# Ship Cargo Assignment Cloud App API Spec

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# **Data Model and Entity Relationships**

### User

| Property | Data Type | Value Restrictions | Notes                           |
|----------|-----------|--------------------|---------------------------------|
| id       | Integer   | N/A                | ID of a boat.                   |
|          |           |                    | Auto-generated by Datastore.    |
| user_id  | String    | N/A                | JWT sub of a user.              |
|          |           |                    | Auto-generated by Google Oauth. |

### **Boats**

| Property | Data Type  | Value Restrictions | Notes  |
|----------|------------|--------------------|--|
| id       | Integer    | N/A                | ID of a boat.  |
|          |            |                    | Auto-generated by Datastore.   |
| name     | String     | N/A                | Name of a boat.  |
| type     | String     | N/A                | Type of a boat (e.g. Sailboat, Catamaran, etc.).   |
| length   | Integer    | N/A                | Length of a boat.  |
| owner    | String     | N/A                | ID of the user who owns this boat.   |
| loads    | Array/List |                    | Array of Load entity objects containing a Load's ID, item name, volume, and creation_date. |

# Loads

| Property | Data Type | Value Restrictions | Notes                        |
|----------|-----------|--------------------|------------------------------|
| id       | Integer   | N/A                | ID of a load.                |
|          |           |                    | Auto-generated by Datastore. |

| volume        | Integer | N/A | Volume of a load.                                       |
|---------------|---------|-----|---|
| carrier       | JSON    | N/A | JSON object containing the assigned Boat's ID and name. |
| item          | String  | N/A | Name of the load's item.<br>Ex. "LEGO Blocks".          |
| creation_date | String  | N/A | Date the load was created. Formatted as MM/DD/YYYY.     |

#### **Data Model Notes**

• No input validation used for this assignment aside from having a required amount of attributes and attributes have to be named a certain way for certain API endpoints

## **Entity Relationship**

User → Boat: 1-to-Many
 Boat → Load: 1-to-Many
 Load → Boat: 1-to-1

#### **Entity Relationship Notes**

- User entities exist independently with no attribute showing its relation to other entities
  - unique identifier is the attribute "user id" which uses the JWT token's "sub" attribute
  - User entities are created during OAuth login
- Boat entities will have an attribute corresponding to its owner and an attribute corresponding to any loads assigned to it
  - User identifier: User's "user id" attributes
  - Load identifier: list of Load objects containing a load's ID, item name, volume, creation\_date
  - Boat entities are created by API calls
- Load entities will have an attribute corresponding to the boat it is assign to (a boat object)
  - Boat identifier: assigned Boat's object containing a boat's ID and name
  - Load entities are created by API calls

When making calls involving the relationship between a User and Boat entity, a JWT access token will be required. This token is supplied to the API endpoint via a header attribute called "Authorization" with the value of "Bearer JWT Token String".

This requirement is not needed in cases of "side effects" such as when a Load entity is deleted and consequently deleted from a Boat's "loads" attribute. All are further specified for each API endpoint.

# **View/Get all Users (Not Protected)**

Allows you to retrieve all users.

GET /users

# Request

**Path Parameters** 

None

**Request Body** 

None

# **Response Body Format**

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes                              |
|---------|--------------------|------------------------------------|
| Success | 200 OK             |                                    |
| Failure | 406 Not Acceptable | Improper mimetype in Accept header |

#### Success

```
Status: 200 OK

{
    "users": [{
        "id": 5094868900642816,
        "user_id": "117877706279049365351",
        "user_name": "Michael Hoang"
    }]
}
```

```
Failure: 406 Not Acceptable

{
    "Error": "Improper mimetype in Accept header"
}
```

# **Create a Boat (Protected)**

Allows you to create a new boat.

POST /boats

# Request

#### **Path Parameters**

None

# **Request Body**

Required

## **Request Body Format**

**JSON** 

# **Request JSON Attributes**

| Name   | Description                      | Required? |
|--------|----------------------------------|-----------|
| name   | Name of the boat                 | Yes       |
| type   | Type of the boat (e.g. Sailboat) | Yes       |
| length | Length of a boat                 | Yes       |

# **Request Example**

```
"name": "Sea Witch",
    "type": "Catamaran",
    "length": 28
}
```

# **Additional Request Header Keys**

| Name          | Description                  | Required? | Value Format              |
|---------------|------------------------------|-----------|---------------------------|
| Authorization | Species the JWT Bearer token | Yes       | Bearer ex_token_str       |
|               |                              |           | Ex:<br>Bearer 123token123 |

### **Response Body Format**

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes  |
|---------|--------------------|--|
| Success | 201 Created        |  |
| Failure | 400 Bad Request    | If your request is missing any of the 3 required attributes, a 400 status code will be returned. |
| Failure | 401 Unauthorized   | No Authorization in request header and/or JWT is invalid   |
| Failure | 406 Not Acceptable | Improper mimetype in Accept header   |
| Failure | 415 Unsupported    | Unsupported data format  |

#### **Success**

```
Success: 201 Created

{
    "id": 6240409692930048,
    "length": 28,
    "loads": [],
    "name": "Sea Witch",
    "owner": "117877706279049365351",
    "self": "https://appspot.com/boats/6240409692930048",
    "type": "Catamaran"
}
```

```
Failure: 400 Bad Request

{
    "Error": "The request object is missing at least one of the required attributes"
}
```

```
Failure: 401 Unauthorized

{
    "Error": "No Authorization in request header and/or JWT is invalid"
}
```

# Failure: 406 Not Acceptable { "Error": "Improper mimetype in Accept header" }

```
Failure: 415 Unsupported Media Type
```

```
{
    "Error": "Unsupported data format"
}
```

# **View/Get a Boat (Protected)**

Allows you to retrieve a boat.

GET /boats/<boat\_id>

# Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| boat_id | ID of the boat |

# **Request Body**

None

# **Additional Request Header Keys**

| Name          | Description                  | Required? | Value Format                                |
|---------------|------------------------------|-----------|---|
| Authorization | Species the JWT Bearer token | Yes       | Bearer ex_token_str  Ex: Bearer 123token123 |

### **Response Body Format**

**JSON** 

# **Response Statuses**

| Outcome | Status Code        | Notes  |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 401 Unauthorized   | No Authorization in request header and/or JWT is invalid |
| Failure | 403 Forbidden      | Boat does not belong to this owner                       |
| Failure | 404 Not Found      | No boat with this boat_id exists                         |
| Failure | 406 Not Acceptable | Improper mimetype in Accept header                       |

#### **Success**

```
Status: 200 OK

{
    "id": 5944267134468096,
    "length": 20,
    "loads": [{
        "creation_date": "07/04/1776",
        "id": 5381317181046784,
        "item": "Wooden Staff",
        "self": "https://appspot.com/loads/5381317181046784",
        "volume": 55
    }],
    "name": "Lucia",
    "owner": "117877706279049365351",
    "self": "https://appspot.com/boats/5944267134468096",
    "type": "Catamaran"
}
```

#### **Failure**

```
Failure: 401 Unauthorized

{
    "Error": "No Authorization in request header and/or JWT is invalid"
}
```

Failure: 403 Forbidden

```
{
    "Error": "Boat does not belong to this owner"
}
```

```
Failure: 404 Not Found
{
    "Error": "No boat with this boat_id exists"
```

```
Failure: 406 Not Acceptable

{
    "Error": "Improper mimetype in Accept header"
}
```

# **View/Get all Boat (Protected)**

Allows you to retrieve all boat (up to 5 at a time).

GET /boats

# Request

#### **Path Parameters**

None

# **Request Body**

None

# **Additional Request Header Keys**

| Name          | Description   | Required? | Value Format        |
|---------------|---|-----------|---------------------|
| Authorization | Species the JWT Bearer token  | Yes       | Bearer ex_token_str |
|               |   |           | Ex:                 |
|               |   |           | Bearer 123token123  |
| limit         | Number of boat objects to return. Maximum limit is 5 (default is 5) | No        | 5                   |
| offset        | Number of boat objects for backend to skip first (default is 0)     | No        | 0                   |

#### **Response Body Format**

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes  |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 401 Unauthorized   | No Authorization in request header and/or JWT is invalid |
| Failure | 406 Not Acceptable | Improper mimetype in Accept header                       |

#### **Success**

```
Status: 200 OK
    "boats": [{
        "id": 4760591327559680,
        "length": 28,
        "loads": [],
        "name": "Sea Witch2",
        "owner": "117877706279049365351",
        "self": "https://appspot.com/boats/4760591327559680",
        "type": "Catamaran"
        "id": 4761818480246784,
        "length": 28,
         "loads": [],
        "name": "Sea Witch1",
        "owner": "117877706279049365351",
        "self": "https://appspot.com/boats/4761818480246784",
        "type": "Catamaran"
        "id": 4827211370594304,
         "length": 28,
        "loads": [],
        "name": "Sea Witch6",
         "owner": "117877706279049365351",
         "self": "https://appspot.com/boats/4827211370594304",
         "type": "Catamaran"
    }, {
         "id": 4837131872632832,
        "length": 28,
        "loads": [],
        "name": "Sea Witch2",
         "owner": "117877706279049365351",
        "self": "https://appspot.com/boats/4837131872632832",
         "type": "Catamaran"
        "id": 4915909558796288,
```

```
"length": 28,
    "loads": [],
    "name": "Sea Witch3",
    "owner": "117877706279049365351",
    "self": "https://appspot.com/boats/4915909558796288",
    "type": "Catamaran"
}],
    "next_url": "https://appspot.com/boats?limit=5&offset=5",
    "total_items": 5
}
```

#### **Failure**

```
Failure: 401 Unauthorized
```

```
{
    "Error": "No Authorization in request header and/or JWT is invalid"
}
```

#### Failure: 406 Not Acceptable

```
{
    "Error": "Improper mimetype in Accept header"
}
```

# **Delete a Boat (Protected)**

Allows you to delete boat.

DELETE /boats/<boat\_id>

# Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| boat_id | ID of the boat |

# **Request Body**

None

# **Request Body Format**

None

# **Additional Request Header Keys**

| Name          | Description                  | Required? | Value Format              |
|---------------|------------------------------|-----------|---------------------------|
| Authorization | Species the JWT Bearer token | Yes       | Bearer ex_token_str       |
|               |                              |           | Ex:<br>Bearer 123token123 |

# **Response Body Format**

**JSON** 

### **Response Statuses**

| Outcome | Status Code      | Notes  |
|---------|------------------|--|
| Success | 204 No Content   |  |
| Failure | 401 Unauthorized | No authorization in request header and/or JWT is invalid |
| Failure | 403 Forbidden    | Boat does not belong to this owner                       |
| Failure | 404 Not Found    | No boat with this boat_id exists                         |

#### Success

Success: 204 No Content

```
Failure: 401 Unauthorized

{
    "Error": "No Authorization in request header and/or JWT is invalid"
}
```

```
Failure: 403 Forbidden

{
    "Error": "Boat does not belong to this owner"
}
```

```
Failure: 404 Not Found

{
    "Error": "No boat with this boat_id exists"
}
```

# **Edit a Boat (1 Attribute Only) (Protected)**

Allows you to edit **ONLY** one attribute of a boat.

PATCH /boats/<boat\_id>

## Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| boat_id | ID of the boat |

### **Request Body**

Required

## **Request MIME Type**

application/json

#### **Request Body Format**

**JSON** 

## **Request JSON Attributes**

Choose only **ONE** of the follow attributes for the JSON request.

| Name   | Description                      | Required? |
|--------|----------------------------------|-----------|
| name   | Name of the boat                 | Yes       |
| type   | Type of the boat (e.g. Sailboat) | Yes       |
| length | Length of a boat                 | Yes       |

# **Request Example**

```
{
    "name": "Sea Witch",
}
```

## **Additional Request Header Keys**

| Name          | Description                  | Required? | Value Format              |
|---------------|------------------------------|-----------|---------------------------|
| Authorization | Species the JWT Bearer token | Yes       | Bearer ex_token_str       |
|               |                              |           | Ex:<br>Bearer 123token123 |

# **Request Notes**

- Request JSON must have only one of the following attributes: name (string), type (string), or length (integer)
  - $^{\circ}~$  having more than one attribute or having extraneous attributes (e.g. color) will cause the system to return code  $400\,$

# **Response MIME Type**

application/json

# **Response Body Format**

**JSON** 

# **Response Statuses**

| Outcome | Status Code                | Notes   |
|---------|----------------------------|---|
| Success | 204 No Content             |   |
| Failure | 400 Bad Request            | The request object is missing at least one of the required attributes |
|         |                            | Too many/few attributes to edit                                       |
| Failure | 401 Unauthorized           | No Authorization in request header and/or JWT is invalid              |
| Failure | 403 Forbidden              | Boat does not belong to this owner                                    |
| Failure | 404 Not Found              | No boat with this boat_id exists                                      |
| Failure | 406 Not Acceptable         | Improper mimetype in Accept header                                    |
| Failure | 415 Unsupported Media Type | Unsupported data format   |

#### Success

Success: 204 No Content

```
Failure: 400 Bad Request

{
    "Error": "The request object is missing at least one of the required attributes"
}
```

```
Failure: 400 Bad Request

{
    "Error": "Too many/few attributes to edit"
}
```

# Failure: 401 Unauthorized { "Error": "No Authorization in request header and/or JWT is invalid" }

```
Failure: 403 Forbidden

{
    "Error": "Boat does not belong to this owner"
}
```

```
Failure: 404 Not Found

{
    "Error": "No boat with this boat_id exists"
}
```

```
Failure: 406 Not Acceptable

{
    "Error": "Improper mimetype in Accept header"
}
```

```
Failure: 415 Unsupported Media Type

{
    "Error": "Unsupported data format"
}
```

# **Edit a Boat (All Attributes) (Protected)**

Allows you to edit **ALL** attributes of a boat.

PUT /boats/<boat\_id>

## Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| boat_id | ID of the boat |

### **Request Body**

Required

## **Request MIME Type**

application/json

## **Request Body Format**

**JSON** 

## **Request JSON Attributes**

All attributes are required in the JSON request.

| Name   | Description                      | Required? |
|--------|----------------------------------|-----------|
| name   | Name of the boat                 | Yes       |
| type   | Type of the boat (e.g. Sailboat) | Yes       |
| length | Length of a boat                 | Yes       |

# **Request Example**

```
"name": "Sea Witch",
    "type": "Catamaran",
    "length": 28
}
```

# **Additional Request Header Keys**

| Name          | Description                  | Required? | Value Format        |
|---------------|------------------------------|-----------|---------------------|
| Authorization | Species the JWT Bearer token | Yes       | Bearer ex_token_str |

|  | Ex:<br>Bearer 123token123 |
|--|---------------------------|
|  | Bearer 123token123        |

# **Request Notes**

- Request JSON must have 3 attributes: name (string), type (string), and length (integer)
  - $^{\circ}~$  if any of these 3 attributes are missing or extraneous attributes (e.g. color) are added, system will return code  $400\,$

### **Response MIME Type**

application/json

## **Response Body Format**

**JSON** 

# **Response Statuses**

| Outcome | Status Code                | Notes   |
|---------|----------------------------|---|
| Success | 303 See Other              |   |
| Failure | 400 Bad Request            | The request object is missing at least one of the required attributes |
|         |                            | Too many/few attributes to edit                                       |
| Failure | 401 Unauthorized           | No Authorization in request header and/or JWT is invalid              |
| Failure | 403 Forbidden              | Boat does not belong to this owner                                    |
| Failure | 404 Not Found              | No boat with this boat_id exists                                      |
| Failure | 406 Not Acceptable         | Improper mimetype in Accept header                                    |
| Failure | 415 Unsupported Media Type | Unsupported data format   |

#### **Success**

```
Success: 303 See Other

{
    "carrier": null,
    "creation_date": "07/04/1776",
    "id": 5190813503979520,
    "item": "Wooden Staff",
    "self": "https://appspot.com/loads/5190813503979520",
    "volume": 55
}
```

```
Failure: 400 Bad Request

{
    "Error": "The request object is missing at least one of the required attributes"
```

```
}
```

```
Failure: 400 Bad Request
```

```
{
    "Error": "Too many/few attributes to edit"
}
```

#### Failure: 401 Unauthorized

```
{
    "Error": "No Authorization in request header and/or JWT is invalid"
}
```

#### Failure: 403 Forbidden

```
{
    "Error": "Boat does not belong to this owner"
}
```

#### Failure: 404 Not Found

```
{
    "Error": "No boat with this boat_id exists"
}
```

#### Failure: 406 Not Acceptable

```
{
    "Error": "Improper mimetype in Accept header"
}
```

#### Failure: 415 Unsupported Media Type

```
{
    "Error": "Unsupported data format"
}
```

# **Create a Load (Not Protected)**

Allows you to create a new load.

POST /loads

# Request

#### **Path Parameters**

None

# **Request Body**

Required

## **Request Body Format**

**JSON** 

# **Request JSON Attributes**

| Name          | Description                                     | Required? |
|---------------|---|-----------|
| volume        | Volume of a load.                               | Yes       |
| item          | Name of the load                                | Yes       |
| creation_date | Date load was created (formatted as MM/DD/YYYY) | Yes       |

# **Request Example**

```
{
  "volume": 5,
  "item": "LEGO Blocks",
  "creation_date": "10/18/2021"
}
```

### **Response Body Format**

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes  |
|---------|--------------------|--|
| Success | 201 Created        |  |
| Failure | 400 Bad Request    | If your request is missing any of the 3 required attributes, a 400 status code will be returned. |
| Failure | 406 Not Acceptable | Improper mimetype in Accept header   |
| Failure | 415 Unsupported    | Unsupported data format  |

#### Success

```
Success: 201 Created

{
    "carrier": null,
    "creation_date": "10/18/2021",
    "id": 5963031779475456,
    "item": "LEGO Blocks",
    "self": "https://appspot.com/loads/5963031779475456",
    "volume": 5
}
```

```
Failure: 400 Bad Request

{
    "Error": "The request object is missing at least one of the required attributes"
}
```

```
Failure: 406 Not Acceptable

{
    "Error": "Improper mimetype in Accept header"
}
```

```
Failure: 415 Unsupported Media Type
```

"Error": "Unsupported data format"
}

# **View/Get a Load (Not Protected)**

Allows you to retrieve a load.

GET /loads/<load\_id>

# Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| load_id | ID of the load |

# **Request Body**

None

### **Response Body Format**

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes                              |
|---------|--------------------|------------------------------------|
| Success | 200 OK             |                                    |
| Failure | 404 Not Found      | No boat with this boat_id exists.  |
| Failure | 406 Not Acceptable | Improper mimetype in Accept header |

#### Success

```
Status: 200 OK

{
    "carrier": {
        "id": 5944267134468096,
        "name": "Lucia",
        "self": "https://appspot.com/boats/5944267134468096"
    },
    "creation_date": "07/04/1776",
    "id": 5381317181046784,
    "item": "Wooden Staff",
    "self": "https://appspot.com/loads/5381317181046784",
    "volume": 55
}
```

```
Failure: 404 Not Found

{
    "Error": "No load with this load_id exists"
}
```

```
Failure: 406 Not Acceptable

{
    "Error": "Improper mimetype in Accept header"
}
```

# **View/Get all Load (Not Protected)**

Allows you to retrieve all loads.

GET /loads

# Request

#### **Path Parameters**

None

# **Request Body**

None

# **Additional Request Header Keys**

Optional (for pagination)

| Name   | Description  | Required? |
|--------|--|-----------|
| limit  | Number of boat objects to return.<br>Maximum limit is 5 (default is 5) |           |
| offset | Number of boat objects for backend to skip first (default is 0)        | No        |

#### **Response Body Format**

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes                              |
|---------|--------------------|------------------------------------|
| Success | 200 OK             |                                    |
| Failure | 406 Not Acceptable | Improper mimetype in Accept header |

#### **Success**

```
Success: 200 OK
    "loads": [{
        "carrier": null,
        "creation date": "10/18/2021",
        "id": 4682363330101248,
        "item": "LEGO Blocks3",
        "self": "https://appspot.com/loads/4682363330101248",
        "volume": 5
        "carrier": null,
         "creation date": "10/18/2021",
        "id": 4753547346313216,
        "item": "LEGO Blocks6",
        "self": "https://appspot.com/loads/4753547346313216",
        "volume": 5
        "carrier": null,
        "creation date": "10/18/2021",
        "id": 5808263236943872,
        "item": "LEGO Blocks5",
        "self": "https://appspot.com/loads/5808263236943872",
        "volume": 5
        "carrier": null,
        "creation date": "10/18/2021",
        "id": 5963031779475456,
        "item": "LEGO Blocks1",
        "self": "https://appspot.com/loads/5963031779475456",
        "volume": 5
        "carrier": null,
        "creation date": "10/18/2021",
        "id": 6511950678720512,
        "item": "LEGO Blocks2",
        "self": "https://appspot.com/loads/6511950678720512",
         "volume": 5
    } ],
```

```
"next_url": "https://appspot.com/loads?limit=5&offset=5",
    "total_items": 5
}
```

```
Failure: 406 Not Acceptable

{
    "Error": "Improper mimetype in Accept header"
}
```

# **Delete a Load (Not Protected)**

Allows you to delete a load.

DELETE /loads/<load\_id>

# Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| load_id | ID of the load |

# **Request Body**

None

# **Request Body Format**

None

# **Response Body Format**

JSON

### **Response Statuses**

| Outcome | Status Code        | Notes                              |
|---------|--------------------|------------------------------------|
| Success | 204 No Content     |                                    |
| Failure | 404 Not Found      | No boat with this boat_id exists   |
| Failure | 406 Not Acceptable | Improper mimetype in Accept header |

#### Success

Success: 204 No Content

```
Failure: 404 Not Found

{
    "Error": "No load with this load_id exists"
}
```

```
Failure: 406 Not Acceptable
```

```
{
    "Error": "Improper mimetype in Accept header"
}
```

# **Edit a Load (1 Attribute Only) (Not Protected)**

Allows you to edit **ONLY** one attribute of a load.

PATCH /loads/<load\_id>

### Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| load_id | ID of the load |

#### **Request Body**

Required

#### **Request MIME Type**

application/json

## **Request Body Format**

**JSON** 

### **Request JSON Attributes**

Choose only **ONE** of the follow attributes for the JSON request.

| Name          | Description                                     | Required? |
|---------------|---|-----------|
| volume        | Volume of a load.                               | Yes       |
| item          | Name of the load                                | Yes       |
| creation_date | Date load was created (formatted as MM/DD/YYYY) | Yes       |

### **Request Example**

```
{
    "volume": 6
}
```

## **Request Notes**

- Request JSON must have only one of the following attributes: volume (integer), item (string), and creation\_date (integer)
  - $\circ~$  having more than one attribute or having extraneous attributes (e.g. color) will cause the system to return code 400

# **Response MIME Type**

application/json

# **Response Body Format**

**JSON** 

# **Response Statuses**

| Outcome | Status Code                | Notes   |
|---------|----------------------------|---|
| Success | 204 No Content             |   |
| Failure | 400 Bad Request            | The request object is missing at least one of the required attributes |
|         |                            | Too many/few attributes to edit                                       |
| Failure | 404 Not Found              | No load with this load_id exists                                      |
| Failure | 406 Not Acceptable         | Improper mimetype in Accept header                                    |
| Failure | 415 Unsupported Media Type | Unsupported data format   |

#### Success

Success: 204 No Content

```
Failure: 400 Bad Request

{
    "Error": "The request object is missing at least one of the required attributes"
}
```

```
Failure: 400 Bad Request

{
    "Error": "Too many/few attributes to edit"
}
```

```
Failure: 404 Not Found

{
    "Error": "No load with this load_id exists"
```

}

# Failure: 406 Not Acceptable

```
{
    "Error": "Improper mimetype in Accept header"
}
```

# **Edit a Load (All Attributes) (Not Protected)**

Allows you to edit **ALL** attributes of a load.

PUT /loads/<load\_id>

### Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| load_id | ID of the load |

#### **Request Body**

Required

## **Request MIME Type**

application/json

## **Request Body Format**

**JSON** 

## **Request JSON Attributes**

All attributes are required in the JSON request.

| Name          | Description                                     | Required? |
|---------------|---|-----------|
| volume        | Volume of a load.                               | Yes       |
| item          | Name of the load                                | Yes       |
| creation_date | Date load was created (formatted as MM/DD/YYYY) | Yes       |

### **Request Example**

```
{
  "volume": 5,
  "item": "LEGO Blocks",
  "creation_date": "10/18/2021"
}
```

#### **Request Notes**

• Request JSON must have 3 attributes: volume (integer), item (string), and creation\_date (integer)

| 0 | if any of these 3 attributes are missing or extraneous attributes (e.g. color) are added, syste will return code 400 | m |
|---|--|---|
|   |  |   |
|   |  |   |
|   |  |   |
|   |  |   |
|   |  |   |
|   |  |   |
|   |  |   |
|   |  |   |
|   |  |   |
|   |  |   |

## **Response MIME Type**

application/json

## **Response Body Format**

**JSON** 

# **Response Statuses**

| Outcome | Status Code                | Notes   |
|---------|----------------------------|---|
| Success | 303 See Other              |   |
| Failure | 400 Bad Request            | The request object is missing at least one of the required attributes |
|         |                            | Too many/few attributes to edit                                       |
| Failure | 404 Not Found              | No load with this load_id exists                                      |
| Failure | 406 Not Acceptable         | Improper mimetype in Accept header                                    |
| Failure | 415 Unsupported Media Type | Unsupported data format   |

#### **Success**

```
Success: 303 See Other

{
    "carrier": null,
    "creation_date": "07/04/1776",
    "id": 5190813503979520,
    "item": "Wooden Staff",
    "self": "https://appspot.com/loads/5190813503979520",
    "volume": 55
}
```

#### **Failure**

```
Failure: 400 Bad Request

{
    "Error": "The request object is missing at least one of the required attributes"
}
```

Failure: 400 Bad Request

```
{
    "Error": "Too many/few attributes to edit"
}
```

#### Failure: 404 Not Found

```
{
    "Error": "No load with this load_id exists"
}
```

#### Failure: 406 Not Acceptable

```
{
    "Error": "Improper mimetype in Accept header"
}
```

# Failure: 415 Unsupported Media Type

```
{
    "Error": "Unsupported data format"
}
```

# Failure: 415 Unsupported Media Type

```
{
    "Error": "Unsupported data format"
}
```

# **Assign a Load to a Boat (Protected)**

Allows you to assign a load to a boat and assign a carrier to a load.

PUT /boats/<boat\_id>/loads/<load\_id>

# Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| boat_id | ID of the boat |
| load_id | ID of the load |

### **Request Body**

None

# **Additional Request Header Keys**

| Name          | Description                  | Required? | Value Format                                |
|---------------|------------------------------|-----------|---|
| Authorization | Species the JWT Bearer token | Yes       | Bearer ex_token_str  Ex: Bearer 123token123 |

# **Response Body Format**

**JSON** 

#### **Response Statuses**

| Outcome | Status Code      | Notes  |
|---------|------------------|--|
| Success | 204 No Content   |  |
| Failure | 401 Unauthorized | No Authorization in request header and/or JWT is invalid |
| Failure | 403 Forbidden    | The load is already loaded on another boat               |
|         |                  | Boat does not belong to this owner                       |
| Failure | 404 Not Found    | The specified boat and/or load does not exist            |

#### Success

Success: 204 No Content

```
Failure: 401 Unauthorized

{
    "Error": "No Authorization in request header and/or JWT is invalid"
}
```

```
Failure: 403 Forbidden

{
    "Error": "The load is already loaded on another boat"
}
```

```
Failure: 403 Forbidden

{
    "Error": "Boat does not belong to this owner"
}
```

# Failure: 404 Not Found { "Error": "The specified boat and/or load does not exist" }

# **Remove a Load from a Boat (Protected)**

Allows you to remove a load from a boat and remove a carrier from a load.

DELETE /boats/<boat\_id>/loads/<load\_id>

# Request

#### **Path Parameters**

| Name    | Description    |
|---------|----------------|
| boat_id | ID of the boat |
| load_id | ID of the load |

### **Request Body**

None

# **Additional Request Header Keys**

| Name          | Description                  | Required? | Value Format                                |
|---------------|------------------------------|-----------|---|
| Authorization | Species the JWT Bearer token | Yes       | Bearer ex_token_str  Ex: Bearer 123token123 |

# **Response Body Format**

**JSON** 

#### **Response Statuses**

| Outcome | Status Code      | Notes   |
|---------|------------------|---|
| Success | 204 No Content   |   |
| Failure | 401 Unauthorized | No Authorization in request header and/or JWT is invalid            |
| Failure | 403 Forbidden    | Boat does not belong to this owner                                  |
| Failure | 404 Not Found    | No boat with this boat_id is loaded with the load with this load_id |

#### Success

Success: 204 No Content

```
Failure: 401 Unauthorized

{
    "Error": "No Authorization in request header and/or JWT is invalid"
}
```

```
Failure: 403 Forbidden

{
    "Error": "Boat does not belong to this owner"
}
```

```
Failure: 404 Not Found

{
    "Error": "No boat with this boat_id is loaded with the load with this load_id"
}
```