Portfolio Assignment: API Spec

CS 493: Cloud Application Development

Spring 2020

Oregon State University

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Change log

Page	Change	Date
	Initial version.	Sn, May 04

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	Type	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	The request may be missing any of the 3 required attributes.

Response Examples

Success

```
Status: 201 Created

{
  "id": "abc123",
  "name": "Sea Witch",
  "type": "Catamaran",
  "length": 28,
  "owner": "1234567891236456789",
  "slip": "1234567891",
  "self": "https://<your-app>/boats/abc123"
```

```
}
```

Failure

```
Status: 400 Bad Request

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

Get a Boat

Allows you to get an existing boat

GET /boats/:boat_id

Request

Request Parameters

Name	Type	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,
  "owner": "1234567891236456789",
  "slip": "1234567891",
  "self": "https://<your-app>/boats/abc123"
}
```

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

[
{
  "id": "abc123",
  "name": "Sea Witch",
  "type": "Catamaran",
  "length": 28,
  "owner": "1234567891236456789",
  "slip": "1234567891",
  "self": "https://<your-app>/boats/abc123"
},
{
  "id": "def456",
  "name": "Adventure",
  "type": "Sailboat",
  "length": 50,
  "owner": "1234567891236456789",
  "slip": "1234567891",
  "self": "https://<your-app>/boats/def456"
},
{
  "id": "xyz123",
  "name": "Hocus Pocus",
  "type": "Sailboat",
  "length": 100,
  "owner": "1234567891236456789",
  "slip": "1234567891",
```

```
    "self": "https://<your-app>/boats/xyz123"
}
]
```

Edit a Boat (PATCH)

Allows you to edit a boat.

PATCH /boats/:boat_id

Request

Request Parameters

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

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	Description	Required?
name	String	The name of the boat.	No, at least one
type	String	The type of the boat. E.g., Sailboat, Catamaran, etc.	No, at least one
length	Integer	Length of the boat in feet.	No, at least one

Request Body Example

```
{
  "name": "Sea Witch",
  "length": 99
}
```

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": 99,
  "owner": "1234567891236456789",
  "slip": "1234567891",
```

```
   "self": "https://<your-app>/boats/abc123"
}
```

Failure

```
Status: 404 Not Found

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

Edit a Boat (PUT)

Allows you to edit a boat.

PUT /boats/:boat_id

Request

Request Parameters

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

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	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": 99
}
```

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: 303 See Other

{
  "id": "abc123",
  "name": "Sea Witch",
  "type": "Catamaran",
  "length": 99,
  "owner": "1234567891236456789",
  "slip": "1234567891",
  "self": "https://<your-app>/boats/abc123"
}
```

Failure

```
Status: 404 Not Found

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

Delete a Boat

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

DELETE /boats/:boat_id

Request

Request Parameters

None

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"
}
```

Create a Slip

Allows you to create a new slip.

POST /slips

Request

Request Parameters

None

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	Description	Required?
number	Integer	The name of the boat.	Yes

Request Body Example

```
{
   "number": 1
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	If the request is missing the number attribute, the slip must not be created, and 400 status code must be returned.

Response Examples

Success

```
Status: 201 Created

{
  "id": "123abc",
  "number": 1,
  "current_boat": null,
  "date-created": "18:54:40",
  "last-modified": "18:54:40",
  "self": "https://<your-app>/slips/123abc"
}
```

Failure

```
Status: 400 Bad Request
```

```
{
"Error":  "The request object is missing the required number"
}
```

Edit a Slip (PUT)

Allows you to edit a slip.

```
PUT /slip/:slip_id
```

Request

Request Parameters

Name	Type	Description	Required?
slip_id	String	ID of the slip	Yes

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	Description	Required?
number	Integer	The name of the boat.	Yes

Request Body Example

```
{
   "number": 1
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	No slip with this slip_id exists

Response Examples

Success

```
Status: 303 See Other

{
  "id": "123abc",
  "number": 1,
  "current_boat": null,
  "date-created": "18:54:40",
  "last-modified": "18:54:40",
  "self": "https://<your-app>/slips/123abc"
}
```

Failure

```
Status: 404 Not Found
```

```
{
"Error": "No slip with this slip_id exists"
}
```

Get a Slip

Allows you to get an existing slip.

GET /slips/:slip_id

Request

Request Parameters

Name	Type	Description	Required?
slip_id	String	ID of the slip	Yes

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	No slip with this slip_id exists

Response Examples

Success

```
Status: 200 OK

{
  "id": "123abc",
  "number": 1
  "current_boat": "abc123",
  "date-created": "18:54:40",
  "last-modified": "18:54:40",
  "self": "https://<your-app>/slips/123abc"
}
```

Failure

```
Status: 404 Not Found

{
"Error":  "No slip with this slip_id exists"
}
```

List all Slips

List all the slips.

GET /slips

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

[
{
  "id": "123abc",
  "number": 1,
  "current_boat": "abc123",
  "date-created": "18:54:40",
  "last-modified": "18:54:40",
  "self": "https://<your-app>/slips/123abc"
},
{
  "id": "456def",
  "number": 2,
  "current_boat": null,
  "date-created": "18:54:40",
  "last-modified": "18:54:40",
  "self": "https://<your-app>/slips/456def"
}
]
```

Delete a Slip

Allows you to delete a slip. If the slip being deleted has a boat, the boat is now considered "at sea."

```
DELETE /slips/:slip_id
```

Request

Request Parameters

None

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 slip with this slip_id exists

Response Examples

Success

```
Status: 204 No Content
```

Failure

```
Status: 404 Not Found

{
"Error": "No slip with this slip_id exists"
}
```

Boat Arrives at a Slip

Boat has arrived at a slip.

```
PUT /slips/:slip_id/:boat_id
```

Request

Request Parameters

None

Request Body

None

Note: Set Content-Length to 0 in your request when calling out to this endpoint.

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 slip exists with this slip_id and the slip is empty.
Failure	403 Forbidden	There is already a boat at this slip.
Failure	404 Not Found	No boat with this boat_id exists, and/or no slip with this slip_id exits.

Response Examples

Success

```
Status: 204 No Content
```

Failure

```
Status: 403 Forbidden

{
"Error":  "The slip is not empty"
}
```

```
Status: 404 Not Found

{
"Error":  "The specified boat and/or slip don't exist"
}
```

List all Users

List all the users.

GET /users

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

[
{
  "email": "example@gmail.com",
  "jwt":"eyJhbGciOiJSUMGE3ZmNkYjE1Mzk2MGNlMDFmNzYwNOiJKV1QifQ",
  "id": 5639601012080640,
  "boat": null,
  "sub": "12345678912365"
},
{
  "sub": "98876412245557",
  "email": "exampletwo@oregonstate.edu",
  "id": 5645760532054016,
  "jwt":"ow8G2YSqgyAEuOo3h30bCkgE1c_ ",
  "boat": null
}
]
```