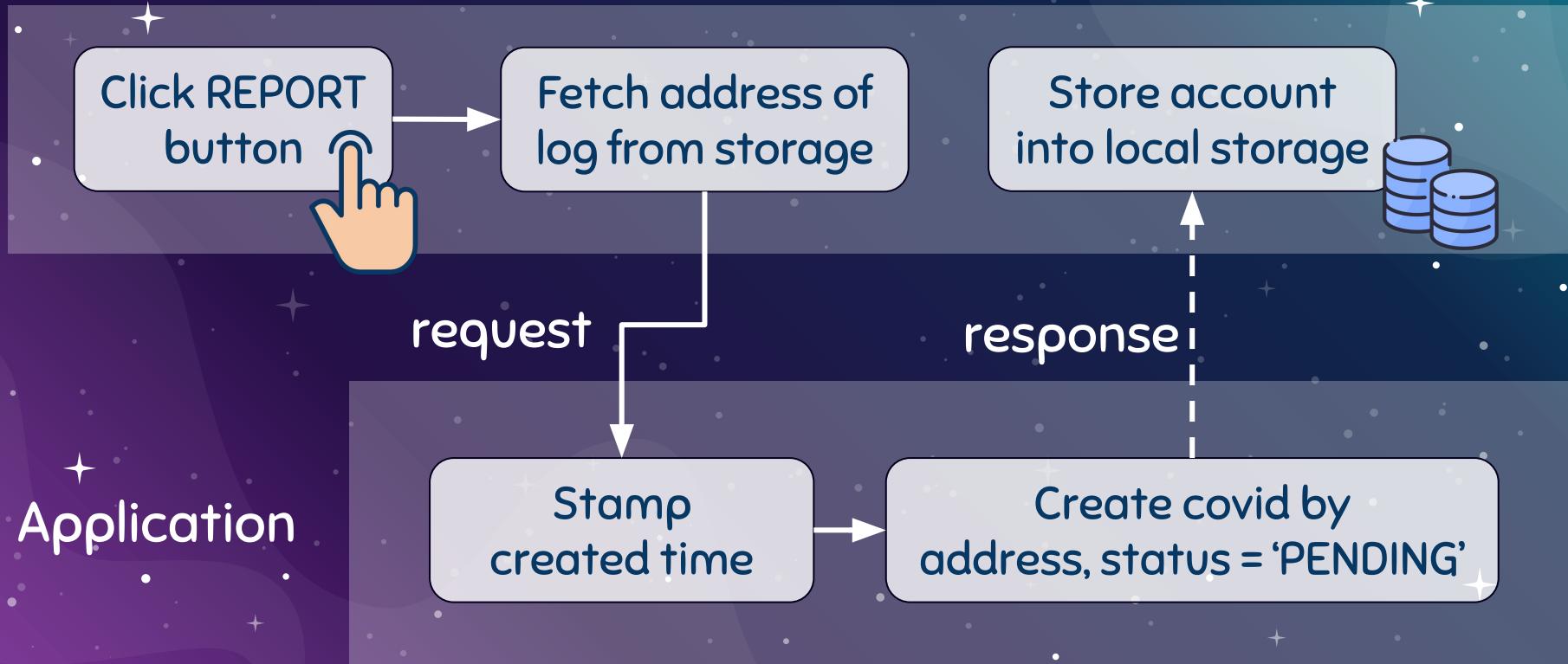
Local storage: Log address

- Secret, address and created time
- Store only 28 days

```
▼ 3j43fte3x74mf9vcx8vjt:  
  address: "cosmos1eu3hc4dzynjz94zn0hfj5zlldthkls2xwv5dpc"  
  createdAt: "2020-11-25T09:11:10.565293Z"  
  secret: "camp crisp demise twenty shell ski sibling section cannon imitate slush wild slot happy h  
  ► __proto__: Object  
► 3184ilnh56t5ad78wa5f5h: {secret: "camp crisp demise twenty shell ski sibling section...reme buddy input  
► axxqha8o1ylijqogfe6ng: {secret: "camp crisp demise twenty shell ski sibling section...reme buddy input  
► eypo1p50vrys1t1txreldq: {secret: "tube divert era hawk lab scare erupt midnight upon...cycle arena mot  
► kd9zv8y7l1av5jt4bsy3t: {secret: "camp crisp demise twenty shell ski sibling section...reme buddy input
```

Report covid

Frontend



View covid

Frontend



[address]

Application



Covid

ID

mrae541aynknc36ecuhny9

Status

PENDING

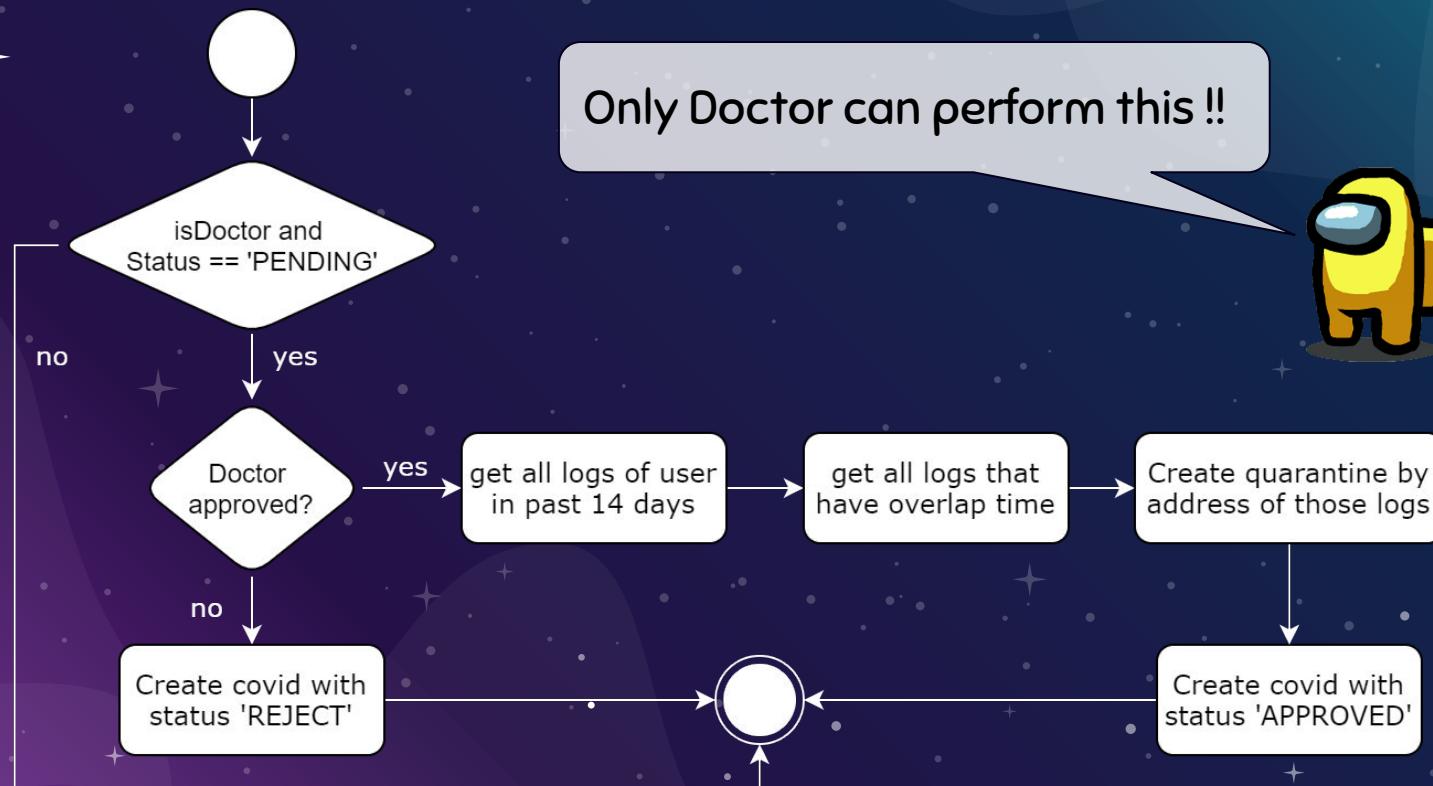
REPORT

Local storage: Covid address

- Log address != Covid address
- Covid address will store permanently

```
{13r63hm7mq763p00ids0em: {...}, 71r0ql3yjwi28hevc8912g: {...}, i1bq60d6yhhwoit006h4: {...} } ⓘ  
  ▼ 13r63hm7mq763p00ids0em:  
    address: "cosmos1f0hs7vteun5wl7yu3u22n639zakgenl5prwyxp"  
    secret: "tube divert era hawk lab scare erupt midnight upon doll harvest fabric direct involve tun  
  ► __proto__: Object  
  ► 71r0ql3yjwi28hevc8912g: {secret: "tube divert era hawk lab scare erupt midnight upon...cycle arena mot  
  ► i1bq60d6yhhwoit006h4: {secret: "camp crisp demise twenty shell ski sibling section...day design supre
```

Approve/reject covid



Request to be a doctor

Create request
to be a doctor

Store address
to database



- Assumption: Every month, trusted third-party will check and create doctors with super account

Performance



Avg: 12 transaction/(person*day)
(check-in + check-out)

~ 7000 transaction/s

Tendermint
~ 10,000 transactions / sec

Limitations and further development



1. Gas should be '0'
2. System should generate account automatically every check-in request
3. Should use multi-sign when create covid to confirm address
4. Local storage is not secure
5. Doctor is not automate
6. No implementation of place registration
7. No implementation of doctor request display
8. To use place owner as a validator, need law or agreement

Demo





I CANTEEN, Chulalongkorn University



<http://localhost:8080/main?id=5faf9e8c6e770822234c3dde>

Q&A

