

# Spragubr\_project: API Spec

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API URL

<https://spragubr-project-airline.appspot.com>

USER LOGIN URL

<https://spragubr-project-airline.appspot.com>

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## Overview

This API is meant to model a fictional commercial airline and allows a user to interact with my non-relational database consisting of three non-user entities, Airplanes, Flights, and Pilots. The API has functions that enable Create, Read, Update, and Delete functions for all three of those entities, as well as the ability to assign and unassign Airplanes and Pilots to Flights.

## NON-USER ENTITIES

The non-relational database, powered by Google Cloud Platform's Datastore, consists of a user entity and three non-user entities, with descriptions below:

- Airplanes
  - “created\_by” – The GCP Datastore generated, unique, ID number for the instance of the user entity that creates an airplane instance.
  - “flight” – A reference to a flight entity that has this instance of an airplane assigned to it.
  - “id” – The GCP Datastore generated, unique, ID number for that instance of the airplane entity.
  - “model” – The model of the airplane.
  - “max\_gross\_weight” – Numbered max gross weight of the airplane in pounds (lbs.).
  - “max\_capacity” - Numbered maximum capacity of the airplane.
  - “self” – A URL for that instance of the airplane entity.
- Pilots
  - “captain\_qual” – Boolean value indicating if the pilot holds the Captain Qualification.
  - “created\_by” – The GCP Datastore generated, unique, ID number for the instance of the user entity that creates a pilot instance.
  - “id” – The GCP Datastore generated, unique, ID number for that instance of the pilot entity.
  - “first\_name” – The first name of a pilot.
  - “first\_officer\_qual” – Boolean value indicating if the pilot holds the First Officer Qualification.
  - “flight” – A reference to a flight entity that has this instance of a pilot assigned as either a Captain or a First Officer.
  - “last\_name” – The last name of a pilot.
  - “self” – A URL for that instance of the pilot entity.
- Flights
  - “created\_by” – The GCP Datastore generated, unique, ID number for the instance of the user entity that creates an Airplane instance.

- “id” – The GCP Datastore generated, unique, ID number for that instance of the flight entity.
- “airplane” – A reference to an airplane entity that has been assigned to the flight.
  - Airplane “id” – The GCP Datastore generated, unique, ID number for that instance of the airplane entity.
  - Airplane “self” – A URL for that instance of the airplane entity.
- “captain” – A reference to a pilot entity that has been assigned to the flight as the Captain.
  - Captain “id” – The GCP Datastore generated, unique, ID number for that instance of the pilot entity.
  - Captain “self” – A URL for that instance of the pilot entity.
- “first\_officer” - A reference to a pilot entity that has been assigned to the flight as the First Officer.
  - First Officer “id” – The GCP Datastore generated, unique, ID number for that instance of the pilot entity.
  - First Officer “self” – A URL for that instance of the pilot entity.
- “self” – A URL for that instance of the flight entity.

When a Pilot or Airplane are assigned to a flight, the API stores information about the Pilot or Airplane in the Flight entity and vice versa. When these entities are unassigned or deleted from the database, the references are set to null. Additionally, a flight entity shall not have more than one Airplane, Captain, and First Officer, the latter two entities needing to be unique pilot entities. Airplanes and pilots shall not have more than one flight assigned to them.

## USER ENTITIES

User entities can be generated by following the link on the homepage for creating an account. A user entity consists of a username and a password. The password value stored in the database is the hash of the user’s password using the “pbkdf2\_sha256” hashing algorithm provided by the passlib Python library. Every time a user logs in, the entered password is hashed and compared against the hash stored in the database. If the hashes match then the user is granted access to the full range of API endpoints and functions.

## Create an Airplane

Allows you to create a new airplane.

### Request

POST /airplanes

#### REQUEST PARAMETERS

None.

#### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

#### REQUEST BODY

Required.

#### REQUEST BODY FORMAT

JSON.

#### REQUEST JSON ATTRIBUTES

Name	Type	Description	Required?
model	String	The model of the airplane.	Yes
max_gross_weight	Integer	Numbered max gross weight of the airplane in pounds (lbs.).	Yes
max_capacity	Integer	Numbered maximum capacity of the airplane.	Yes

#### REQUEST BODY EXAMPLE

```
{  
    "model": "Airbus A380",  
    "max_gross_weight": 1267659,  
    "max_capacity": 544  
}
```

#### RESPONSE BODY FORMAT

JSON.

## RESPONSE STATUS

Result	Status Code	Note
Success	201 Created	
Failure	400 Bad Request	If any of the model, max_gross_weight, or max_capacity attributes are missing from the request body then the 400 status code will be returned.
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 201 CREATED

```
{  
    "created_by": "user123",  
    "flight": null,  
    "id": "123abc",  
    "max_capacity": 544,  
    "max_gross_weight": 1267659,  
    "model": "Airbus A380",  
    "self": "https://spragubr-project-airline/airplanes/123abc"  
}
```

Failure // 400 BAD REQUEST

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

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Get an Airplane

Allows you to get the attributes of an airplane.

GET /airplanes/:airplane\_id

### REQUEST PARAMETERS

Name	Type	Description	Required?
airplane_id	String	The ID of the airplane in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	200 OK	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	An airplane with this airplane_id does not exist.
Failure	405 Method Not Allowed	If any HTTP method other than POST, GET, PUT, PATCH, or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 200 OK

```
{  
    "created_by": "user123",  
    "flight": null,  
    "id": "123abc",  
    "max_capacity": 544,  
    "max_gross_weight": 1267659,  
    "model": "Airbus A380",  
    "self": "https://spragubr-project-airline/airplanes/123abc"  
}
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "No airplane with this airplane_id exists"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## List all Airplanes

Allows you to view all airplanes in the database. Returns are paginated with a limit of 5 results per page. If a page beyond the available range of boats is accessed, the API returns an empty array with no “next” or “prev” attributes.

GET /airplanes

### REQUEST PARAMETERS

None.

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	200 OK	
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 200 OK

**NOTE:** This example shows the return generated by a database containing at least 11 boats through the following URL: <https://spragubr-project-airline/airplanes?limit=5&offset=5>. If there weren't more than 10 boats then the "next" attribute would not be returned. If the first page of results are accessed then the "prev" field will be omitted.

```
{  
  "airplanes": [  
    {  
      "created_by": "user123",  
      "id": "123abc",  
      "flight": null,  
      "max_capacity": 544,  
      "max_gross_weight": 1267659,  
      "model": "Airbus A380",  
      "self": "https://spragubr-project-airline/airplanes/123abc"  
    },  
    .  
    .  
    .  
    .  
    .  
    .  
    .  
    .  
    .  
    {  
      "created_by": "user789",  
      "id": "789ghi",  
      "flight": null,  
      "max_capacity": 544,  
      "max_gross_weight": 1267659,  
      "model": "Airbus A380",  
      "self": "https://spragubr-project-airline/airplanes/789ghi"  
    }  
  ],  
  "next": "https://spragubr-project-airline/airplanes?limit=5&offset=10"  
  "prev": "https://spragubr-project-airline/airplanes?limit=5&offset=0"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
  "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Edit an Airplane

Allows you to edit an airplane.

### Request

PATCH or PUT /airplanes/:airplane\_id

#### REQUEST PARAMETERS

Name	Type	Description	Required?
airplane_id	String	The ID of the airplane in the database	Yes

#### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

#### REQUEST BODY

Required.

#### REQUEST BODY FORMAT

JSON.

#### REQUEST JSON ATTRIBUTES

Name	Type	Description	Required?
model	String	The model of the airplane. Must be include only ASCII characters and have a length greater than 0 and less than or equal to 100 characters.	Yes
max_gross_weight	Integer	Numbered max gross weight of the airplane in pounds (lbs.). Must be greater than 0 and less than 1,410,959, the maximum takeoff weight for the world's largest plane, the Antonov An-225 Mriya.	Yes
max_capacity	Integer	Numbered length of the boat in feet. Must be greater than 0 and less than 853, the largest capacity possible in a commercial airliner.	Yes

#### REQUEST BODY EXAMPLE

```
{  
  "model": "Airbus A380",  
  "max_gross_weight": 1267659,  
  "max_capacity": 300  
}
```

# Response

## RESPONSE BODY FORMAT

JSON.

## RESPONSE STATUS

Result	Status Code	Note
Success	201 Created	
Failure	400 Bad Request	If any of the model, max_gross_weight, or max_capacity attributes are missing from the request body then the 400 status code will be returned.
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	An airplane with this airplane_id does not exist.
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 201 CREATED

```
{  
    "created_by": "user123",  
    "flight": null,  
    "id": "123abc",  
    "max_capacity": 300,  
    "max_gross_weight": 1267659,  
    "model": "Airbus A380",  
    "self": "https://spragubr-project-airline/airplanes/123abc"  
}
```

Failure // 400 BAD REQUEST

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

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "No airplane with this airplane_id exists"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Delete an Airplane

Allows you to remove an airplane from the database.

DELETE /airplanes/:airplane\_id

### REQUEST PARAMETERS

Name	Type	Description	Required?
airplane_id	String	The ID of the airplane in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	An airplane with this airplane_id does not exist.
Failure	405 Method Not Allowed	If any HTTP method other than POST, GET, PUT, PATCH, or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
[REDACTED]
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "No airplane with this airplane_id exists"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Create a Pilot

Allows you to create a new pilot.

POST /pilots

### REQUEST PARAMETERS

None.

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

Required.

### REQUEST BODY FORMAT

JSON.

### REQUEST JSON ATTRIBUTES

Name	Type	Description	Required?
first_name	String	The first name of the pilot.	Yes
last_name	String	The last name of the pilot.	Yes
captain_qual	Boolean	Value indicating if the pilot holds the Captain Qualification.	Yes
first_officer_qual	Boolean	Value indicating if the pilot holds the First Pilot Qualification.	Yes

### REQUEST BODY EXAMPLE

```
{  
    "captain_qual": False,  
    "first_name": "Jane",  
    "first_officer_qual": True,  
    "last_name": "Doe"  
}
```

# Response

## RESPONSE BODY FORMAT

JSON.

## RESPONSE STATUS

Result	Status Code	Note
Success	201 Created	
Failure	400 Bad Request	If any of the first name, last name, Captain qual, or First Officer qual attributes are missing from the request body then the 400 status code will be returned.
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 201 CREATED

```
{  
    "captain_qual": False,  
    "created_by": "user123",  
    "first_name": "Jane",  
    "first_officer_qual": True,  
    "flight": null,  
    "id": "abc123",  
    "last_name": "Doe",  
    "self": "https://spragubr-project-airline/pilots/abc123"  
}
```

Failure // 400 BAD REQUEST

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

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Get a Pilot

Allows you to get the attributes of a pilot.

GET /pilots/:pilot\_id

### REQUEST PARAMETERS

Name	Type	Description	Required?
pilot_id	String	The ID of the pilot in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	200 OK	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	A pilot with this pilot_id does not exist.
Failure	405 Method Not Allowed	If any HTTP method other than POST, GET, PUT, PATCH, or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 200 OK

```
{  
    "captain_qual": False,  
    "created_by": "user123",  
    "first_name": "Jane",  
    "first_officer_qual": True,  
    "flight": null,  
    "id": "abc123",  
    "last_name": "Doe",  
    "self": "https://spragubr-project-airline/pilots/abc123"  
}
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "No pilot with this pilot_id exists"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## List all Pilots

Allows you to view all pilots in the database. Returns are paginated with a limit of 5 results per page.

GET /pilots

### REQUEST PARAMETERS

None.

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	200 OK	
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 200 OK

**NOTE:** This example shows the return generated by a database containing at least 11 loads through the following URL: <https://spragubr-project-airline/pilots?limit=5&offset=5>. If there weren't more than 10 loads then the "next" attribute would not be returned. If the first page of results are accessed then the "prev" field will be omitted.

```
{  
  "pilots": [  
    {  
      "captain_qual": False,  
      "created_by": "user123",  
      "first_name": "Jane",  
      "first_officer_qual": True,  
      "flight": null,  
      "last_name": "Doe",  
      "id": "abc123",  
      "self": "https://spragubr-project-airline/pilots/abc123"  
    },  
    .  
    .  
    .  
    .  
    .  
    .  
    .  
    .  
    {  
      "captain_qual": True,  
      "created_by": "user789",  
      "first_name": "Amelia",  
      "first_officer_qual": True,  
      "flight": null,  
      "last_name": "Earhart",  
      "id": "ghi789",  
      "self": "https://spragubr-project-airline/pilots/ghi789"  
    }  
  ],  
  "next": "https://spragubr-project-airline/pilots?limit=5&offset=10"  
  "prev": "https://spragubr-project-airline/pilots?limit=5&offset=0"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
  "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Edit a Pilot

Allows you to edit a pilot.

### Request

PATCH or PUT /pilots/:pilot\_id

#### REQUEST PARAMETERS

Name	Type	Description	Required?
pilot_id	String	The ID of the pilot in the database	Yes

#### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

#### REQUEST BODY

Required.

#### REQUEST BODY FORMAT

JSON.

#### REQUEST JSON ATTRIBUTES

Name	Type	Description	Required?
first_name	String	The first name of the pilot.	Yes
last_name	String	The last name of the pilot.	Yes
captain_qual	Boolean	Value indicating if the pilot holds the Captain Qualification.	Yes
first_officer_qual	Boolean	Value indicating if the pilot holds the First Pilot Qualification.	Yes

#### REQUEST BODY EXAMPLE

```
{  
    "captain_qual": True,  
    "first_name": "Jane",  
    "first_officer_qual": True,  
    "last_name": "Doe"  
}
```

# Response

## RESPONSE BODY FORMAT

JSON.

## RESPONSE STATUS

Result	Status Code	Note
Success	201 Created	
Failure	400 Bad Request	If any of the first name, last name, Captain qual, or First Officer qual attributes are missing from the request body then the 400 status code will be returned.
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 201 CREATED

```
{  
    "captain_qual": True,  
    "created_by": "user123",  
    "first_name": "Jane",  
    "first_officer_qual": True,  
    "flight": null,  
    "id": "abc123",  
    "last_name": "Doe",  
    "self": "https://spragubr-project-airline/pilots/abc123"  
}
```

Failure // 400 BAD REQUEST

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

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Delete a Pilot

Allows you to delete a pilot.

`DELETE /pilots/:pilot_id`

### REQUEST PARAMETERS

Name	Type	Description	Required?
pilot_id	String	The ID of the pilot in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	A pilot with this pilot_id does not exist.
Failure	405 Method Not Allowed	If any HTTP method other than POST, GET, PUT, PATCH, or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
[REDACTED]
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "No pilot with this pilot_id exists"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Create a Flight

Allows you to create a new flight.

POST /flights

### REQUEST PARAMETERS

None.

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

Required.

### REQUEST BODY FORMAT

JSON.

### REQUEST JSON ATTRIBUTES

Name	Type	Description	Required?
destination	String	Value indicating the destination for the flight.	Yes
flight_time	Integer	Value indicating the estimated flight time (takeoff to landing) in minutes.	Yes
Inflight_meal	Boolean	Value indicating if an in-flight meal will be offered to passengers.	Yes

### REQUEST BODY EXAMPLE

```
{  
    "destination": "San Diego"  
    "flight_time": 110,  
    "inflight_meal": False  
}
```

## Response

### RESPONSE BODY FORMAT

JSON.

## RESPONSE STATUS

Result	Status Code	Note
Success	201 Created	
Failure	400 Bad Request	If any of the destination, flight_time, or inflight_meal attributes are missing from the request body then the 400 status code will be returned.
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 201 CREATED

```
{  
    "airplane": null,  
    "captain_id": null,  
    "created_by": "user123",  
    "destination": "San Diego",  
    "first_officer_id": null,  
    "flight_time": 110,  
    "id": "1a2b3c",  
    "inflight_meal": false,  
    "self": "https://spragubr-project-airline/flights/1a2b3c"  
}
```

Failure // 400 BAD REQUEST

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

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Get a Flight

Allows you to get the attributes of a flight.

GET /flights/:flight\_id

### REQUEST PARAMETERS

Name	Type	Description	Required?
flight_id	String	The ID of the flight in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	200 OK	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	A flight with this flight_id does not exist.
Failure	405 Method Not Allowed	If any HTTP method other than POST, GET, PUT, PATCH, or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 200 OK

```
{  
    "airplane": null,  
    "captain_id": {  
        "id": "def456",  
        "self": "https://spragubr-project-airline/pilots/def456"  
    },  
    "created_by": "user123",  
    "destination": "San Diego",  
    "first_officer_id": {  
        "id": "abc123",  
        "self": "https://spragubr-project-airline/pilots/abc123"  
    },  
    "flight_time": 100,  
    "id": "1a2b3c",  
    "in_flight_meal": False,  
    "self": "https://spragubr-project-airline/flights/1a2b3c"  
}
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "No flight with this flight_id exists"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## List all Flights

Allows you to view all flights in the database. Returns are paginated with a limit of 5 results per page.

GET /flights

### REQUEST PARAMETERS

None.

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	200 OK	
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 200 OK

**NOTE:** This example shows the return generated by a database containing at least 11 flights through the following URL: <https://spragubr-project-airline/flights?limit=5&offset=5>. If there weren't more than 10 flights then the "next" attribute would not be returned. If the first page of results are accessed then the "prev" field will be omitted.

```
{
  "flights": [
    {
      "airplane": {
        "id": "123abc",
        "self": "https://spragubr-project-airline/airplanes/123abc"
      },
      "captain_id": {
        "id": "def456",
        "self": "https://spragubr-project-airline/pilots/def456"
      },
      "created_by": "user123",
      "destination": "San Diego",
      "first_officer_id": {
        "id": "abc123",
        "self": "https://spragubr-project-airline/pilots/abc123"
      },
      "flight_time": 110,
      "id": "1a2b3c",
      "inflight_meal": False,
      "self": "https://spragubr-project-airline/flights/1a2b3c"
    },
    .
    .
    .
    {
      "airplane": null,
      "captain_id": null,
      "created_by": "user456",
      "destination": "New York",
      "first_officer_id": null,
      "flight_time": 240,
      "id": "4d5e6f",
      "inflight_meal": True,
      "self": "https://spragubr-project-airline/flights/4d5e6f"
    },
  ],
  "next": "https://spragubr-project-airline/flights?limit=5&offset=10",
  "prev": "https://spragubr-project-airline/flights?limit=5&offset=0"
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Edit a Flight

Allows you to edit a flight.

### Request

PATCH or PUT /flights/:flight\_id

#### REQUEST PARAMETERS

Name	Type	Description	Required?
flight_id	String	The ID of the flight in the database	Yes

#### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

#### REQUEST BODY

Required.

#### REQUEST BODY FORMAT

JSON.

#### REQUEST JSON ATTRIBUTES

Name	Type	Description	Required?
destination	String	Value indicating the destination for the flight.	Yes
flight_time	Integer	Value indicating the estimated flight time (takeoff to landing) in minutes.	Yes
Inflight_meal	Boolean	Value indicating if an in-flight meal will be offered to passengers.	Yes

#### REQUEST BODY EXAMPLE

```
{  
    "destination": "San Diego"  
    "flight_time": 110,  
    "inflight_meal": True  
}
```

# Response

## RESPONSE BODY FORMAT

JSON.

## RESPONSE STATUS

Result	Status Code	Note
Success	201 Created	
Failure	400 Bad Request	If any of the destination, flight_time, or inflight_meal attributes are missing from the request body then the 400 status code will be returned.
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 201 CREATED

```
{  
    "airplane": null,  
    "captain_id": {  
        "id": "def456",  
        "self": "https://spragubr-project-airline/pilots/def456"  
    },  
    "created_by": "user123",  
    "destination": "San Diego",  
    "first_officer_id": {  
        "id": "abc123",  
        "self": "https://spragubr-project-airline/pilots/abc123"  
    },  
    "flight_time": 100,  
    "id": "1a2b3c",  
    "in_flight_meal": True,  
    "self": "https://spragubr-project-airline/flights/1a2b3c"  
}
```

Failure // 400 BAD REQUEST

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

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Delete a Flight

Allows you to delete a flight.

`DELETE /flights/:flight_id`

### REQUEST PARAMETERS

Name	Type	Description	Required?
flight_id	String	The ID of the flight in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	A flight with this flight_id does not exist.
Failure	405 Method Not Allowed	If any HTTP method other than POST, GET, PUT, PATCH, or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
[REDACTED]
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "No flight with this flight_id exists"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Assign an Airplane to a Flight

Allows you to assign an airplane to a flight.

PUT /flights/:flight\_id/airplane/:airplane\_id

### REQUEST PARAMETERS

Name	Type	Description	Required?
airplane_id	String	The ID of the airplane in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	403 Forbidden	This airplane has already been assigned to a flight. -or- This flight already has an airplane assigned to it.
Failure	404 Not Found	The specified flight and/or airplane do not exist in the database.
Failure	405 Method Not Allowed	If any HTTP method other than PUT or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
[REDACTED]
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 403 FORBIDDEN

```
{  
    "Error": "This airplane is already assigned to a flight"  
}
```

```
{  
    "Error": "This flight already has an airplane assigned to it"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "The specified flight and/or airplane do not exist in the database"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Assign a Captain to a Flight

Allows you to assign a Captain to a flight.

PUT /flights/:flight\_id/captain/:pilot\_id

### REQUEST PARAMETERS

Name	Type	Description	Required?
pilot_id	String	The ID of the pilot in the database who will be serving the role of "Captain". The value must be a valid pilot ID number, must not be the same ID number used for first_officer_id, and the pilot entity must have a value of "True" for their captain_qual attribute.	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

### Response

#### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

## RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	403 Forbidden	This pilot has already been assigned to a flight as a Captain or a First Officer. -or- This flight already has a Captain assigned to it. -or- This pilot cannot be a Captain [First Officer] for this flight
Failure	404 Not Found	The specified flight and/or pilot do not exist in the database.
Failure	405 Method Not Allowed	If any HTTP method other than PUT or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
{}
```

Failure // 401 UNAUTHORIZED

```
{
  "Error": "A valid JWT is missing from the Authorization header in the request"
}
```

Failure // 403 FORBIDDEN

```
{
  "Error": "This pilot is already assigned to a flight as a Captain or a First Officer"
}
```

```
{
  "Error": "This flight already has a Captain assigned to it"
}
```

```
{
  "Error": "This pilot cannot be a Captain for this flight"
}
```

Failure // 404 NOT FOUND

```
{
  "Error": "The specified flight and/or pilot do not exist in the database"
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Assign a First Officer to a Flight

Allows you to assign an airplane to a flight.

PUT /flights/:flight\_id/first\_officer/:pilot\_id

### REQUEST PARAMETERS

Name	Type	Description	Required?
pilot_id	String	The ID of the pilot in the database who will be serving the role of "First Officer". The value must be a valid pilot ID number, must not be the same ID number used for captain_id, and the pilot entity must have a value of "True" for their first_officer_qual attribute.	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

## RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	403 Forbidden	This pilot has already been assigned to a flight as a Captain or a First Officer. -or- <u>This flight already has a First Officer assigned to it.</u>
Failure	404 Not Found	The specified flight and/or pilot do not exist in the database.
Failure	405 Method Not Allowed	If any HTTP method other than PUT or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
{}
```

Failure // 401 UNAUTHORIZED

```
{
    "Error": "A valid JWT is missing from the Authorization header in the request"
}
```

Failure // 403 FORBIDDEN

```
{
    "Error": "This pilot is already assigned to a flight as a Captain or a First Officer"
}
```

```
{
    "Error": "This flight already has a First Officer assigned to it"
}
```

Failure // 404 NOT FOUND

```
{
    "Error": "The specified flight and/or pilot do not exist in the database"
}
```

Failure // 405 METHOD NOT ALLOWED

```
{
    "Error": "Invalid HTTP Method used for request"
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Remove an Airplane from a Flight

Allows you to unassign an airplane from a flight.

`DELETE /flights/:flight_id/airplane/:airplane_id`

### REQUEST PARAMETERS

Name	Type	Description	Required?
flight_id	String	The ID of the flight in the database	Yes
airplane_id	String	The ID of the airplane in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	The specified flight and/or airplane do not exist in the database. -or- The specified airplane is not assigned to this flight.
Failure	405 Method Not Allowed	If any HTTP method other than PUT or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
[REDACTED]
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "The specified flight and/or airplane do not exist in the database"  
}
```

```
{  
    "Error": "The specified airplane is not assigned to this flight"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Remove a Captain from a Flight

Allows you to unassign an airplane from a flight.

`DELETE /flights/:flight_id/captain/:pilot_id`

### REQUEST PARAMETERS

Name	Type	Description	Required?
flight_id	String	The ID of the flight in the database	Yes
pilot_id	String	The ID of the pilot in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	The specified flight and/or pilot do not exist in the database. -or- The specified pilot is not assigned to this flight.
Failure	405 Method Not Allowed	If any HTTP method other than PUT or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
[REDACTED]
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "The specified flight and/or pilot do not exist in the database"  
}
```

```
{  
    "Error": "The specified pilot is not assigned to this flight"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Remove a First Officer from a Flight

Allows you to unassign a First Officer from a flight.

`DELETE /flights/:flight_id/first_officer/:pilot_id`

### REQUEST PARAMETERS

Name	Type	Description	Required?
flight_id	String	The ID of the flight in the database	Yes
airplane_id	String	The ID of the airplane in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

Success: No body.

Failure: JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	204 No Content	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	The specified flight and/or pilot do not exist in the database. -or- The specified pilot is not assigned to this flight.
Failure	405 Method Not Allowed	If any HTTP method other than PUT or DELETE is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 204 NO CONTENT

```
[REDACTED]
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
    "Error": "The specified flight and/or pilot do not exist in the database"  
}
```

```
{  
    "Error": "The specified pilot is not assigned to this flight"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```

## Get all Entities Created by a User

Allows you to view all of the loads assigned to a boat.

GET /entities/:user\_id

### REQUEST PARAMETERS

Name	Type	Description	Required?
user_id	String	The ID of the user in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

JSON

### RESPONSE STATUS

Result	Status Code	Note
Success	200 OK	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	404 Not Found	A user with this user_id does not exist.
Failure	405 Method Not Allowed	If any HTTP method other than GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 200 OK

```
{  
  "airplanes": [  
    {  
      "id": "abc123",  
      "self": "https://spragubr-project-airline/airplanes/abc123"  
    },  
    "flights": null,  
    "pilots": [  
      {  
        "id": "456def",  
        "self": "https://spragubr-project-airline/pilots/456def",  
      }  
    ]  
}
```

Failure // 401 UNAUTHORIZED

```
{  
  "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

Failure // 404 NOT FOUND

```
{  
  "Error": "No user with this user_id exists"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
  "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
  "Error": "Accept header is not set to 'application/json'"  
}
```

## List all Entities Created by a User

Allows you to view all flights in the database. Returns are paginated with a limit of 5 results per page.

GET /users/:user\_id/created

### REQUEST PARAMETERS

Name	Type	Description	Required?
user_id	String	The ID of the user in the database	Yes

### REQUEST HEADERS

Name	Value	Required?
Accept	application/json If this value is missing or other than indicated above then a 406 status code and message will be displayed.	Yes
Authorization	Bearer :jwt jwt – JSON Web Token generated for a user after successful login. The value will be displayed to the user after login and is valid for 60 minutes. If this value is invalid or missing then a 401 status code and message will be returned. The user ID stored in this token must match the user_id in the route, or else an error message is returned.	Yes

### REQUEST BODY

None.

## Response

### RESPONSE BODY FORMAT

JSON.

### RESPONSE STATUS

Result	Status Code	Note
Success	200 OK	
Failure	401 Unauthorized	If a valid JWT is missing or no longer valid then the 401 status code will be returned. This can be rectified by logging out and then logging back in to get a new JWT.
Failure	405 Method Not Allowed	If any HTTP method other than POST or GET is used for a request to this endpoint then a 405 status code and message will be returned.
Failure	406 Not Acceptable	If the request's Accept header value is missing or not set to "application/json" then a 406 status code and message will be returned.

## RESPONSE EXAMPLES

Success // 200 OK

```
{  
    "airplanes": [  
        .  
        .  
        .  
    ],  
    "flights": [  
        .  
        .  
        .  
    ],  
    "pilots": [  
        .  
        .  
        .  
    ]  
}
```

Failure // 401 UNAUTHORIZED

```
{  
    "Error": "A valid JWT is missing from the Authorization header in the request"  
}
```

```
{  
    "Error": "You do not have permission to access this endpoint"  
}
```

Failure // 405 METHOD NOT ALLOWED

```
{  
    "Error": "Invalid HTTP Method used for request"  
}
```

Failure // 406 NOT ACCEPTABLE

```
{  
    "Error": "Accept header is not set to 'application/json'"  
}
```