# Assignment 8: API Spec

CS 493: Cloud Application Development

#### Fall 2020

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	Initial version.	M, Oct 22	

APP URL: http://34.82.47.245:8000/

# **Create a Boat**

Allows you to create a new boat.

POST /boats

# **Request**

**Request Parameters** 

None

Request Body

Required

Request Body Format

JSON

# Request JSON Attributes

Name	Туре	Description	Required?
name	String	The name of the boat.	Yes
type	String	The type of the boat. E.g., Sailboat, Catamaran, etc.	Yes
length	Integer	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 must not be created, and 400 status code must
		be returned.
		You don't need to validate the values of the attributes and can assume that if the request contains any of the listed attributes, then that attribute's value is valid.
		You can also assume that the request will not contain any extraneous attribute (i.e., the request JSON will never contain any attribute other than the ones that are listed).

# Response Examples

Datastore will automatically generate an ID and store it with the entity being created. This value needs to be sent in the response body as shown in the example.

#### Success

```
Status: 201 Created

{
    "id": "abc123",
    "name": "Sea Witch",
    "type": "Catamaran",
    "length": 28,
}
```

#### Failure

```
Status: 400 Bad Request

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

# View a Boat

Allows you to get an existing boat

GET /boats/:boat\_id

# **Request**

# **Request Parameters**

Name	Туре	Description	Required?
boat_id	String	ID of the boat	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

# Response Examples

#### Success

```
Status: 200 OK

{
    "id": "abc123",
    "name": "Sea Witch",
    "type": "Catamaran",
    "length": 28,
}
```

#### Failure

```
Status: 404 Not Found

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

# **List all Boats**

List all the boats.

**GET** /boats

# Request

**Request Parameters** 

None

Request Body

None

# **Response**

Response Body Format

JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	

### Response Examples

#### Success

```
Status: 200 OK
[ "Boats":
[{
 "id": "abc123",
 "name": "Sea Witch",
 "type": "Catamaran",
 "length": 28,
},{
 "id": "def456",
 "name": "Adventure",
 "type": "Sailboat",
 "length": 50,
},{
 "id": "xyz123",
 "name": "Hocus Pocus",
 "type": "Sailboat",
 "length": 100,
}]
```

# **Delete a Boat**

Allows you to delete a boat. Note that if the boat is currently in a load, deleting the boat makes the load empty.

DELETE /boats/:boat\_id

# **Request**

# **Request Parameters**

Name	Туре	Description	Required?
boat_id	String	ID of the boat	Yes

# **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 boat with this boat_id exists

# Response Examples

#### Success

Status: 204 No Content

#### Failure

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