get API Doc

Lwu ý: http://localhost:3001 => https://tngiabao.ticklab.site

```
1. Sign Up
```

```
• URL: http://localhost:3001/api/auth/signup
  Method: POST
Request Body:
    "email": "bao6@123",
    "username": "bao6",
    "password": "123"
}
Response:
    "status": 201,
    "message": "User created successfully",
    "data": {
        "user": {
            "id": "20344dbf-6155-4ecc-891b-8fdaabea9b6e",
            "name": "bao7",
            "email": "bao7@123",
            "avatarurl":
"https://avatar.iran.liara.run/username?username=bao7",
            "role": "user",
            "coinbalance": 0
        }
   }
}
```

2. Sign In

• URL: http://localhost:3001/api/auth/signin

Method: POST

```
Request Body:
    "email": "bao3@123",
    "password": "123"
}
Response:
{
    "status": 200,
    "message": "User signed in successfully",
    "data": {
        "id": "1211d02a-df15-4365-9119-ef6371bdcd79",
        "name": "bao3",
        "email": "bao3@123",
        "avatarurl":
"https://avatar.iran.liara.run/username?username=bao3",
        "role": "admin",
        "coinbalance": 0,
       "cookie:
    }
}
```

3. File Upload

• URL: http://localhost:3001/api/file/upload

• Method: POST

Response:

```
{
    "status": 201,
    "message": "File uploaded successfully",
    "data": {
        "id": "c36d1ba3-bbac-4857-b6ea-45b4677e2379",
        "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
        "filename": "1730220603851-Chapter_6_v8.0.pdf",
```

```
"url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1730220603851-Chapter_6_v8.0.pdf?alt=media&token=15cec8d1-504c-48c
7-bf82-7425c10726a4",
        "type": "application/pdf",
           "pageCount": 5
   }
}
4. Get File by User ID
  • URL: http://localhost:3001/api/file/user/{userId}

    Method: GET

GET
https://tngiabao.ticklab.site/api/file/user/1211d02a-df15-4365-9119-
ef6371bdcd79
Response:
    "status": 200,
    "message": "Get file successfully",
    "data": [
        {
            "id": "aecbb0ea-53a8-4079-9d98-dc7fe9736fa0".
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79".
            "filename": "1730135566564-Class.drawio.png",
            "url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1730135566564-Class.drawio.png?alt=media&token=fc7b9b30-9148-4148-
bc5b-8d553a359053",
            "type": "image/png"
        },
        {
            "id": "24da72b8-a40f-4e6c-aef4-b4f93fb8cebb",
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
            "filename": "1731430393615-Fundamental of Database
Systems.pdf",
```

```
"url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1731430393615-Fundamental%20of%20Database%20Systems.pdf?alt=media&
token=db12d5a3-b35d-4b7c-9ace-e7d7476355fa",
            "type": "application/pdf"
        },
            "id": "99c73745-8805-4747-b074-4ceece2775ae".
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
            "filename": "1731401303426-Chapter_6_v8.0.pdf",
            "url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1731401303426-Chapter_6_v8.0.pdf?alt=media&token=ecea9267-869c-42c
6-99e7-43816ac49f6b",
            "type": "application/pdf"
        },
        {
            "id": "2778f269-94ca-4448-b225-743220d716c3",
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79".
            "filename":
"1731417019225-Develop_a_Network_Application.pdf",
            "url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1731417019225-Develop_a_Network_Application.pdf?alt=media&token=f9
9dc73f-4eae-4de0-9c4e-59ae7dec63de",
            "type": "application/pdf"
        },
            "id": "2e249675-32e3-49bd-ab5c-0b91c5545a50",
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
            "filename": "1731417372225-task 3.pdf",
            "url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1731417372225-task%203.pdf?alt=media&token=f956e6bb-a08b-4de4-b214
-969617f41a93",
            "type": "application/pdf"
        },
            "id": "aaf27f83-9fe3-4a66-b2ec-5512fccfb48b",
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
            "filename": "1731417415083-task 3.pdf",
```

```
"url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1731417415083-task%203.pdf?alt=media&token=d604f279-f5c2-449b-8238
-e4caeb22e9f4",
            "type": "application/pdf"
        },
            "id": "7c301bf2-2563-48d7-b85e-31bfa05e1b25".
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
            "filename":
"1731417518509-Develop_a_Network_Application.pdf",
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1731417518509-Develop_a_Network_Application.pdf?alt=media&token=59
8ad68e-44bc-4367-959e-daa683f84de4",
            "type": "application/pdf"
        },
            "id": "2badae4d-494a-4977-9035-6cf46e6be0df".
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79".
            "filename": "1731430663171-Fundamental of Database
Systems.pdf",
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1731430663171-Fundamental%20of%20Database%20Systems.pdf?alt=media&
token=d56913ac-a161-4ff1-9b38-b1304b8f4a57",
            "type": "application/pdf"
        },
            "id": "82fbe314-d3d7-471a-9491-e23983d6e863",
            "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
            "filename": "1731430713524-Lab_1a_Network Devices.pdf",
            "url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1731430713524-Lab_1a_Network%20Devices.pdf?alt=media&token=81baa63
f-85f8-4731-aff3-6bfdc13b04a1",
            "type": "application/pdf"
    ]
}
```

4. Get File by File ID

```
• URL: http://localhost:3001/api/file/{fileId}

    Method: GET

Response:
    "status": 200,
    "message": "Get file successfully",
    "data": [
        {
            "id": "5adb03a5-f66f-4ea6-a980-727296d672e5".
            "userid": "c772fe36-bce3-4f9e-a4f6-00354a73bde5",
            "filename": "1730178142646-Chapter_6_v8.0.pdf",
            "url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1730178142646-Chapter_6_v8.0.pdf?alt=media&token=c1ce78e4-0887-4ad
2-bb6e-2fa65b56b6ba",
            "type": "application/pdf"
        }
    1
}
```

5. Get All Files

```
• URL: http://localhost:3001/api/file
```

Method: GET

```
Response:
    "status": 200,
    "message": "Get all files successfully",
    "data": [
            "id": "47e6e43d-67c0-4cca-9b18-c9a6994e1572".
            "userid": "0c6338fb-0901-4463-9469-62a714922377",
            "filename": "THTT_T5",
            "url":
"https://drive.google.com/file/d/1X-5sjKP71rYL57Qn1TFcMLpbHQKVlgmc/v
iew?usp=drive_link",
            "type": "pdf"
        },
```

```
]
```

6. Delete File

```
• URL: http://localhost:3001/api/file/delete
  • Method: DELETE
Request:
  "fileId": "417fd4d1-697b-4fdb-ac54-413d71bba67a"
}
Response:
    "status": 200,
    "message": "File deleted successfully",
    "data": {
        "id": "aecbb0ea-53a8-4079-9d98-dc7fe9736fa0",
        "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
        "filename": "1730135566564-Class.drawio.png",
        "url":
"https://firebasestorage.googleapis.com/v0/b/ssps-715a8.appspot.com/
o/1730135566564-Class.drawio.png?alt=media&token=fc7b9b30-9148-4148-
bc5b-8d553a359053",
        "type": "image/png",
        "numpage": null,
        "isdeleted": true
}
```

7. Get User Profile

```
• URL: http://localhost:3001/api/user/{userId}
```

• Method: GET

```
Response:
```

```
"status": 201,
   "message": "Get user profile successfully",
   "data": {
        "id": "1211d02a-df15-4365-9119-ef6371bdcd79",
        "name": "bao3",
        "email": "bao3@123",
        "password":
"$2b$10$DCgFiRWAk20fVsPhIaZcHuGdGQEn44p8eUCyzgxJiIuT3degmDC..",
        "avatarurl":
"https://avatar.iran.liara.run/username?username=bao3",
        "role": "admin",
        "coinbalance": 0
    }
}
```

8. Update User Profile

```
• URL: http://localhost:3001/api/user/{userId}
```

• Method: PATCH

```
Request Body:
    "username": "bao3change1"
Response:
    "status": 200,
    "message": "Update user profile successfully",
    "data": {
        "id": "c772fe36-bce3-4f9e-a4f6-00354a73bde5",
        "name": "bao3change1",
        "email": "bao5@123",
        "password":
"$2b$10$BheCpAX/n9cThC4dpDkPA.PJTWQ5kz6a3Hdncd2.mM.IMrM3UpllW",
        "avatarurl":
"https://avatar.iran.liara.run/username?username=bao5",
        "role": "user",
        "coinbalance": 0
    }
}
```

*** Route: /printjob

1. Create Print Job (For user)

```
Method: POST
Request Body:
    "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713",
    "numcopy": 1,
    "numpage": 6,
    "orientation": "portrait",
    "colortype": "Grayscale",
    "papersize": "A4",
    "pagepersheet": 1,
    "numside": 2,
    "printerid": "ea871c64-5ea9-468a-859b-653c501974d1"
Response:
    "status": 201,
    "message": "PrintJob created",
    "data": {
        "printJob": {
            "id": "ef46bce7-8d8a-460b-ba76-9d8fb8ab591b",
            "printerid": "ea871c64-5ea9-468a-859b-653c501974d1".
            "userid": "0c6338fb-0901-4463-9469-62a714922377",
            "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713".
            "starttime": "2024-10-30T07:14:31.911Z",
            "papersize": "A4",
            "numpage": 6,
            "numside": 2,
            "numcopy": 1,
            "pagepersheet": 1,
            "colortype": "Grayscale",
            "orientation": "portrait",
            "status": "created"
        },
        "price": 6
    }
}
```

• **URL**: http://localhost:3001/api/printjob/createPrintJob

2. Start Print Job (For user)

```
• URL: http://localhost:3001/api/printjob/startPrintJob
  Method: POST
Request Body:
{
    "printJobId": "ef46bce7-8d8a-460b-ba76-9d8fb8ab591b"
}
Response:
    "status": 200,
    "message": "Accept printing request",
    "data": {
        "id": "ef46bce7-8d8a-460b-ba76-9d8fb8ab591b".
        "printerid": "ea871c64-5ea9-468a-859b-653c501974d1",
        "userid": "0c6338fb-0901-4463-9469-62a714922377",
        "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713".
        "starttime": "2024-10-30T07:14:31.911Z",
        "papersize": "A4",
        "numpage": 6,
        "numside": 2.
        "numcopy": 1,
        "pagepersheet": 1,
        "colortype": "Grayscale",
        "orientation": "portrait",
        "status": "created"
    }
}
```

3. Get All Print Job (For admin)

• URL:

http://localhost:3001/api/printjob/all?startDate={string}&endD
ate={string}&displayPage={number}&itemPerPage={number}

Method: GET

Request Url example:

http://localhost:3001/api/printjob/all?startDate=2024-10-29T00:00:00 &endDate=2024-10-29T23:00:00&displayPage=1&itemPerPage=2

```
( Date string format: YYYY-MM-DDTHH:mm:ss )
( displayPage và itemPerPage dùng để phân trang, trang được đáng số
từ 1, truyền x vào displayPage để nhận printjob của trang x).
Response:
    "status": 200,
    "message": "All history",
    "data": {
        "printJob": [
            {
                "id": "7ed7f2d9-2d62-4e19-b00a-40dd5185b4bc",
                "printerid": "ea871c64-5ea9-468a-859b-653c501974d1".
                "userid": "0c6338fb-0901-4463-9469-62a714922377",
                "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713",
                "starttime": "2024-11-09T08:44:02.596Z",
                "papersize": "A4",
                "numpage": 6,
                "numside": 2,
                "numcopy": 1,
                "pagepersheet": 1,
                "colortype": "Grayscale",
                "orientation": "portrait",
                "status": "success",
                "price": 6,
                "filename": "Final exam"
            },
                "id": "166017f6-3a6d-40d5-9ebc-6edce87e6c3c",
                "printerid": "ea871c64-5ea9-468a-859b-653c501974d1",
                "userid": "0c6338fb-0901-4463-9469-62a714922377",
                "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713",
                "starttime": "2024-11-09T06:06:28.135Z".
                "papersize": "A4".
                "numpage": 6,
                "numside": 2,
                "numcopy": 1,
                "pagepersheet": 1,
                "colortype": "Grayscale",
                "orientation": "portrait",
                "status": "success",
```

4. Get PrintJob by printJobId

```
• URL: http://localhost:3001/api/printjob/{printjobId}

    Method: GET

Response:
    "status": 200,
    "message": "PrintJob",
    "data": {
        "id": "ef46bce7-8d8a-460b-ba76-9d8fb8ab591b",
        "printerid": "ea871c64-5ea9-468a-859b-653c501974d1",
        "userid": "0c6338fb-0901-4463-9469-62a714922377",
        "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713",
        "starttime": "2024-10-30T07:14:31.911Z",
        "papersize": "A4",
        "numpage": 6.
        "numside": 2,
        "numcopy": 1,
        "pagepersheet": 1,
        "colortype": "Grayscale",
        "orientation": "portrait",
        "status": "success",
        "filename": "ABC"
    }
}
```

5. Get PrintJob by UserId

• URL:

http://localhost:3001/api/printjob/user/{userId}?startDate={st
ring}&endDate={string}&displayPage={number}&itemPerPage={numbe
r}

• Method: GET

```
Response:
    "status": 200,
    "message": "All printjob of user",
    "data": {
        "printJob": [
            {
                "id": "7ed7f2d9-2d62-4e19-b00a-40dd5185b4bc",
                "printerid": "ea871c64-5ea9-468a-859b-653c501974d1".
                "userid": "0c6338fb-0901-4463-9469-62a714922377",
                "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713",
                "starttime": "2024-11-09T08:44:02.596Z",
                "papersize": "A4",
                "numpage": 6,
                "numside": 2,
                "numcopy": 1,
                "pagepersheet": 1,
                "colortype": "Grayscale",
                "orientation": "portrait",
                "status": "success",
                "price": 6,
                "filename": "Final exam"
            },
            {
                "id": "166017f6-3a6d-40d5-9ebc-6edce87e6c3c",
                "printerid": "ea871c64-5ea9-468a-859b-653c501974d1".
                "userid": "0c6338fb-0901-4463-9469-62a714922377",
                "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713".
                "starttime": "2024-11-09T06:06:28.135Z",
                "papersize": "A4",
                "numpage": 6,
                "numside": 2.
                "numcopy": 1,
                "pagepersheet": 1,
```

6. Get PrintJob by PrinterId

• URL:

http://localhost:3001/api/printjob/printer/{printerId}?startDa
te={string}&endDate={string}&displayPage={number}&itemPerPage=
{number}

• Method: GET

```
Response:
```

```
"colortype": "Grayscale",
                "orientation": "portrait",
                "status": "success",
                "price": 6,
                "filename": "Final exam"
            },
            {
                "id": "166017f6-3a6d-40d5-9ebc-6edce87e6c3c",
                "printerid": "ea871c64-5ea9-468a-859b-653c501974d1",
                "userid": "0c6338fb-0901-4463-9469-62a714922377",
                "fileid": "cf5a66d5-5626-4030-9cb6-a908ef7e8713",
                "starttime": "2024-11-09T06:06:28.135Z",
                "papersize": "A4",
                "numpage": 6,
                "numside": 2.
                "numcopy": 1,
                "pagepersheet": 1,
                "colortype": "Grayscale",
                "orientation": "portrait",
                "status": "success",
                "price": 6,
                "filename": "Final exam"
            }
        ],
        "totalItem": 18,
        "totalPage": 9
   }
}
```

7. Get Total Page of user by Userld

URL:

http://localhost:3001/api/printjob/totalPage/{userId}?startDat
e={string}&endDate={string}&paperSize={string}&byMonth={true}

Or: (for admin, get all user)

http://localhost:3001/api/printjob/totalPage/all?startDate={st
ring}&endDate={string}&paperSize={string}&byMonth={true}

Method: GET

```
Response:
    "status": 200,
    "message": "Total printed page of user",
    "data": 24
}
Hoặc
{
    "status": 200,
    "message": "Total printed page of user",
    "data": [
        {
            "month": "2024-11",
            "totalPage": 12
        },
            "month": "2024-10",
            "totalPage": 33
        }
} (Néu byMonth = true)
8. Get TotalUser (For admin)
  • URL:
     http://localhost:3001/api/printjob/totalUser?startDate={string
     }&endDate={string}&byMonth={true}

    Method: GET

Response:
    "status": 200,
    "message": "Total user",
    "data": 2
}
Hoặc
{
    "status": 200,
    "message": "Total user",
    "data": [
        {
            "month": "2024-11",
```

```
"totalUser": 4
        },
        {
            "month": "2024-10",
            "totalUser": 2
        }
    ]
}
( Nếu byMonth = true)
9. Get totalFilebyType (For admin)
   • URL:
     http://localhost:3001/api/printjob/totalFilebyType?startDate={
     string}&endDate={string}&types={list}
   Method: GET
Response:
    "status": 200,
    "message": "Total File by Type",
    "data": [
        {
            "type": "pdf",
            "totalFile": 11
        },
        {
            "type": "word",
            "totalFile": 0
        },
            "type": "png",
            "totalFile": 2
        }
```

10. Get printerUsageFrequency (For admin)

• URL:

1

}

http://localhost:3001/api/printjob/printerUsageFrequency/:{pri
nterId}?startDate={string}&endDate={string}

• Method: GET

```
"status": 200,
    "message": "Printer usage frequency by day",
    "data": [
        {
            "date": "2024-11-15",
            "usageCount": 1
        },
        {
            "date": "2024-11-09",
            "usageCount": 2
        },
            "date": "2024-11-02",
            "usageCount": 2
        }
    ]
}
11. Get filePrintRequestFrequency( For admin )
  • URL:
     http://localhost:3001/api/printjob/filePrintRequestFrequency/?
     startDate={string}&endDate={string}

    Method: GET

Response:
{
    "status": 200,
    "message": "File print request frequency by day",
    "data": [
        {
            "date": "2024-11-15",
            "filePrintRequests": 20
        },
        {
            "date": "2024-11-14",
            "filePrintRequests": 3
        },
    ]
}
```

Response:

*** Route: /report

2. Generate monthly report

```
    Method: POST

Request Body:
{
    "name": "November report",
    "type": "monthly",
    "description": "Report all action",
    "reportDate": "2024-11-15"
}
( type: only "monthly" or "yearly", reportDate format: YYYY-MM or
YYYY-MM-DD ).
Response:
    "status": 201,
    "message": "Report created",
    "data": {
        "newReport": {
            "id": "258850cd-7a60-4ba4-b0a5-2f13120068fa",
            "name": "November report",
            "createtime": "2024-11-07T09:10:49.559Z",
            "type": "monthly",
            "description": "Report all action"
        },
        "allEvent": [
            {
                "id": "11aa7095-bfd7-43cd-b6af-146b7fa3e6a4".
                "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
                "createtime": "2024-11-05T01:35:17.757Z",
                "type": "print document",
                "description": "print 3 pages, printJobId:
7127-nas98-..."
            },
                "id": "3037f08a-1784-4601-910b-612a3fb9244d",
                "userid": "1211d02a-df15-4365-9119-ef6371bdcd79",
```

• URL: http://localhost:3001/api/report/generateMonthlyReport

3. Generate yearly report

• URL: http://localhost:3001/api/report/generateYearlyReport

Method: POST

```
Request Body:
```

```
{
    "name": "2024 report",
    "type": "yearly",
    "description": "Report all action",
    "reportDate": "2024-11-15"
}
```

Response: Same as generate monthly report.

4. Get all report

• URL:

http://localhost:3001/api/report?startDate={string}&endDate={s
tring}

• Method: GET

Request Url example:

```
http://localhost:3001/api/report/?startDate=2024-11-05T00:00:00&endDate=2024-11-05T23:00:00
```

Response:

```
{
    "status": 200,
    "message": "All report",
```

5. Get report by report id.

```
• URL: http://localhost:3001/api/report/{reportId}

    Method: GET

Response:
    "status": 200,
    "message": "Report and all events of the report",
    "data": {
        "report": {
            "id": "5ec14366-3158-47c1-8d9a-5629497c88b9",
            "name": "Monthly report 09/2024",
            "createtime": "2024-11-05T01:44:27.484Z",
            "type": "monthly",
            "description": "Report all action"
        },
        "event": [
            {
                "eventid": "11aa7095-bfd7-43cd-b6af-146b7fa3e6a4",
                "userid": "1211d02a-df15-4365-9119-ef6371bdcd79".
                "createtime": "2024-11-05T01:35:17.757Z",
                "type": "print document",
                "description": "print 3 pages, printJobId:
7127-nas98-..."
            },
            {
                "eventid": "d057fc89-b2ac-4c6b-9dec-cd8017b60847",
                "userid": "0c6338fb-0901-4463-9469-62a714922377",
                "createtime": "2024-11-05T01:36:18.736Z",
```

"message": "Update report successfully",

"name": "Report Sep 2024",

"description": "First update"

"type": "monthly",

"id": "5ec14366-3158-47c1-8d9a-5629497c88b9",

"createtime": "2024-11-05T01:44:27.484Z",

7. Delete report by report id.

```
• URL: http://localhost:3001/api/report/{reportId}
```

• Method: DELETE

Response:

}

}

"status": 200,

"data": {

{

```
"id": "c6e8af94-8374-4c24-bb31-9ecf8c406660",
                "name": "Test report",
                "createtime": "2024-11-07T09:22:12.535Z",
                "type": "monthly",
                "description": "Report all action"
            }
        ],
        "deletedEvents": [
            {
                "id": "57e3a85a-2a8c-4ad5-b986-81ba07454e6c",
                "reportid": "c6e8af94-8374-4c24-bb31-9ecf8c406660",
                "eventid": "11aa7095-bfd7-43cd-b6af-146b7fa3e6a4"
            },
            {
                "id": "318d3ec2-0dd0-42a3-8162-d46542911d2b",
                "reportid": "c6e8af94-8374-4c24-bb31-9ecf8c406660",
                "eventid": "d057fc89-b2ac-4c6b-9dec-cd8017b60847"
            }
        1
    }
/printer Router (Printer controller)
  1. Get all printers:
  - GET request: /api/printer
  - Response:
    "status": 200,
    "message": "Get all printers successfully",
    "data": [
        {
            "id": "aa037df8-8d8e-4989-af20-372192c0584c",
            "brand": "Vinfast",
            "model": "VF666",
            "shortdescription": "Fast",
            "status": "Enable",
            "locationid": null
        },
        {
            "id": "373bd24c-d22a-400a-8dc6-7cf84af632bf",
```

{

```
"brand": "HP",
            "model": "XYZ",
            "shortdescription": null,
            "status": "enabled",
            "locationid": null
        }
  ]
}
  2. GET printers by ID:
  - GET request: /api/printer/:id
  - Response:
{
    "status": 200,
    "message": "Get printer successfully",
    "data": {
        "id": "ea871c64-5ea9-468a-859b-653c501974d1",
        "brand": "4321",
        "model": "SVD34",
        "shortdescription": "HIHI",
        "status": "Enable",
        "locationid": null
    }
}
  3. Create new printer:
  - POST request: /api/printer.
  - Body:
        - brand, model, status are mandatory;
        id is auto-generated;
        - shortDescription, locationID are optional;
{
    "brand": "fasda",
    "model": 345,
    "status": "enabled"
}
  - Response:
{
    "status": 200,
    "message": "Get printer successfully",
```

```
"data": {
        "id": "ea871c64-5ea9-468a-859b-653c501974d1",
        "brand": "4321",
        "model": "SVD34",
        "shortdescription": "HIHI",
        "status": "Enable",
        "locationid": null
    }
}
  4. Delete a printer:
  - DELETE request: /api/printer/:id
  - Response:
{
   "status": 200,
   "message": "Delete successfully",
   "data": {
      "id": "b7f950f0-7b1c-4c9e-bbf8-188406adfe3f",
      "brand": "fasda",
      "model": "345",
      "shortdescription": null,
      "status": "enabled",
      "locationid": null
}
  5. Update a printer:
  - PATCH request: /api/printer/:id
  - Body:
{ status: "enabled" }
  - Response:
{
    "status": 200,
    "message": "Update successfully",
    "data": {
        "id": "aa037df8-8d8e-4989-af20-372192c0584c",
        "brand": "Vinfast",
        "model": "VF666",
        "shortdescription": "Fast",
        "status": "disabled",
```

```
"locationid": null
   }
}
Router Config /api/config
  1.GET request: /api/config
  - Desc: Get all permitted files and the default
    number of given pages.
  - Example Response:
{
    "status": 200,
    "message": "Get configuration successfully!",
    "data": {
        "permitedFiles": [
             {
                 "type": "doc",
                 "isenable": true
             },
             {
                 "type": "docx",
                 "isenable": true
             },
             {
                 "type": "xls",
                 "isenable": false
             },
             {
                 "type": "pdfx",
                 "isenable": false
             }
        ],
```

```
"config": {
            "defaultnumpage": 10,
            "dategivenpage":
"2024-11-04T17:00:00.000Z"
    }
}
  2.GET request: /api/config/filetype
  - Desc: Get all permitted file types.
  - Example Response:
{
    "status": 200,
    "message": "Get permited file types
successfully!",
    "data": [
        {
            "type": "doc",
            "isenable": true
        },
        {
            "type": "docx",
            "isenable": true
        },
        {
            "type": "xls",
            "isenable": false
        },
        {
            "type": "pdfx",
```

```
"isenable": false
        }
    1
}
  3.POST request: /api/config/filetype
  - Desc: Add a new permitted file type.
  - Request body:
{
    "type": "xls",
    "isenable": "false"
}
  - Example response:
  4.PATCH request: /api/config/filetype/:type
  - Desc: Update a filetype config.(Authorized first)
  - Example request: /api/config/filetype/pdfx
{
    "isenable": "false",
    "type": "pdf"
}
    Example response:
{
    "status": 200,
    "message": "Permited file updated
successfully!",
    "data": {
        "type": "pdf",
        "isenable": false
    }
}
```

```
5.DELETE request: /api/config/filetype/:type
  - Desc: Delete a permitted file type.
  - Example response:
{
    "status": 200,
    "message": "Delete permited file type
successfully!",
    "data": {
        "type": "doc",
        "isenable": true
    }
}
  6.GET request: /api/config/page
  - Desc: Get page configuration settings.
  - Response:
{
    "status": 200,
    "message": "Get permited file types
successfully!",
    "data": {
        "defaultnumpage": 15,
        "dategivenpage": "2024-12-14T17:00:00.000Z"
    }
}
  7.PATCH request: /api/config/page
  - Desc: Update Page configuration (defaultNumPage,
    dateGivenPage).
  - Example request:
{
```

```
"dategivenpage": 12,
    "defaultnumpage": "2024-12-25"
}
Note: attribute name are CASE-SENSITIVE
  - Example Response:
{
    "status": 200,
    "message": "Update page config successfully.",
    "data": {
         "id": 1,
         "defaultnumpage": 15,
         "dategivenpage": "2024-12-25T17:00:00.000Z"
    }
Router Payment /api/payment
  1. GET all payment: GET request (/api/payment)
  - Description: get all payment
  - Response:
{
   "status": 200,
   "message": "Get all payment successfully.",
   "data": [
       {
           "id": "bbf3d89f-7561-4dd6-9dfe-5dbff3c2cf02",
           "user id": "c2bcbedc-34bf-4451-b5dc-2188ee826cc8",
           "amount": 12,
           "timestamp": "2024-11-09T08:13:47.155Z"
   ]
}
```

2. GET payment by user id:

- Description: get payment by user id
- Request: GET /api/payment/:user id?page=1&limit=4
- Example Response: GET

```
/api/payment/c2bcbedc-34bf-4451-b5dc-2188ee826cc8?page=1&limit=4
{
    "status": 200,
    "message": "Get payment by user ID successfully.",
    "data": [
        {
            "id": "bbf3d89f-7561-4dd6-9dfe-5dbff3c2cf02",
            "user id": "c2bcbedc-34bf-4451-b5dc-2188ee826cc8",
            "amount": 12,
            "timestamp": "2024-11-09T08:13:47.155Z"
        },
        {
            "id": "bde235fd-7922-41e0-a809-852f2b580321",
            "user id": "c2bcbedc-34bf-4451-b5dc-2188ee826cc8",
            "amount": 12,
            "timestamp": "2024-11-09T08:42:40.084Z"
        },
        {
            "id": "dfc161be-0ce3-4873-aaed-f55734cea217",
            "user id": "c2bcbedc-34bf-4451-b5dc-2188ee826cc8",
            "amount": 12,
            "timestamp": "2024-11-09T08:42:59.655Z"
        },
        {
            "id": "1924cbf3-e3ee-4dc0-b895-cd2aa33e6916",
            "user id": "c2bcbedc-34bf-4451-b5dc-2188ee826cc8",
            "amount": 12,
            "timestamp": "2024-11-09T09:03:58.272Z"
        }
```

```
]
}
  3. Insert a payment:
  - Request: POST request /api/payment
  - Request Body:
{
    "user id":
"c2bcbedc-34bf-4451-b5dc-2188ee826cc8",
    "amount": 12
}
  - Response:
{
    "status": 200,
    "message": "Insert payment successfully.",
    "data": {
        "user": {
            "id": "c2bcbedc-34bf-4451-b5dc-2188ee826cc8",
            "coinBalance": 61
        },
        "payment": {
            "id": "63cbe9c1-8d93-45f5-9757-8c5a8f366d4a",
            "user id":
"c2bcbedc-34bf-4451-b5dc-2188ee826cc8",
            "amount": 10,
            "timestamp": "2024-11-09T09:33:05.112Z"
        }
    }
```

Router Location /api/location

1. GET request: /api/location

- Desc: Get all locations

```
- Response:
```

2. GET request: /api/location?campusname=LTK

- Desc: get locations based on campusname, buildingname, roomnumber, id.
- Example: GET request: http://localhost:3001/api/location?campusname=LTK
- Response:

}

3. POST request: /api/location

```
- Desc: Insert a location.
  - Request body:
{
    "campusname": "LTK",
    "buildingname": "B2",
    "roomnumber": 202
}
Note: campusname must be 'LTK' or 'DA'
  - Response:
{
    "status": 201,
    "message": "Location added successfully",
    "data": {
         "id": "fcbc893a-9b9c-48bb-b0c0-a9667208f734",
        "campusname": "LTK",
        "buildingname": "B2",
        "roomnumber": 202
    }
}
  4. Update location
  - PATCH request: /api/location/:id
  - Example request:
     http://localhost: 3001/api/location/fcbc893a-9b9c-48bb-b0c0-a9667208
     f734
{
   "campusname": "LTK",
   "buildingname": "H6",
   "roomnumber": 1511
}
  - Response:
{
    "status": 200,
```

```
"message": "Update location successfully",
    "data": {
        "id": "fcbc893a-9b9c-48bb-b0c0-a9667208f734",
        "campusname": "LTK",
        "buildingname": "H6",
        "roomnumber": 1511
    }
}
5. Delete location:
```

- Delete request: /api/location/:id