# Portfolio Project

CS 493: Cloud Application Development

Spring 2022

## Oregon State University

Last Update: June 05, 11:26 pm Central

## **Application & Account Creation/Login:**

https://portfolio-tristan-harville.uk.r.appspot.com/

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## Change log

| Version | Change           | Date           |
|---------|------------------|----------------|
| 1.0     | Initial version. | April 25, 2022 |

## Data Model

The app stores three kinds of entities in Datastore, Boats, Loads, and Users. All properties are required in order for the entity to exist.

#### Boats

| Property | Data Type | Valid Values   |  |
|----------|-----------|--|--|
| id       | Integer   | The id of the boat. This is automatically generated by           |  |
|          |           | DataStore and should not be specified.                           |  |
| 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.                                  |  |
| loads    | Array     | This is an array containing load objects that the boat currently |  |
|          |           | has loaded on it. These load objects can only be placed on one   |  |
|          |           | boat. If the boat is carrying no loads, the array will be empty. |  |
| Owner    | String    | The owner of the array, uses the sub property of 0Auth as the    |  |
|          |           | identifier   |  |

#### Loads

| Property      | Data Type | Valid Values   |
|---------------|-----------|--|
| id            | Integer   | The id of the load. This is automatically generated by   |
|               |           | DataStore and should not be specified.   |
| volume        | Integer   | How much space the load takes up on the boat.  |
| carrier       | Object    | If a boat is currently carrying this load, an object containing information about the boat will be stored here. If no boat is currently carrying this load, then the property will contain "null". |
| item          | String    | A description of what the load is.   |
| creation_date | String    | That date that this load was created.  |

#### Users

| Property | Data Type | Valid Values   |
|----------|-----------|--|
| id       | Integer   | The id of the user. This is automatically generated by       |
|          |           | DataStore and should not be specified.                       |
| name     | String    | Name of the user.  |
| Sub      | String    | The sub property of the 0Auth login that is generated when a |
|          |           | user logs onto the application.                              |

### Non-user Entity Relationship

This application contains one non-user relationship between the Loads entity and the Boats entity. This relationship is a one-to-many relationship, where a load can only be associated with one boat but a boat can be associated with many loads. A boat may exist without any loads. A load may exist without a carrier, which is a boat.

## User Entity Model

This application also supports a user entity. Users are authenticated through the user of auth0 and authorized using a JWT. The unique identifier for a user is the 'sub' property of the JWT. If a user were to make a request to the API for protected endpoints, the user would need to provide the JWT provided upon logging into the application. The application does not require the use of a user\_id.

A relationship between a user entity and a non-user entity is also supported by this application. This relationship is a one-to-many relationship between users and boats. A user may have many boats. A boat may have only one user, who is identified as the boats 'owner'. A user may exist without owning any boats. A boat may not exist without an owner.

## View all Users

Get all the users that have logged onto the application.

#### **GET /users**

Request

Path Parameters

None

Request Body

None

Response

Response Body Format

**JSON** 

## Response Statuses

| Outcome | Status Code        | Notes                                    |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 406 Not Acceptable | The MIME type requested is not supported |

## Response Examples

#### Success

```
Status: 200 OK
  "users":
[
  "id": 123,
  "name": "David Johnson",
  "sub": auth0|232tnen11231nasn,
},
{
  "id": 333,
  "name": "Chris Brown",
  "sub": auth0|545ggfsd33sn,
},
{
  "id": 890,
  "name": "Strange Guy",
  "owner": auth0|9578eunfd12384,
}
```

#### Failure

Status: 406 Not Acceptable

```
{
"Error": "Not Acceptable MIME type"
}
```

## Create a Boat

Allows you to create a new boat.

## POST /boats

Request

Path Parameters

None

Request Header

Bearer Token

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 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, the boat will not be created, and 400 status code will be returned.  It is assumed that the properties datatype input will be as stated in the data model for the boat |
| Failure | 401 Unauthorized   | The user is not logged in and therefore does not have permission to create boats   |
| Failure | 406 Not Acceptable | The MIME type requested is not supported   |

### Response Examples

#### Success

```
Status: 201 Created

{
    "id": 123,
    "name": "Sea Witch",
    "type": "Catamaran",
    "length": 28,
    "loads": [],
    "owner": auth0|232tnen11231nasn,
    "self": 28,
}
```

### View a Boat

Allows you to get an existing boat

```
GET /boats/:boat_id
```

#### Request

#### Path Parameters

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

#### 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 | 406 Not Acceptable | The MIME type requested is not supported |

### Response Examples

#### Success, no loads

```
Status: 200 OK

{
    "id": 123,
    "name": "Sea Witch",
    "type": "Catamaran",
    "length": 28,
    "loads": [],
    "owner": auth0|232tnen11231nasn,
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/123",
}
```

## Success, with loads

```
{"self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/777",
    "id": "777"}
    ],
    "owner": auth0|232tnen11231nasn,
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/333",
}
```

```
Status: 404 Not Found

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

Status: 406 Not Acceptable

{
    "Error": "Not Acceptable MIME type"
}
```

## View all Boats

Get all the boats in DataStore. This method utilizes pagination with the limit and offset parameters. These parameters are optional. When they are not specified, a limit of 5 and offset of 0 are used.

**GET /boats** 

#### Request

#### Path Parameters

| Parameter | Description  | Required? |
|-----------|--|-----------|
| Limit     | How many load objects are to be returned per result          | No        |
| Offset    | The starting point in the load dataset to start your results | No        |

#### Request Body

None

#### Response

Response Body Format

JSON

#### **Response Statuses**

| Outcome | Status Code        | Notes                                    |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 406 Not Acceptable | The MIME type requested is not supported |

#### Response Examples

#### Success

```
Status: 200 OK
[
 "id": 123,
 "name": "Sea Witch",
  "type": "Catamaran",
 "length": 28,
 "loads": [],
  "owner": auth0|232tnen11231nasn,
 "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/123",
},
 "id": 333,
 "name": "Adventure",
  "type": "Sailboat",
 "length": 50
 "loads": [
      {"self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/456",
      "id": "456"},
      {"self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/777",
       "id": "777"}
```

```
"owner": auth0|545ggfsd33sn,
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/333",
},
{
    "id": 890,
    "name": "Kodiak",
    "type": "Canoe",
    "length": 12,
    "loads": [],
    "owner": auth0|9578eunfd12384,
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/890",
}
]
```

```
Status: 406 Not Acceptable

{
"Error": "Not Acceptable MIME type"
}
```

## View all User Boats

Get all the boats in DataStore that are associated with a user and is protected. This method utilizes pagination with the limit and offset parameters. These parameters are optional. When they are not specified, a limit of 5 and offset of 0 are used.

#### **GET /boats**

#### Request

#### Path Parameters

| Parameter | Description  | Required? |
|-----------|--|-----------|
| Limit     | How many load objects are to be returned per result          | No        |
| Offset    | The starting point in the load dataset to start your results | No        |

#### Request Header

Bearer token

Request Body

None

#### Response

Response Body Format

JSON

#### **Response Statuses**

| Outcome | Status Code        | Notes  |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 401 Unauthorized   | The user is not logged in, and an error will throw and the |
|         |                    | default function of view all boats will be executed        |
| Failure | 406 Not Acceptable | The MIME type requested is not supported                   |

#### Response Examples

#### Success

```
Status: 200 OK

[
{
    "id": 123,
    "name": "Sea Witch",
    "type": "Catamaran",
    "length": 28,
    "loads": [],
    "owner": auth0|232tnen11231nasn,
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/123",
},
{
    "id": 333,
    "name": "Adventure",
    "type": "Sailboat",
```

```
"length": 50
 "loads": [
      {"self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/456",
      "id": "456"},
      {"self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/777",
      "id": "777"}
      ],
  "owner": auth0|232tnen11231nasn,
 "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/333",
},
{
 "id": 890,
 "name": "Kodiak",
  "type": "Canoe",
 "length": 12,
 "loads": [],
 "owner": auth0|232tnen11231nasn,
 "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/890",
}
```

```
Status: 406 Not Acceptable

{
"Error": "Not Acceptable MIME type"
}
```

## Edit a Boat

Allows the user to edit a boat. This is a protected endpoint and the user must be logged in and authenticated to edit a boat.

## PATCH /boats/:boat\_id

## Request

#### Path Parameters

| Parameter | Description    | Required? |
|-----------|----------------|-----------|
| boat_id   | ID of the boat | Yes       |

### Request Header

Bearer token

#### Request Body

Required

## Request Body Format

**JSON** 

## Request JSON Attributes

| Name   | Description   | Required? |
|--------|---|-----------|
| name   | The name of the boat.                                 | No        |
| type   | The type of the boat. E.g., Sailboat, Catamaran, etc. | No        |
| length | Length of the boat in feet.                           | No        |

### Request Body Example

```
{
    "type": "Catamaran"
}
```

### Response

### Response Body Format

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes   |
|---------|--------------------|---|
| Success | 200 OK             |   |
| Failure | 400 Bad Request    | The user did not enter any attributes to be edited      |
| Failure | 401 Unauthorized   | The user is not logged in                               |
| Failure | 403 Forbidden      | The user is trying to edit a boat owned by another user |
| Failure | 404 Not Found      | The boat_id was not found in the database               |
| Failure | 406 Not Acceptable | The MIME type requested is not supported                |

#### Response Examples

#### Success

```
Status: 200 OK

{
    "id": 123,
    "name": "Sea Witch",
    "type": "Catamaran",
    "length": 28,
    "loads": [],
    "owner": auth0|232tnen11231nasn,
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/123",
}
```

```
Status: 400 Bad Request

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

Status: 401 Unauthorized

{
   ""code": "invalid header",
   "description":
        "Invalid header."
        "Use an RS256 signed JWT Access Token""
}

Status: 403 Forbidden

{
   "Error": "Cannot update this boat since it is owned by another user"
}

Status: 404 Not Found

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

Status: 406 Not Acceptable

{
   "Error": "Not Acceptable MIME type"
}
```

## Update a Boat

Allows the user to update a boat. This is a protected endpoint and the user must be logged in and authenticated to update a boat.

PUT /boats/:boat\_id

### Request

#### Path Parameters

| Parameter | Description    | Required? |
|-----------|----------------|-----------|
| boat_id   | ID of the boat | Yes       |

### Request Header

Bearer token

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 Body Example

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

### Response

Response Body Format

**JSON** 

### Response Statuses

| Outcome | Status Code        | Notes  |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 400 Bad Request    | The user did enter all required attributes to be updated |
| Failure | 401 Unauthorized   | The user is not logged in                                |
| Failure | 403 Forbidden      | The user is trying to update a boat owned by another     |
|         |                    | user   |
| Failure | 404 Not Found      | The boat_id was not found in the database                |
| Failure | 406 Not Acceptable | The MIME type requested is not supported                 |

#### Response Examples

#### Success

```
Status: 200 OK

{
    "id": 123,
    "name": "Sea Witch",
    "type": "Catamaran",
    "length": 28,
    "loads": [],
    "owner": auth0|232tnen11231nasn,
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/123",
}
```

```
Status: 400 Bad Request

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

Status: 401 Unauthorized

{
    ""code": "invalid header",
    "description":
        "Invalid header."
        "Use an RS256 signed JWT Access Token""
}

Status: 403 Forbidden

{
    "Error": "Cannot update this boat since it is owned by another user"
}

Status: 404 Not Found

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

Status: 406 Not Acceptable

{
    "Error": "Not Acceptable MIME type"
}
```

## Delete a Boat

Allows you to delete a boat. This is a protected endpoint and the user must be logged into the application to have authorization to delete a boat. Note that if the boat is currently carrying loads, deleting the boat will mark each load as not being carried (i.e. the 'carrier' property for the load will have a value of 'null').

#### DELETE /boats/:boat\_id

#### Request

#### Path Parameters

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

#### Request Header

Bearer token

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

#### **Response Statuses**

| Outcome | Status Code      | Notes   |
|---------|------------------|---|
| Success | 204 No Content   |   |
| Failure | 401 Unauthorized | The user is not logged in                                 |
| Failure | 403 Forbidden    | The user is trying to delete a boat owned by another user |
| Failure | 404 Not Found    | The boat_id was not found in the database                 |

#### Response Examples

#### Success

```
Status: 204 No Content
```

```
Status: 401 Unauthorized

{
    ""code": "invalid header",
    "description":
        "Invalid header. "
        "Use an RS256 signed JWT Access Token""
}
Status: 403 Forbidden
```

```
{
    "Error": "Cannot delete this boat since it is owned by another user"
}
Status: 404 Not Found
{
    "Error": "No boat with this boat_id exists"
}
```

## Create a Load

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        | The volume of the load.              | Yes       |
| item          | The description of what the load is. |           |
| creation_date | Date that this load was created      | Yes       |

## Request Body Example

```
{
  "volume": 12,
  "item": "Milk Cartons",
  "creation_date": "09/16/2020"
}
```

### 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, the load will not be created, and 400 status code will be returned  It is assumed that the properties datatype input will be as stated in the data model for the load. |
| Failure | 406             |  |

### Response Examples

#### Success

```
Status: 201 Created

{
    "id": 123,
    "volume": 12,
    "carrier": null,
    "item": "Milk Cartons",
    "creation_date": "09/16/2020",
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/123",
}
```

```
Status: 400 Bad Request

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

Status: 406 Not Acceptable

{
    "Error": "Not Acceptable MIME type"
}
```

## View a Load

Allows you to get an existing load

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

#### Request

#### Path Parameters

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

#### Request Body

None

#### Response

### Response Body Format

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes                                    |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 404 Not Found      | No load with this load_id exists         |
| Failure | 406 Not Acceptable | The MIME type requested is not supported |

### Response Examples

#### Success, no carrier

```
Status: 200 OK

{
    "id": 123,
    "volume": 12,
    "carrier": null,
    "item": "Milk Cartons",
    "creation_date": "09/16/2020",
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/123",
}
```

## Success, with carrier

```
Status: 200 OK

{
    "id": 456,
    "volume": 44,
    "carrier": {
        "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/777",
        "id": "777",
        "name": "Sea Witch"},
    "item": "Bowling Balls",
```

```
"creation_date": "03/22/2021",
    "self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/456",
}
```

```
Status: 404 Not Found

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

Status: 406 Not Acceptable

{
   "Error": "Not Acceptable MIME type"
}
```

## View all Loads

Get all the loads in DataStore. This method utilizes pagination with the limit and offset parameters. These parameters are optional. When they are not specified, a limit of 5 and offset of 0 are used.

**GET /loads** 

#### Request

#### Path Parameters

| Parameter | Description  | Required? |
|-----------|--|-----------|
| Limit     | How many load objects are to be returned per result          | No        |
| Offset    | The starting point in the load dataset to start your results | No        |

#### Request Body

None

#### Response

Response Body Format

**JSON** 

#### **Response Statuses**

| Outcome | Status Code        | Notes                                    |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 406 Not Acceptable | The MIME type requested is not supported |

#### Response Examples

#### Success

```
Status: 200 OK
[
 "id": 123,
 "volume": 12,
  "carrier": null,
 "item": "Milk Cartons",
  "creation_date": "09/16/2020",
  "self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/123",
},
{
 "id": 456,
 "volume": 44,
  "carrier": {
      "self": "https://hw4-tristan-harville.uk.r.appspot.com/boats/777",
      "id": "777",
      "name": "Sea Witch"},
 "item": "Bowling Balls",
  "creation_date": "03/22/2021",
  "self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/456",
},
```

```
"id": 778,
  "volume": 120,
  "carrier": null,
  "item": "Tractors",
  "creation_date": "12/25/2021",
  "self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/778",
}
]
```

```
Status: 406 Not Acceptable

{
"Error": "Not Acceptable MIME type"
}
```

## Edit a Load

Allows the user to edit a load.

## PATCH /loads/:load\_id

### Request

### Path Parameters

| Parameter | Description    | Required? |
|-----------|----------------|-----------|
| load_id   | ID of the load | Yes       |

## Request Body

Required

## Request Body Format

**JSON** 

## Request JSON Attributes

| Name          | Description                          | Required? |
|---------------|--------------------------------------|-----------|
| volume        | The volume of the load.              | No        |
| item          | The description of what the load is. |           |
| creation_date | Date that this load was created      | No        |

## Request Body Example

```
{
    "item": "Milk Duds",
}
```

## Response

## Response Body Format

**JSON** 

### Response Statuses

| Outcome | Status Code        | Notes  |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 400 Bad Request    | The user did not enter any attributes to be edited |
| Failure | 404 Not Found      | The load_id was not found in the database          |
| Failure | 406 Not Acceptable | The MIME type requested is not supported           |

### Response Examples

#### Success

```
Status: 200 OK

{
    "id": 123,
    "volume": 12,
    "carrier": null,
```

```
"item": "Milk Duds",
  "creation_date": "09/16/2020",
  "self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/123",
}
```

```
Status: 400 Bad Request

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

Status: 404 Not Found

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

Status: 406 Not Acceptable

{
    "Error": "Not Acceptable MIME type"
}
```

## Update a Load

Allows the user to update a load.

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

Request

#### Path Parameters

| Parameter | Description    | Required? |
|-----------|----------------|-----------|
| load_id   | ID of the load | Yes       |

Request Body

Required

Request Body Format

**JSON** 

## Request JSON Attributes

| Name          | Description                          | Required? |
|---------------|--------------------------------------|-----------|
| volume        | The volume of the load.              | Yes       |
| item          | The description of what the load is. |           |
| creation_date | Date that this load was created      | Yes       |

## Request Body Example

```
{
  "volume": 2,
  "item": "Milk Duds",
  "creation_date": "10/29/2020",
}
```

## Response

Response Body Format

**JSON** 

## Response Statuses

| Outcome | Status Code        | Notes  |
|---------|--------------------|--|
| Success | 200 OK             |  |
| Failure | 400 Bad Request    | The user did not enter all the required attributes to update |
| Failure | 404 Not Found      | The load_id was not found in the database                    |
| Failure | 406 Not Acceptable | The MIME type requested is not supported                     |

## Response Examples

#### Success

```
Status: 200 OK
{
```

```
"id": 123,
  "volume": 2,
  "carrier": null,
  "item": "Milk Duds",
  "creation_date": "10/29/2020",
  "self": "https://hw4-tristan-harville.uk.r.appspot.com/loads/123",
}
```

```
Status: 400 Bad Request

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

Status: 404 Not Found

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

Status: 406 Not Acceptable

{
    "Error": "Not Acceptable MIME type"
}
```

## 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 remove the load from the boat it has been placed on (i.e. the 'loads' property for the boat will remove the load from the value array).

#### DELETE /loads/:load id

## Request

#### Path Parameters

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

#### Request Body

None

#### Response

No body

## 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 |

#### Response Examples

#### Success

```
Status: 204 No Content
```

```
Status: 404 Not Found

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

## Assign Load to Boat

A load is assigned to be carried by a boat. A boat can be assigned many loads. A load may only be assigned to one 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

No body

### 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 currently carried by another boat. |
| Failure | 403 Forbidden  | The load is already being carried by another boat.   |
| Failure | 404 Not Found  | The specified boat and/or load does not exist.   |

### Response Examples

#### Success

Status: 204 No Content

```
Status: 403 Forbidden

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

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

## Remove Load from Boat

A load is removed 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

No body

### 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 currently carried by the boat. |
| Failure | 404 Not Found  | The specified boat and/or load does not exist, or the load is not on the boat specified.   |

### Response Examples

#### Success

Status: 204 No Content

```
Status: 404 Not Found
{
  "Error": "No boat with this boat_id is loaded with the load with this load_id"
}
Status: 404 Not Found
{
  "Error": "boat_id or load_id does not exist"
}
```