

## Device Example JSON

Name	Type	Description
url	string	<b>Required.</b> URL with auto-generated unique id
id	string	<b>Required.</b> Auto-generated unique id
color	string	<b>Required.</b> Color Enum of device
model	string	<b>Required.</b> Model Enum of device
serial_no	string	<b>Required.</b> Serial Number of device
is_rented	boolean	<b>Required.</b> Default is false

```
{
  "url": "https://.../devices/kj0987a234bcdasdf12",
  "id": "kj0987a234bcdasdf12",
  "color": "SPACE_GRAY",
  "model": "LENOVO",
  "serial_no": "ASDFASDF123",
  "is_rented": false
}
```

**Valid Colors:** SILVER , SPACE\_GRAY , GOLD , ROSE\_GOLD

**Valid Models:** LENOVO , IPAD\_4TH , IPAD\_AIR , IPAD\_AIR2

## User Example JSON

Name	Type	Description
url	string	<b>Required.</b> URL with auto-generated unique id
id	string	<b>Required.</b> Auto-generated unique id

Name	Type	Description
first_name	string	<b>Required.</b> User first name
family_name	string	<b>Required.</b> User family/last name
group	string	<b>Required.</b> Group Enum
device_id	string	ID of the current device, null if empty
start_date	string	Datetime that current device rented in "DD/MM/YYYY HH:MM", null if empty

```
{
  "url": "https://.../users/123abc",
  "id": "123abc",
  "first_name": "Val",
  "family_name": "Chapple",
  "group": "CLASS_2018",
  "device_id": "kj0987a234bcdasdf12",
  "start_date": "1/1/2015 18:23",
}
```

**Valid Groups:** STAFF , CLASS\_2018 , CLASS\_2019 , CLASS\_2020 , CLASS\_2021

## View a list of devices

Returns an array of device information in JSON, including urls to each device.

```
GET /devices
```

### Response

Status: 200 OK

```
[
  {
    "url": "https://.../devices/kj0987a234bcdasdf12",
    "id": "kj0987a234bcdasdf12",
    "color": "SPACE_GRAY",
    "model": "LENOVO",
```

```
    "serial_no": "ASDFASDF123",
    "is_rented": false
  }
]
```

## View a single device

---

Returns information of a device with `{device_id}` in JSON, including the url to the device.

```
GET /devices/{device_id}
```

### Response

Status: 200 OK

```
{
  "url": "https://.../devices/kj0987a234bcdasdf12",
  "id": "kj0987a234bcdasdf12",
  "color": "SPACE_GRAY",
  "model": "LENOVO",
  "serial_no": "ASDFASDF123",
  "is_rented": false
}
```

## View a list of users

---

Returns an array of user information in JSON, including urls to each user.

```
GET /users
```

### Response

Status: 200 OK

```
[
  {
    "url": "https://.../users/123abc",
    "id": "123abc",
    "first_name": "Val",
```

```
    "family_name": "Chapple",
    "group": "CLASS_2018",
    "device_id": "kj0987a234bcdasdf12",
    "start_date": "1/1/2015 18:23",
  }
]
```

## View a single user

Returns information of a user with `{user_id}` in JSON, including the url to the user.

```
GET /users/{user_id}
```

### Response

Status: 200 OK

```
{
  "url": "https://.../users/123abc",
  "id": "123abc",
  "first_name": "Val",
  "family_name": "Chapple",
  "group": "CLASS_2018",
  "device_id": "kj0987a234bcdasdf12",
  "start_date": "1/1/2015 18:23",
}
```

## Create a new device

```
POST /devices
```

### Input

Name	Type	Description
<code>color</code>	<code>string</code>	<b>Required.</b> Color Enum of device
<code>model</code>	<code>string</code>	<b>Required.</b> Model Enum of device
<code>serial_no</code>	<code>string</code>	<b>Required.</b> Serial Number of device

Invalid data, extra data, or incorrect data types will be rejected.

**Note:** A new device defaults to `false` for `is_rented` , and the device `id` is auto-generated on the server.

### Request Body

```
{
  "color": "SPACE_GRAY",
  "model": "LENOVO",
  "serial_no": "ASDF1234567"
}
```

### Response

```
Status: 201 Created

{
  "url": "https://.../devices/dasdf1234h1",
  "id": "dasdf1234h1",
  "color": "SPACE_GRAY",
  "model": "LENOVO",
  "serial_no": "ASDF1234567",
  "is_rented": false
}
```

## Create a new user

```
POST /users
```

### Input

Name	Type	Description
<code>first_name</code>	<code>string</code>	<b>Required.</b> User first name
<code>family_name</code>	<code>string</code>	<b>Required.</b> User family name
<code>group</code>	<code>string</code>	<b>Required.</b> Group Enum

Invalid data, extra data, or incorrect data types will be rejected.

**Note 1:** A new user defaults to no devices checked out. That is, `device_id` and `start_date` default to `null`.

**Note 2:** The user `id` is auto-generated on the server.

### Request Body

```
{
  "first_name": "Larry",
  "family_name": "Chapple",
  "group": "STAFF",
}
```

### Response

```
Status: 201 Created

{
  "url": "https://.../users/456abc",
  "id": "456abc",
  "first_name": "Larry",
  "family_name": "Chapple",
  "group": "STAFF",
  "device_id": null,
  "start_date": null
}
```

## Edit a device

```
PATCH /devices/{device_id}
```

### Input

Name	Type	Description
<code>color</code>	<code>string</code>	Color Enum of device
<code>model</code>	<code>string</code>	Model Enum of device
<code>serial_no</code>	<code>string</code>	Serial Number of device

Invalid data, extra data, or incorrect data types will be rejected.

**Note:** The property `is_rented` can only be changed by checking the device out or in.

### Request Body

```
{
  "color": "GOLD",
}
```

### Response

Status: 200 OK

```
{
  "url": "https://.../devices/dasdf1234h1",
  "id": "dasdf1234h1",
  "color": "GOLD",
  "model": "LENOVO",
  "serial_no": "ASDF1234567",
  "is_rented": true
}
```

## Edit a user

PATCH /users/{user\_id}

### Input

Name	Type	Description
<code>first_name</code>	<code>string</code>	User first name
<code>family_name</code>	<code>string</code>	User family name
<code>group</code>	<code>string</code>	Group Enum

Invalid data, extra data, or incorrect data types will be rejected.

**Note:** All other user properties can only be changed by checking a device in or out.

### Request Body

```
{
  "group": "STAFF"
}
```

## Response

Status: 200 OK

```
{
  "url": "https://.../users/456abcd",
  "id": "456abcd",
  "first_name": "Sharon",
  "family_name": "Chapple",
  "group": "STAFF",
  "device_id": null,
  "start_date": null,
}
```

## Delete a device

---

```
DELETE /devices/{device_id}
```

## Response

Status: 204 No Content

Device is removed from data store only if `is_rented` equals `false` .

## Delete a user

---

```
DELETE /users/{user_id}
```

## Response

Status: 204 No Content



User is removed from data store only if `device_id` equals `null` and `start_date` equals `null` .

## Set a Device to a user

---

```
PUT /devices/{device_id}/users/{user_id}
```

- The user's property of `device_id` is set to that of the device.
- The user's property of `start_date` are set to the current datetime.
- The device's properties of `is_rented` is set to `false` .
- Request will be rejected if the device is already checked out or the user already has a device.

### Response

```
Status: 204 No Content
```

## Set a Device to Available

---

```
DELETE /users/{user_id}/devices/{device_id}
```

- The user's properties of `device_id` and `start_date` are set to `null` .
- The device's property of `is_rented` is set to `false` .
- Request will be rejected if the device is already checked in or the user already doesn't have a device.

### Response

```
Status: 204 No Content
```