Internet of Things Application Programming Interface

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Authentication

Login

```
Method: POST
https://api.iot2.mcmullin.org/auth/login
Content-Type: application/json
```

Body

```
{
    "username":"test",
    "password":"test12345"
}
```

Response

```
{
    "accessToken":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJuYW1lIjoidGVzdCIsImlhdCI6MTYxNzg5
ODMzMywiZXhwIjoxNjE3OTAwMTMzfQ.YIvP4E3CODMZNUldOfF-mVB-
e17PSHecKo1yON5CbCA",
    "refreshToken":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJuYW1lIjoidGVzdCIsImlhdCI6MTYxNzg5
ODMzM30.r1jvbXxE088LmdM_k2oAP2VmaH6TH8c4AoNNsOXPvxk"
}
```

Refresh Token

```
Method: POST
https://api.iot2.mcmullin.org/auth/token
Content-Type: application/json
```

Body

```
{
    "token": refresh token goes here
}
```

Response

```
{
    "accessToken":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJuYW1lIjoidGVzdCIsImlhdCI6MTYxNzg5
ODM4MCwiZXhwIjoxNjE3OTAwMTgwfQ.g7MBiVWIrWi10w1US0tQTSxanqg27_xHKlRHAA98Fyk
"
}
```

Log out

```
Method: DELETE
https://api.iot2.mcmullin.org/auth/logout
Content-Type: application/json
```

Body

```
{
    "token": refresh token goes here
}
```

Response
`204 Status Code`

User Info

```
Method: POST
https://api.iot2.mcmullin.org/auth/user/info
Content-Type: application/json
```

Headers

```
    authorization : Bearer <token>
```

Response

```
{
    "username": "test",
    "displayName": "Test user",
```

```json
    "email": "test@cielab.net",
    "iat": 1617987368,
    "exp": 1617989168
 }
```

Inventory API

Request Items Stored in Inventory System

```
GET /api/inventory
Accept: application/json
Authorization: Bearer <token>
```

Headers

```
    authorization: Bearer <token>
```

Response

```json
[
    {
        "item_name": "HoloLens",
        "description": "Microsoft Hololens",
        "availability": 1,
        "amount": 3
    },
    {
        "item_name": "Oculus VR",
        "description": "Oculus Virtual Reality Goggles",
        "availability": 1,
        "amount": 4
    },
    {
        "item_name": "HTC VIVE",
        "description": "HTC Vive Virtual Reality Goggles",
        "availability": 1,
        "amount": 3
    },
    {
        "item_name": "NZXT Computers",
        "description": "NZXT High Performance Computers",
        "availability": 1,
        "amount": 5
    },
```

```json
    {
        "item_name": "Alienware PC",
        "description": "Alienware Personal Computer",
        "availability": 1,
        "amount": 2
    },
    {
        "item_name": "Cobot",
        "description": "Cobot Arm",
        "availability": 1,
        "amount": 4
    },
    {
        "item_name": "Nao",
        "description": "Nao Robot",
        "availability": 1,
        "amount": 2
    }
]
```

Withdrawl History

```
GET /api/withdraw
Accept: application/json
Data: # Options {all, userID, itemID}
Authorization: Bearer <token>
Example:
    * https://api.iot2.mcmullin.org/api/withdraw?command=all
    * https://api.iot2.mcmullin.org/api/withdraw?command=itemId&value=
{itemID}
    * https://api.iot2.mcmullin.org/api/withdraw?command=userID&value=
{userID}
```

Headers

```
    authorization: Bearer <token>
```

Response

```json
[
    {
        "itemID": 2,
        "item_name": "Oculus VR",
        "userID": 61011003,
```

```json
        "firstname": "Lucy",
        "lastname": "Somsuay",
        "date_borrowed": "2021-03-01T00:00:00.000Z",
        "expected_return_date": "2021-03-08T00:00:00.000Z"
    },
    {

        "itemID": 2,
        "item_name": "Oculus VR",
        "userID": 61011004,
        "firstname": "Hole",
        "lastname": "Somsuay",
        "date_borrowed": "2021-03-05T00:00:00.000Z",
        "expected_return_date": "2021-03-12T00:00:00.000Z"
    },
    {

        "itemID": 3,
        "item_name": "HTC VIVE",
        "userID": 61011004,
        "firstname": "Hole",
        "lastname": "Somsuay",
        "date_borrowed": "2021-03-02T00:00:00.000Z",
        "expected_return_date": "2021-03-14T00:00:00.000Z"
    },
    {

        "itemID": 7,
        "item_name": "Nao",
        "userID": 61011005,
        "firstname": "Vorachat",
        "lastname": "Somsuay",
        "date_borrowed": "2021-03-07T00:00:00.000Z",
        "expected_return_date": "2021-03-21T00:00:00.000Z"
    }
]
```