Assign 5: Advanced REST Features Spec

URL: <http://skinnern-cs493-project5.appspot.com/>

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# 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 | Name of the boat | yes |
| type | string | Type of boat | yes |
| length | integer | Length of boat | yes |

Request body example

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

Response

**Response Body Format**

**JSON**

**Response Statuses**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status code** | **notes** |
| **success** | **201** | **Boat was made** |
| **failure** | **400 bad request** | **Boat is missing attributes** |
| **failure** | **403** | **Boat name is not unique** |
| **failure** | **406** | **The body type is not supported** |

**Response Examples**

• Datastore will automatically generate an ID and store it with the entity being created.

|  |
| --- |
| **{**  **"boats": [{**  **"loads": [],**  **"id": 5631986051842048,**  **"length": 10,**  **"name": "Test Ship 1",**  **"self": "http://skinnern-cs493-project4.appspot.com/boats/5631986051842048",**  **"type": "Ship 1"**  **}]}** |

# • Datastore will automatically generate an ID and store it with the entity being created.

|  |
| --- |
| **{**  **"Error": "the Boat name must be unique."**  **}** |

# 

# GET A BOAT (JSON)

Allows you to get an existing boat

|  |
| --- |
| Get /boats/[boatid] |

Request

Request Header

|  |  |  |
| --- | --- | --- |
| **Key** | **Value** | **Description** |
| Content-Type | application/json | Content format to send to server |
| Accept | application/json | The content format to return to the requester |

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** | **Boat was found** |
| **failure** | **400** | **The request does not follow specifications** |
| **failure** | **404 not found** | **Boat with boat\_id was not found** |
| **failure** | **406** | **Body type is not supported** |

**Response Examples**

• the datastore should display attributes of the selected boat, unless the selected boat does not exist

|  |
| --- |
| {  "type": "Ship 1",  "loads": [],  "id": 5631986051842048,  "length": 10,  "name": "Test Ship 1",  "self": "<http://skinnern-cs493-project4.appspot.com/boats/5631986051842048>"  } |

•the user is not able to get /boats, any attempt to do so will result in an error, that i did not make an error code for:

|  |
| --- |
|  |

•if the user specifies an invalid return type, (non- HTML or JSON) the following error will occur:

|  |
| --- |
| {  "Error": "This body type is not supported."  } |

•If there is data in the request body, we will also throw an error:

|  |
| --- |
| **{**  **"Error": "the request object doesn't follow our specifications"**  **}** |

# GET A BOAT (HTML)

Allows you to get an existing boat

|  |
| --- |
| Get /boats/[boatid] |

Request

Request Header

|  |  |  |
| --- | --- | --- |
| **Key** | **Value** | **Description** |
| Content-Type | application/json | Content format to send to server |
| Accept | text/html | The content format to return to the requester |

Request Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Description** | **Required?** |
| Boat id | string | Id of the boat | yes |

Request Body

none

Response

**Response Body Format**

**text/html**

**Response Statuses**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status code** | **notes** |
| **success** | **200 OK** | **Boat was found** |
| **failure** | **400** | **Request does not follow specifications** |
| **failure** | **404 not found** | **Boat with boat\_id was not found** |
| **failure** | **406** | **Body type is not supported** |

**Response Examples**

• the datastore should display attributes of the selected boat, unless the selected boat does not exist

|  |
| --- |
| {  "type": "Ship 1",  "loads": [],  "id": 5631986051842048,  "length": 10,  "name": "Test Ship 1",  "self": "<http://skinnern-cs493-project4.appspot.com/boats/5631986051842048>"  } |

•the user is not able to get /boats, any attempt to do so will result in an error that i did not make an error code for:

|  |
| --- |
|  |

•if the user specifies an invalid return type, (non- HTML or JSON) the following error will occur:

|  |
| --- |
| {  "Error": "This body type is not supported."  } |

•If there is data in the request body, we will also throw an error:

|  |
| --- |
| **{**  **"Error": "the request object doesn't follow our specifications"**  **}** |

# 

# EDIT A BOAT (PATCH)

**Allows you to edit a boat**

|  |
| --- |
| PATCH /boats/[boatid] |

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 | Name of the boat | yes |
| type | string | Type of boat | yes |
| length | integer | Length of boat | yes |

Request body example

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

Response

**Response Body Format**

**JSON**

**Response Statuses**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status code** | **notes** |
| **success** | **200** | **Boat was edited** |
| **failure** | **400 bad request** | **Your edit was missing attributes/ was invalid** |
| **failure** | **404** | **Boat with this id does not exist** |
| **failure** | **406** | **Body type is not supported** |
| **failure** | **403** | **A boat with this name already exists** |

**Response Examples**

• the datastore ship should be edited with the proper attributes, and will return the current attributes of the ship

|  |
| --- |
| {  "type": "Ship 1",  "loads": [],  "id": 5631986051842048,  "length": 10,  "name": "Test Ship 1",  "self": "<http://skinnern-cs493-project4.appspot.com/boats/5631986051842048>"  } |

• failures should result in the client being sent a message roughly telling them what is wrong with the program

|  |
| --- |
| {"Error": "This body type is not supported."}  {"Error": "No boat with this boat\_id exists"}  {"Error": "the request object doesn't follow our specifications."} |

# EDIT A BOAT (PUT)

**Allows you to edit a boat**

|  |
| --- |
| PATCH /boats/[boatid] |

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 | Name of the boat | yes |
| type | string | Type of boat | yes |
| length | integer | Length of boat | yes |

Request body example

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

Response

**Response Body Format**

**JSON**

**Response Statuses**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status code** | **notes** |
| **success** | **200** | **Boat was edited** |
| **success** | **303** | **User was redirected to proper location** |
| **failure** | **400 bad request** | **Your edit was missing attributes** |
| **failure** | **404** | **Boat with this id does not exist** |
| **failure** | **403** | **A boat with this name already exists** |

**Response Examples**

• the datastore ship should be edited with the proper attributes, and will return the current attributes of the ship

|  |
| --- |
| {  "type": "Ship 1",  "loads": [],  "id": 5631986051842048,  "length": 10,  "name": "Test Ship 1",  "self": "<http://skinnern-cs493-project4.appspot.com/boats/5631986051842048>"  } |

• if a ship with the same name as the current one already exists, the following error will occur:

|  |
| --- |
| {  "Error": "Boat names must be unique."  } |

# 

# DELETE A BOAT

**Allows you to delete a boat**

**If a boat is deleted, any load relationships that had existed will become nullified**

|  |
| --- |
| DELETE /boats/[boatid] |

Request

Request Parameters

None

Request Body

none

Request Body Format

JSON

Response

**Response Body Format**

**Success: no body**

**Failure: JSON**

**JSON**

**Response Statuses**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status code** | **notes** |
| **success** | **204 no content** | **Boat was deleted** |
| **failure** | **400** | **Does not follow specifications** |
| **failure** | **404 not found** | **No boat with this boat\_id exists** |

**Response Examples**

• if delete is successful, no message will be sent, if failure, will send the following:

|  |
| --- |
| {  Error: "No boat with this boat\_id exists"  } |

• if user tries to delete /boats, the API contains a safety error:

|  |
| --- |
| **{**  **"Error": "This is action is disallowed in this location."**  **}** |

•If there is data in the request body, we will also throw an error:

|  |
| --- |
| **{**  **"Error": "the request object doesn't follow our specifications"**  **}** |