#### Starting server

In MAMP -> start

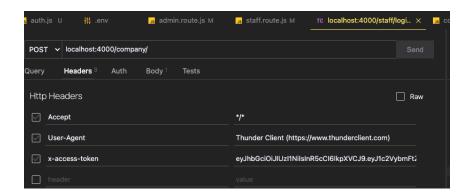
In RFID-Contract repo -> cd backend -> npm run server

#### ### IMPORTANT ###

Service that highlighted in yellow need "jwn token" in headers["x-access-token"] (admin,manager or staff)

Service that highlighted in green need "jwn token" in headers ["x-access-token"] (admin or manager only)

Service that highlighted in pink need"jwn token" in headers["x-access-token"] (admin only)



localhost:4000 for every service

## **ADMIN** —

GET localhost:4000/admin/ -> get all admin accounts
GET localhost:4000/admin/:username -> get admin account by username

```
POST localhost:4000/admin/register -> register new admin account Request body example:
```

```
{
  "username": "admin",
  "password": "admin"
}
```

# POST localhost:4000/admin/login -> login as admin

```
Request body example:
{
    "username": "admin",
    "password": "admin"
}
```

Response body example:

```
"status": "ok",
"token":
```

}

"eyJhbGciOiJIUzl1NilsInR5cCl6lkpXVCJ9.eyJ1c2VybmFtZSl6lmFkbWluliwiaWF0ljoxNjUwNjl5NDEyfQ.\_yrFeKQl7jP VYQAoZ1FJMddhql5y Mep0y2NH74chs4"

## **COMPANY** —

GET localhost:4000/company/ -> get all companies

GET localhost:4000/company/:companyCode -> get company by company code

Example: localhost:4000/company/YORU

# POST localhost:4000/company/ -> create new company

```
Request body example:

{
  "companyCode": "YORU",
  "companyName": "Team Yoru",

  "walletPublicKey": "0xf4a6514b99Eac9F938a6441E42F2b985746A7c7D",
  "walletPrivateKey": "a225c85bec66a9c5d2df394f16e6ec902d24a10cd96c2eaf0b8d5b9ffdb27406"
}
```

**DELETE localhost:4000/company/:companyCode** -> delete company by company code and all its staff

# PUT localhost:4000/company/update/:companyCode -> update company by

```
company code
Request body example:
```

```
{
    "companyCode": "YORU",
    "companyName": "Team Yoru",

    "walletPublicKey": "0xf4a6514b99Eac9F938a6441E42F2b985746A7c7D",

    "walletPrivateKey": "a225c85bec66a9c5d2df394f16e6ec902d24a10cd96c2eaf0b8d5b9ffdb27406"
}
```

```
NODE —
```

GET localhost:4000/node/ -> get all nodes

GET localhost:4000/node/:nodeCode -> get node by node code

**GET localhost:4000/node/active/** -> get all nodes that currently active

**GET localhost:4000/node/active/:companyCode** -> get all active nodes of the company

**GET localhost:4000/node/bycompany/:companyCode/** -> get all nodes of the company

**GET localhost:4000/node/related/:shipmentld** -> get all node codes that participated in the path of the shipment by its shipment id

**GET localhost:4000/node/stock/samedestination/:destinationNode** -> get all node codes that currently have shipments with the same destination as req.params and the shipments are not in shipping or completed status.

```
POST localhost:4000/node/ -> create new node
Request body example:
 "nodeCode": "LKB-231",
 "companyCode": "YORU",
 "address": "123 Ladkrabang 12304",
 "lat": 12.3102,
 "Ing": 11.222,
 "phoneNumber": "0912345678",
 "status": "active"
}
PUT localhost:4000/node/update/:nodeCode/ -> update node data
Request body example:
{
 "nodeCode": "LKB-231",
 "companyCode": "YORU",
 "address": "123 Ladkrabang 12304",
 "lat": 12.3102,
 "Ing": 11.222,
 "phoneNumber": "0912345678",
```

```
"status": "active" }

PATCH localhost:4000/node/update/status/:nodeCode/ -> update node status
Request body example:
{
    "nodeCode": "LKB-231",
    "status": "inactive"
}
```

**DELETE localhost:4000/node/:nodeCode/** -> delete node by nodeCode

#### STAFF —

GET localhost:4000/staff/ -> get all staff accounts

GET localhost:4000/staff/:username -> get staff by username

**GET localhost:4000/staff/getByCompany/:companyCode** -> get all staff accounts of the company

```
POST localhost:4000/staff/register -> register new staff account
Request body example:
 "username": "ritteamyoru",
 "password": "yoru1234",
 "fullName": "Phurit Warapattanapong",
 "email": "test@email.com",
 "positionLevel": "manager",
 "companyCode": "YORU"
}
POST localhost:4000/staff/login -> login as staff
Request body example:
 "username": "ritteamyoru",
 "password": "yoru1234"
Response body example:
"username": "ritteamyoru",
"password": "$2b$10$lcnGxm2rj5vOaC2FjYRvCOJrZFwyz.nP9IfJGqKP6guiw.3swi2fa",
"email": "test@email.com",
"positionLevel": "manager",
"companyCode": "YORU",
"eyJhbGciOiJIUzI1NilsInR5cCl6lkpXVCJ9.eyJ1c2VybmFtZSl6InJpdHRIYW15b3J1liwiaWF0IjoxNjUwNjMyNzcwfQ.O
WmW-aEt8FYA73eZuChNJUq09tO43vUbFKn0WrYhvFw"
}
```

```
POST localhost:4000/staff/checkPassword -> check user password
Request body example:
 "username": "ritteamyoru",
 "password": "yoru1234"
Response body example:
"username": "ritteamyoru",
"password": "$2b$10$lcnGxm2rj5vOaC2FjYRvCOJrZFwyz.nP9lfJGqKP6guiw.3swi2fa",
"email": "test@email.com",
"positionLevel": "manager",
"companyCode": "YORU",
}
Or 403
"error": "Invalid password",
PUT localhost:4000/staff/update/:username -> update staff account
Request body example:
 "username": "ritteamyoru",
 "password": "yoru1234",
 "fullName": "Phurit Warapattanapong",
 "email": "test@email.com",
 "positionLevel": "manager",
 "companyCode": "YORU"
}
```

**DELETE localhost:4000/staff/:username** -> delete staff by username

#### SHIPMENT—

GET localhost:4000/shipment/ -> get all shipment from SQL DB

GET localhost:4000/shipment/:id -> get shipment by shipmentId (uid) from SQL DB

**GET localhost:4000/shipment/stock/:companyCode** -> get shipment that currently stocking in the company(created/arrived) from SQL DB

**GET localhost:4000/shipment/stock/node/:nodeCode** -> get shipment that currently stocking in the specific node(created/arrived) from SQL DB

**GET localhost:4000/shipment/status/:status/:companyCode** -> get shipment that latest scanned at node of the company with specific status from SQL DB

**GET localhost:4000/shipment/incomplete/:companyCode** -> get incomplete shipment that latest scanned at node of the company from SQL DB

**GET localhost:4000/shipment/related/:companyCode** -> get shipment that related to the company (being originNode, currentNode, or destinationNode)

**GET localhost:4000/shipment/contract/:id/:address** -> get shipment from smart contract by shipment id and using wallet public key

Example: localhost:4000/shipment/contract/TEST789/0xf4a6514b99Eac9F938a6441E42F2b985746A7c7D

# **GET localhost:4000/shipment/audit/:txnHash** -> get shipment data from blockchain using transaction hash

```
Response example:
[
 {
  "label": "Shipment id",
  "val": "SHP005"
 },
  "label": "Description",
  "val": "RTX 3060 Ti 12 ea"
  "label": "Origin Node",
  "val": "BANG-RAK-HQ1"
  "label": "Scanned at",
  "val": "BANG-RAK-HQ1"
  "label": "Destination Node",
  "val": "CNX-2040"
 },
  "label": "Producer",
  "val": "YORU"
 },
  "label": "Status",
  "val": "CREATED"
 {"label": "Scanned time",
  "val": "Mon May 23 2022" }
POST localhost:4000/shipment/ -> create shipment on smart contract
Request body example:
"uid":"TEST300",
"description": "PS5 2EA, Nintendo Switch 1EA",
"originNode":"LKB-1003",
"currentNode":"LKB-1003",
"destinationNode": "BANG-RAK-HQ1",
"companyCode":"YORU",
"status":"created",
"scannedTime":1651120311,
"walletPublicKey": "0xf4a6514b99Eac9F938a6441E42F2b985746A7c7D",
}
```

```
POST localhost:4000/shipment/centralize/ -> create shipment on SQL
Request body example:
"uid":"TEST300",
"description": "PS5 2EA, Nintendo Switch 1EA",
"originNode":"LKB-1003",
"currentNode":"LKB-1003",
"destinationNode": "BANG-RAK-HQ1",
"companyCode":"YORU",
"status": "created",
"scannedTime":1651120311,
"transactionHash": "0xfa3b5ab6f78bf5b99439820c299fb058ffbfac8af2bc8298676c1a53decbc853",
}
PUT localhost:4000/shipment/update/ -> create shipment on SQL
Request body example:
"uid":"TEST300",
"description": "PS5 2EA, Nintendo Switch 1EA",
"originNode":"LKB-1003",
"currentNode":"LKB-1003",
"destinationNode": "BANG-RAK-HQ1",
"companyCode":"YORU",
"status": "created",
"scannedTime":1651120311,
"walletPublicKey": "0xf4a6514b99Eac9F938a6441E42F2b985746A7c7D",
}
PUT localhost:4000/shipment/centralize/update/ -> create shipment on SQL
Request body example:
"uid":"TEST300",
"description": "PS5 2EA, Nintendo Switch 1EA",
"originNode":"LKB-1003",
"currentNode":"LKB-1003",
"destinationNode": "BANG-RAK-HQ1",
"companyCode":"YORU",
"status": "created",
"scannedTime":1651120311,
"transactionHash": "0xfa3b5ab6f78bf5b99439820c299fb058ffbfac8af2bc8298676c1a53decbc853",
```

```
SCAN DATA —
```

GET localhost:4000/scan/ -> get all scan data

GET localhost:4000/scan/node/:nodeCode/ -> get all scan that scanned at the node

GET localhost:4000/scan/shipment/:shipmentId -> get all scan data of the shipment

**GET localhost:4000/scan/stock/:nodeCode** -> get all scan data that created or arrived at that node(for calculate stocking graph)\

**GET localhost:4000/scan/shipping/:nodeCode** -> get all scan data that shipped at that node(for calculate shipping graph)

**GET localhost:4000/scan/status/:status/:companyCode** -> get all scan data that have the specific status at every nodes of the company(for calculate graph)

```
POST localhost:4000/scan/ -> create scan data
```

```
Request body example:
{
    "uid": "SHP002",
    "status": "shipping",
    "currentNode": "RAM-52011",
    "scannedTime": 1651420311,
    "transactionHash": "0xe62f73300c59dd9fba002eb187a9856cb97e54ff0fce3bada51ff284438f8224"
}
```