

GCP deployment URL (login and user creation):  
<https://cs493-portfolio-luojjo.uw.r.appspot.com>

# Portfolio: API Spec

CS 493: Cloud Application Development

Fall 2021

Oregon State University

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## Change Log

Version	Change	Date
1.0	Initial Version	December 1, 2021
2.0	Included 403 user is not owner examples	December 4, 2021

## Data Model

The app stores three kinds of entities in Datastore: Users, Boats, and Loads

### Users

Property	Data Type	Notes
id	integer	The ID of the user. Datastore automatically generates it.
user_id	String	The unique id generated by Auth0 when a user is created

### Boats

Property	Data Type	Notes
id	integer	The ID of the boat. Datastore automatically generates it.
name	String	Name of the boat.
type	String	Type of the boat. E.g., Sailboat, Catamaran, etc.
length	integer	The length of the boat in feet.
owner	String	The user_id of the owner of the boat
loads	list of JSON objects	The loads assigned to the boat.

### Loads

Property	Data Type	Notes
id	integer	The ID of the load. Datastore automatically generates it.
volume	integer	The volume of the load.
carrier	JSON object	The boat that the load is assigned to.
content	String	The content of the load.
creation_date	String	The date the load was created.

## List all Users

List all the users

GET /users

### Request

#### Path Parameters

None

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### Request Body

none

### Response

#### Response Body Format

JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	405 Method Not Allowed	If the request type is not "POST" or "GET"
Failure	406 Not Acceptable	If the request header does not contain "Accept": "application/json" or specifies some other MIME type.

## Response Examples

### Success

Status: 200 OK

```
[
  {
    "id": 123
    "username": "luojo",
    "boats": []
  },
  {
    "id": 456,
    "username": "user2",
    "boats": []
  }
]
```

### Failure

Status: 405 Method Not Allowed

```
{
  "Error": "Unsupported request method"
}
```

Status: 406 Not Acceptable

```
{
  "Error": "The request's Accept header is missing or unsupported"
}
```

## Create a Boat

Allows you to create a new boat. Requires an authorized user.

POST /boats

### Request

#### Path Parameters

None

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### 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, Catamaran, etc.	Yes
length	The length of the boat in feet.	Yes

#### Request Body Example

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

## Response

### **Response Body Format**

JSON

### **Response Statuses**

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	If the request is missing any of the 3 required attributes. Extraneous attributes will be ignored.
Failure	401 Unauthorized	Unauthorized request.
Failure	405 Method Not Allowed	If the request type is not "POST" or "GET"
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

### **Response Examples**

#### Success

Status: 201 Created

```
{
  "id": 1234,
  "name": "Sea Witch",
  "type": "Catamaran",
  "length": 28,
  "owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",
  "loads": [],
  "self": "https://<your-app>/boats/1234"
}
```

#### Failure

Status: 400 Bad Request

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

Status: 401 Unauthorized

```
{  
  "code": "no auth header",  
  "description": "Authorization header is missing"  
}
```

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```

Status: 406 Not Acceptable

```
{  
  "Error": "The request's Accept header is missing or unsupported"  
}
```

## List all Boats

List all the boats for an authorized user. Requires the authorized user that owns the boats.

GET /boats
------------

### Request

#### Path Parameters

Name	Description	Required?
cursor	Tracks where in Datastore the request is looking	Optional (returned after the first request)

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### Request Body

None

### Response

#### Response Body Format

JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	Only returns boats belonging to an authorized user.  Paginated to 5 entries per page. Includes a "next" link to retrieve the next page of 5 entries (if available).
Failure	401 Unauthorized	Unauthorized request.
Failure	405 Method Not Allowed	If the request type is not "POST" or "GET"



Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.
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## Response Examples

### Success

Status: 200 OK

```
{
  "boats": [
    {
      "id": 1234,
      "name": "Sea Witch",
      "type": "Catamaran",
      "length": 28,
      "owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",
      "loads": [
        {"id": 5678,
          "self": "https://<your-app>/loads/5678"},
        {"id": 8765,
          "self": "https://<your-app>/loads/8765"}
      ],
      "self": "https://<your-app>/boats/1234"
    },
    {
      "id": 567,
      "name": "Adventure",
      "type": "Sailboat",
      "length": 50,
      "owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",
      "loads": [
        {"id": 135,
          "self": "https://<your-app>/loads/135"}
      ],
      "self": "https://<your-app>/boats/567"
    },
    {
      "id": 890,
      "name": "Hocus Pocus",
      "type": "Sailboat",
      "length": 100,
      "owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",
      "loads": [],
      "self": "https://<your-app>/boats/890"
    },
    {
      "id": 135,
      "name": "Ambition",

```

```
    "type": "Yacht",
    "length": 300,
    "owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",
    "loads": [],
    "self": "https://<your-app>/boats/135"
  },
  {
    "id": 357,
    "name": "Severance",
    "type": "Tugboat",
    "length": 100,
    "owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",
    "loads": [],
    "self": "https://<your-app>/boats/347"
  }
],
"next": "http://localhost:8080//boats?cursor=Ci0SJ2oRcH5jczQ5My1odzQtbHVvam9yEgsS
        BWJvYXRzGICAgOi3voULDBgAIAA=",
"total": 6
}
```

Status: 401 Unauthorized

```
{
  "code": "no auth header",
  "description": "Authorization header is missing"
}
```

Status: 405 Method Not Allowed

```
{
  "Error": "Unsupported request method"
}
```

Status: 406 Not Acceptable

```
{
  "Error": "The request's Accept header is missing or unsupported"
}
```

## View a Boat

View a boat for the authorized user. Requires the authorized user that owns the boat.

GET /boats/:boat\_id

### Request

#### Path Parameters

Name	Description
boat_id	ID of the boat

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### Request Body

None

### Response

#### Response Body Format

JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	Only returns boats belonging to an authorized user.
Failure	401 Unauthorized	Unauthorized request.
Failure	403 Forbidden	If the authorized user is not the owner of the boat.
Failure	404 Not Found	No boat with this boat_id exists
Failure	405 Method Not Allowed	If the request type is not "GET", "PUT", "PATCH", or "DELETE".
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

## Response Examples

### Success

Status: 200 OK

```
{
  "id": 1234,
  "name": "Sea Witch",
  "type": "Catamaran",
  "length": 28,
  "owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",
  "loads": [
    {
      "id": 5678,
      "self": "https://<your-app>/loads/5678"
    },
    {
      "id": 8765,
      "self": "https://<your-app>/loads/8765"
    }
  ],
  "self": "https://<your-app>/boats/1234"
}
```

Status: 401 Unauthorized

```
{
  "code": "no auth header",
  "description": "Authorization header is missing"
}
```

Status: 403 Forbidden

```
{
  "Error": "Requesting user is not the owner of the boat"
}
```

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{
  "Error": "Unsupported request method"
}
```

Status: 406 Not Acceptable

```
{  
  "Error": "The request's Accept header is missing or unsupported"  
}
```

## Edit a Boat (some attributes)

Allows you to edit designated attributes of an existing boat. Requires the authorized user that owns the boat.

```
PATCH /boats/:boat_id
```

### Request

#### Path Parameters

Name	Description
boat_id	ID of the boat

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### Request Body

Required (at least one attribute)

#### Request Body Format

JSON

#### Request JSON Attributes

Name	Description	Required?
name	The name of the boat.	optional
type	The type of the boat. E.G., Sailboat, Catamaran, etc.	optional
length	Length of the boat in feet.	optional

Note: although all of the attributes are optional, at least one is required

## Request Body Example

```
{
  "name": "Sea Witches",
  "length": 30
}
```

## Response

### Response Body Format

JSON

### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	400 Bad Request	The request does not include at least one of the required attributes  Extraneous attributes will be ignored.
Failure	401 Unauthorized	Unauthorized request.
Failure	403 Forbidden	If the request object is attempting to change "id".  If the authorized user is not the owner of the boat.
Failure	404 Not Found	No boat with this boat_id exists
Failure	405 Method Not Allowed	If the request type is not "GET", "PUT", "PATCH", or "DELETE".
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

### Response Examples

#### Success

Status: 200 OK

```
{
  "id": 1234,
  "name": "Sea Witches",
  "type": "Catamaran",
  "length": 30,
}
```

```
"owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",  
"loads": [],  
"self": "https://<your-app>/boats/1234"  
}
```

### Failure

Status: 400 Bad Request

```
{  
  "Error": "The request object does not have at least one of the required attributes"  
}
```

Status: 401 Unauthorized

```
{  
  "Error": "Unauthorized request"  
}
```

Status: 403 Forbidden

```
{  
  "Error": "The id property cannot be changed"  
}
```

Status: 403 Forbidden

```
{  
  "Error": "Requesting user is not the owner of the boat"  
}
```

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```



Status: 406 Not Acceptable

```
{  
  "Error": "The request's Accept header is missing or unsupported"  
}
```

## Edit a Boat (all attributes)

Allows you to edit all attributes of an existing boat. Requires the authorized user that owns the boat.

PUT/boats/:boat\_id

### Request

#### Path Parameters

Name	Description
boat_id	ID of the boat

#### Request Header

Name	Description	Required?
accept	application/json	Yes

#### Request Body

Required

#### Request Body Format

JSON

#### Request JSON Attributes

Name	Description	Required?
name	The name of the boat.	Yes
type	The type of the boat. E.G., Sailboat, Catamaran, etc.	Yes
length	Length of the boat in feet.	Yes

## Request Example

```
{
  "name": "Sea Witch",
  "Type": "Sailboat",
  "length": 28
}
```

## Response

### Response Body Format

JSON

### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	400 Bad Request	The request is missing any of the 3 required attributes. Extraneous attributes will be ignored.
Failure	401 Unauthorized	Unauthorized request.
Failure	403 Forbidden	If the request object is attempting to change "id". If the authorized user is not the owner of the boat.
Failure	404 Not Found	No boat with this boat_id exists
Failure	405 Method Not Allowed	If the request type is not "GET", "PUT", "PATCH", or "DELETE".
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

## Response Examples

### Success

Status: 200 OK

```
{
  "id": 1234,
  "name": "Sea Witch",
  "type": "Sailboat",
  "length": 28,
  "owner": "q34tgavt9p38980avaw4vthnp89aw3vtp89a3vtphm89",
  "loads": [],
  "self": "https://<your-app>/boats/1234"
}
```

### Failure

Status: 400 Bad Request

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

Status: 401 Unauthorized

```
{
  "code": "no auth header",
  "description": "Authorization header is missing"
}
```

Status: 403 Forbidden

```
{
  "Error": "The id property cannot be changed"
}
```

Status: 403 Forbidden

```
{
  "Error": "Requesting user is not the owner of the boat"
}
```

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```

Status: 406 Not Acceptable

```
{  
  "The request's Accept header is missing or unsupported"  
}
```

## Delete a Boat

Allows you to delete a boat. Requires the authorized user that owns the boat.

Note that if the boat currently has a load(s), deleting the boat will unload the load(s)

```
DELETE /boats/:boat_id
```

### Request

#### Path Parameters

Name	Description
boat_id	ID of the boat

#### Request Body

None

### Response

#### Response Body Format

Success: No body

Failure: JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	Unauthorized request.
Failure	403 Forbidden	If the authorized user is not the owner of the boat.
Failure	404 Not Found	No boat with this boat_id exists
Failure	405 Method Not Allowed	If the request type is not "GET", "PUT", "PATCH", or "DELETE".

#### Response Examples

##### Success

```
Status: 204 No Content
```

## Failure

Status: 401 Unauthorized

```
{  
  "code": "no auth header",  
  "description": "Authorization header is missing"  
}
```

Status: 403 Forbidden

```
{  
  "Error": "Requesting user is not the owner of the boat"  
}
```

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```

## Create a Load

Allows you to create a new load.

POST /loads

### Request

#### Path Parameters

None

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### Request Body

Required

#### Request Body Format

JSON

#### Request JSON Attributes

Name	Description	Required?
volume	The volume of the load.	Yes
content	The content of the load.	Yes
creation_date	The date the load was created.	Yes

#### Request Body Example

```
{
  "volume": 5,
  "content": "LEGO Blocks",
  "creation_date": 12/2/2021
}
```



## Response

### **Response Body Format**

JSON

### **Response Statuses**

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	If the request is missing any of the 3 required attributes. Extraneous attributes will be ignored.
Failure	405 Method Not Allowed	If the request type is not "POST" or "GET"
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

### **Response Examples**

#### Success

Status: 201 Created

```
{
  "id": 5678,
  "volume": 5,
  "carrier": NULL,
  "content": "LEGO Blocks",
  "creation_date": "12/1/2021",
  "self": "https://<your-app>/loads/5678"
}
```

## Failure

Status: 400 Bad Request

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

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```

Status: 406 Not Acceptable

```
{  
  "Error": "The request's Accept header is missing or unsupported"  
}
```

## List all Loads

List all the loads.

GET /loads

### Request

#### Path Parameters

Name	Description	Required?
cursor	Tracks where in Datastore the request is looking	Optional (returned after the first request)

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### Request Body

None

### Response

#### Response Body Format

JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	Paginated to 5 entries per page. Includes a "next" link to retrieve the next page of 5 entries (if available).
Failure	405 Method Not Allowed	If the request type is not "POST" or "GET".
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

## Response Examples

### Success

Status: 200 OK

```
{
  "loads": [
    {
      "id": 5678,
      "volume": 5,
      "carrier": {
        "id": 1234,
        "name": "Sea Witch",
        "self": "https://<your-app>/boats/1234"
      },
      "content": "LEGO Blocks",
      "creation_date": "12/1/2021",
      "self": "https://<your-app>/loads/5678"
    },
    {
      "id": 6789,
      "volume": 10,
      "carrier": NULL,
      "content": "Tennis Racquets",
      "creation_date": "11/1/2021",
      "self": "https://<your-app>/loads/6789"
    },
    {
      "id": 7890,
      "volume": 5,
      "carrier": {
        "id": 567,
        "name": "Adventure",
        "self": "https://<your-app>/boats/567"
      },
      "content": "LEGO Blocks",
      "creation_date": "12/1/2021",
      "self": "https://<your-app>/loads/7890"
    },
    {
      "id": 1357,
      "volume": 100,
      "carrier": NULL,
      "content": "Printer Paper",
      "creation_date": "1/1/2021",
      "self": "https://<your-app>/loads/1357"
    },
    {
      "id": 3579,
      "volume": 5,
```

```
        "carrier": NULL
        "content": "Wine",
        "creation_date": "12/1/2020",
        "self": "https://<your-app>/loads/3579"
    }
  ],
  "next":
    "http://localhost:8080//boats?cursor=Ci0SJ2oRcH5jczQ5My1odzQtbHVvam9yEgsS
    BWJvYXRzGICAgOi3voULDBgAIAA=",
  "total": 6
}
```

#### Failure

Status: 405 Method Not Allowed

```
{
  "Error": "Unsupported request method"
}
```

Status: 406 Not Acceptable

```
{
  "Error": "The request's Accept header is missing or unsupported"
}
```

## View a Load

View a load.

```
GET /loads/:load_id
```

### Request

#### Path Parameters

Name	Description
load_id	ID of the load

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### Request Body

None

### Response

#### 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	405 Method Not Allowed	If the request type is not "GET", "PUT", "PATCH", or "DELETE".
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

## Response Examples

### Success

Status: 200 OK

```
{
  "id": 5678,
  "volume": 5,
  "carrier": {
    "id": 1234,
    "name": "Sea Witch",
    "self": "https://<your-app>/boats/1234"
  },
  "content": "LEGO Blocks",
  "creation_date": "12/1/2021",
  "self": "https://<your-app>/loads/5678"
}
```

### Failure

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{
  "Error": "Unsupported request method"
}
```

Status: 406 Not Acceptable

```
{
  "Error": "The request's Accept header is missing or unsupported"
}
```

## Edit a Load (some attributes)

Allows you to edit designated attributes of an existing load.

```
PATCH /loads/:load_id
```

### Request

#### Path Parameters

Name	Description
load_id	ID of the load

#### Request Header

Name	Description	Required?
Accept	application/json	Yes

#### Request Body

Required (at least one attribute)

#### Request Body Format

JSON

#### Request JSON Attributes

Name	Description	Required?
volume	The volume of the load.	optional
content	The content of the load.	optional
creation_date	The date the load was created.	optional

Note: although all of the attributes are optional, at least one is required

#### Request Body Example

```
{  
  "volume": 10,  
}
```



## Response

### **Response Body Format**

JSON

### **Response Statuses**

Outcome	Status Code	Notes
Success	200 OK	
Failure	400 Bad Request	The request does not include at least one of the required attributes  Extraneous attributes will be ignored.
Failure	403 Forbidden	If the request object is attempting to change "id".
Failure	404 Not Found	No load with this load_id exists
Failure	405 Method Not Allowed	If the request type is not "GET", "PUT", "PATCH", or "DELETE".
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

### **Response Examples**

#### Success

Status: 200 OK

```
{
  "id": 5678,
  "volume": 10,
  "carrier": {
    "id": 1234,
    "name": "Sea Witch",
    "self": "https://<your-app>/boats/1234"
  },
  "content": "LEGO Blocks",
  "creation_date": "12/1/2021",
  "self": "https://<your-app>/loads/5678"
}
```

## Failure

Status: 400 Bad Request

```
{  
  "Error": "The request object does not have at least one of the required attributes"  
}
```

Status: 403 Forbidden

```
{  
  "Error": "The id property cannot be changed"  
}
```

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```

Status: 406 Not Acceptable

```
{  
  "Error": "The request's Accept header is missing or unsupported"  
}
```

## Edit a Load (all attributes)

Allows you to edit all attributes of an existing load.

PUT/loads/:load\_id

### Request

#### Path Parameters

Name	Description
load_id	ID of the load

#### Request Header

Name	Description	Required?
accept	application/json	Yes

#### Request Body

Required

#### Request Body Format

JSON

#### Request JSON Attributes

Name	Description	Required?
volume	The volume of the load.	Yes
content	The content of the load.	Yes
creation_date	The date the load was created.	Yes

#### Request Example

```
{
  "volume": 10,
  "content": "LEGO Star Wars Set",
  "creation_date": "12/12/2021"
}
```

## Response

### **Response Body Format**

JSON

### **Response Statuses**

Outcome	Status Code	Notes
Success	200 OK	
Failure	400 Bad Request	The request is missing any of the 3 required attributes. Extraneous attributes will be ignored.
Failure	403 Forbidden	If the request object is attempting to change "id".
Failure	404 Not Found	No load with this load_id exists
Failure	405 Method Not Allowed	If the request type is not "GET", "PUT", "PATCH", or "DELETE".
Failure	406 Not Acceptable	If the request header does not contain "accept": "application/json" or specifies some other MIME type.

### **Response Examples**

#### Success

Status: 200 OK

```
{
  "id": 5678,
  "volume": 10,
  "carrier": {
    "id": 1234,
    "name": "Sea Witch",
    "self": "https://<your-app>/boats/1234"
  },
  "content": "LEGO Star Wars Set",
  "creation_date": "12/12/2021",
  "self": "https://<your-app>/loads/5678"
}
```

## Failure

Status: 400 Bad Request

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

Status: 403 Forbidden

```
{  
  "Error": "The id property cannot be changed"  
}
```

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```

Status: 406 Not Acceptable

```
{  
  "The request's Accept header is missing or unsupported"  
}
```

## Delete a Load

Allows you to delete a load. Note that if the load is currently being carried by a boat, deleting the load will unload the load from the carrier boat

```
DELETE /loads/:load_id
```

### Request

#### Path Parameters

Name	Description
load_id	ID of the load

#### Request Body

None

### Response

#### Response Body Format

Success: No body

Failure: JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	404 Not Found	No load with this load_id exists
Failure	405 Method Not Allowed	If the request type is not "GET", "PUT", "PATCH", or "DELETE".

## Response Examples

### Success

Status: 204 No Content

### Failure

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```

## Assign a Load to a Boat

Allows you to assign a load to a boat.

```
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

### Response

#### Response Body Format

Success: No body

Failure: JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	Succeeds only if a boat exists with this boat_id, a load exists with this load_id, and the load is not already assigned.
Failure	403 Forbidden	The load with the load ID is already assigned.
Failure	404 Not Found	The specified boat and/or load does not exist.
Failure	405 Method Not Allowed	If the request type is not "PUT" or "DELETE".



## Response Examples

### Success

Status: 204 No Content

### Failure

Status: 403 Forbidden

```
{  
  "Error": "The load is already assigned to a boat"  
}
```

Status: 404 Not Found

```
{  
  "Error": "The specified boat and/or load does not exist"  
}
```

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```

## Remove a Load from a Boat

Allows you to remove a load from a boat.

```
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

### Response

#### Response Body Format

Success: No body

Failure: JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	Succeeds only if a boat exists with this boat_id, a load exists with this load_id, and the load is assigned to this boat.
Failure	404 Not Found	The specified boat and/or load does not exist.  No load with this load_id is assigned to the boat with this boat_id
Failure	405 Method Not Allowed	If the request type is not "PUT" or "DELETE".

## Response Examples

### Success

Status: 204 No Content

### Failure

Status: 404 Not Found

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

Status: 405 Method Not Allowed

```
{  
  "Error": "Unsupported request method"  
}
```