

# API Documentation

## Routes

URL	HTTP Method	Functionality
/users	GET	<a href="#">Retrieve All Users</a>
/users	POST	<a href="#">Create User</a>
/users/:id	GET	<a href="#">Retrieve User</a>
/users/:id	PATCH	<a href="#">Update User</a>
/users/login	POST	<a href="#">Retrieve Access Token</a>
/users/:id/bookings	GET	<a href="#">Retrieve User's Bookings</a>
/bookings	GET	<a href="#">Retrieve all Unallocated Bookings</a>
/bookings	POST	<a href="#">Create Booking</a>
/bookings/:id	GET	<a href="#">Retrieve Booking</a>
/bookings/:id	PATCH	<a href="#">Update Booking</a>
/bookings/:id/claim	PATCH	<a href="#">Claim an Unallocated Booking</a>
/bookings/:id/release	PATCH	<a href="#">Release a Booking</a>
/companies/:id	GET	<a href="#">Retrieve Company</a>
/companies/:id/bookings	GET	<a href="#">Retrieve Company's Bookings</a>
/companies/:id/admins	GET	<a href="#">Retrieve Company's Admins</a>
/companies/:id/drivers	GET	<a href="#">Retrieve Company's Drivers</a>
/companies/:id/drivers	PATCH	<a href="#">Add Driver to Company</a>
/companies/:id/drivers/:id	PATCH	<a href="#">Remove Driver from Company</a>

### Retrieve All Users

Retrieves the names and IDs of all registered users.

#### Request Headers

Attribute	Description
Authorization (required)	the authorization token

#### Request Body

N/A

#### Example Response

```
[
  {
    "id": "5c7c640796a5b10008e056ce",
    "name": "John Doe"
  },
  {
    "id": "5c7c640796a5b10008e073ae",
    "name": "Jane Doe"
  }
]
```

### Create User

Creates a new User record from information provided in request body.

#### Request Headers

N/A

#### Request Body

Attribute	Description
email	(required) the new user's email
name	(required) the new user's full name
password	(required) the new user's password

### Retrieve User

Retrieves information about a given user, based on the provided user ID.

#### Request Headers

Attribute	Description
Authorization (required)	the authorization token

#### Request Body

N/A

#### Example Response

```
{
  "id": "5c7c640796a5b10008e056ce",
  "email": "johndoe@gmail.com",
  "name": "John Doe",
  "v": 0,
  "created_at": "2019-03-03T23:32:23.298Z",
  "available": false,
  "bookings": [],
  "company": null,
  "role": "Customer"
}
```

### Update User

Updates a user's record based on the user ID passed as a parameter.

#### Request Headers

Attribute	Description
Authorization (required)	the authorization token

Request Body

Attribute	Description
name	(optional) the user's new full name
password	(optional) the user's new password
old_password	(optional) the user's old password
availability	(optional) the driver's availability

Retrieve Access Token

Sends Basic Auth credentials (email and password) and if valid grants a 24 hour access token.

Request Headers

Attribute	Description
Authorization (required)	the basic auth credentials

Request Body

Attribute	Description
email	(required) the user's email
password	(required) the user's password

Example Response

```
{
  "id": "5c7c640796a5b10008e056ce",
  "email": "johndoe@gmail.com",
  "name": "John Doe",
  "v": 0,
  "created_at": "2019-03-03T23:32:23.298Z",
  "role": "Customer",
  "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIIOiI1YzZjNjQwNzk2YTViMTAwMDhlMDUyY2UiLCJyb2xlIjo1Q3VzdG9tZXIiLCJpYXQiOiE1NTE3MTY4MjM5MjY0LWV4cC94bG9uS2ZmKUNrjXZAnSrwsgc"
}
```

Retrieve User's Bookings

Retrieves a list of the user's bookings, can pass a query parameter to limit results.

Request Headers

Attribute	Description
Authorization (required)	the authorization token

Request Body

N/A

Example Response

```
[
  {
    "id": "5c9abae34b5cee00080eeae7",
    "pickup_location": "Aberystwyth Pier",
    "destination": "Cwrt Mawr",
    "time": "2019-03-27T00:50:42.000Z",
    "no_passengers": 2,
    "customer": "5c8ee3eae99c4400079f87bb",
    "v": 0,
    "created_at": "2019-03-26T23:50:59.567Z",
    "status": "Pending",
    "company": "5c9a41819e3ed800077f7c86",
    "driver": "5c9abae34b5cee00080eeae7",
    "id": "5c9abae34b5cee00080eeae7"
  },
  {
    "id": "5caca7e6d13e6d0007f68658",
    "pickup_location": "Fferm Penglais Block 17",
    "destination": "Aberystwyth Golf Club",
    "time": "2019-04-09T16:37:49.926Z",
    "no_passengers": 1,
    "customer": "5caa0ec58a006e0007573de6",
    "v": 0,
    "company": null,
    "driver": null,
    "created_at": "2019-04-09T14:10:46.442Z",
    "status": "Pending",
    "notes": [
      "Booking Claimed by: Taxi Co",
      "Booking Released"
    ],
    "id": "5caca7e6d13e6d0007f68658"
  }
]
```

Retrieve all Unallocated Bookings

Retrieves a list of the all unallocated bookings, viewable by Company Admins

Request Headers

Attribute	Description
Authorization (required)	the authorization token

Request Body

N/A

Example Response

```
[
  {
    "id": "5c9abae34b5cee00080eeae7",
    "pickup_location": "Aberystwyth Pier",
    "destination": "Cwrt Mawr",
  }
]
```

```
{
  "time": "2019-03-27T00:50:42.000Z",
  "no_passengers": 2,
  "customer": "5c8ee3eae99c4400079f87bb",
  "_v": 0,
  "created_at": "2019-03-26T23:50:59.567Z",
  "status": "Pending",
  "company": "",
  "driver": "5c9abae34b5cee00080eeae7",
  "id": "5c9abae34b5cee00080eeae7"
},
{
  "_id": "5caca7e6d13e6d0007f68658",
  "pickup_location": "Fferm Penglais Block 17",
  "destination": "Aberystwyth Golf Club",
  "time": "2019-04-09T16:37:49.926Z",
  "no_passengers": 1,
  "customer": "5caa0ec58a006e0007573de6",
  "_v": 0,
  "company": null,
  "driver": null,
  "created_at": "2019-04-09T14:10:46.442Z",
  "status": "Pending",
  "notes": [
    "Booking Claimed by: Taxi Co",
    "Booking Released"
  ],
  "id": "5caca7e6d13e6d0007f68658"
}
]
```

Create Booking

Creates a new Booking record from information provided in request body.

Request Headers

N/A

Request Body

Attribute	Description
pickup_location	(required) the pickup location of the new booking
destination	(required) the destination of the new booking
time	(required) the desired time of the new booking (ISO Format)
no_passengers	(required) the number of passengers for the new booking

Retrieve Booking

Retrieves information about a given booking, based on the provided ID.

Request Headers

Attribute	Description
Authorization	(required) the authorization token

Request Body

N/A

Example Response

```
{
  "_id": "5c8e424c29b15f000813aa00",
  "pickup_location": "Fferm Penglais",
  "destination": "Ynyslas Beach",
  "time": "2019-03-17T13:53:00.000Z",
  "no_passengers": 1,
  "customer": {
    "_id": "5c8e418129b15f000813a9fe",
    "name": "Rhys Evans"
  },
  "_v": 0,
  "created_at": "2019-03-17T12:49:16.078Z",
  "status": "Pending"
}
```

Update Booking

Updates a booking's record based on the booking ID as a parameter

Request Headers

Attribute	Description
Authorization	(required) the authorization token

Request Body

Attribute	Description
status	(optional) the new status of the booking
time	(optional) the new time of the booking
driver	(optional) the new driver of the booking
note	(optional) a new note for the booking

Claim an Unallocated Booking

As a Company Admin, claim an unallocated booking for your company

Request Headers

Attribute	Description
Authorization	(required) the authorization token

Request Body

Attribute	Description
company	(required) the ID of the company

Release a Booking

As a Company Admin or Booking Driver, release a booking back to the unallocated pool.

Request Headers

Attribute	Description
Authorization (required)	the authorization token

Request Body

N/A

Retrieve a Company

Retrieves a Company's record.

Request Headers

Attribute	Description
Authorization (required)	the authorization token

Request Body

N/A

Example Response

```
{
  "id": "5caa3e8ca6c086b4686bcc37",
  "name": "Taxi Co",
  "_v": 5,
  "created_at": "2019-04-07T18:16:44.359Z",
  "admins": [
    "5caa3e5dde3576000871cf3a"
  ],
  "drivers": [
    "5caa0b3d2ff74f00072e67ea"
  ],
  "bookings": []
}
```

Retrieve a Company's Bookings

Retrieves a list of a Company's Bookings

Request Headers

Attribute	Description
Authorization (required)	the authorization token

Request Body

N/A

Example Response

```
[
  {
    "id": "5caca7e6d13e6d0007f68658",
    "pickup_location": "Fferm Penglais Block 17",
    "destination": "Aberystwyth Golf Club",
    "time": "2019-04-09T16:37:49.926Z",
    "no_passengers": 1,
    "customer": "5caa0ec58a006e0007573de6",
    "_v": 0,
    "company": "5caa3e8ca6c086b4686bcc37",
    "driver": null,
    "created_at": "2019-04-09T14:10:46.442Z",
    "status": "In_Progress",
    "notes": [
      "Booking Claimed by: Taxi Co",
      "Booking Released",
      "Booking Claimed by: Taxi Co"
    ],
    "id": "5caca7e6d13e6d0007f68658"
  },
  {
    "id": "5caca7e6d13e6d0007f68658",
    "pickup_location": "Cwrt Mawr",
    "destination": "Aberystwyth University",
    "time": "2019-04-09T16:37:49.926Z",
    "no_passengers": 1,
    "customer": "5caa0ec58a006e0007573de6",
    "_v": 0,
    "company": "5caa3e8ca6c086b4686bcc37",
    "driver": null,
    "created_at": "2019-04-09T14:10:46.442Z",
    "status": "Cancelled",
    "notes": [
      "Booking Claimed by: Taxi Co",
      "Booking Released",
      "Booking Claimed by: Taxi Co"
    ],
    "id": "5caca7e6d13e6d0007f68658"
  }
]
```

Retrieve a Company's Admins

Retrieves a list of a Company's Admins

Request Headers

Attribute	Description
Authorization (required)	the authorization token

Request Body

N/A

Example Response

```
[
  {
    "id": "5caa3e5dde3576000871cf3a",
    "email": "janedoe@gmail.com",
    "name": "Jane Doe",
    "v": 0,
    "company": "5caa3e8ca6c086b4686bcc37",
    "created_at": "2019-04-07T18:15:57.045Z",
    "available": false,
    "bookings": [],
    "role": "Company_Admin",
    "id": "5caa3e5dde3576000871cf3a"
  },
  {
    "id": "5caa0b3d2ff74f00072e67ea",
    "email": "rhys301097@gmail.com",
    "name": "Rhys Evans",
    "v": 0,
    "company": "5caa3e8ca6c086b4686bcc37",
    "created_at": "2019-04-07T18:15:57.045Z",
    "available": false,
    "bookings": [],
    "role": "Company_Admin",
    "id": "5caa0b3d2ff74f00072e67ea"
  },
]
```

### Retrieve a Company's Drivers

Retrieves a list of a Company's employed Drivers

#### Request Headers

Attribute	Description
Authorization (required)	the authorization token

#### Request Body

N/A

#### Example Response

```
[
  {
    "id": "5caa3e5dde3576000871cf3a",
    "email": "janedoe@gmail.com",
    "name": "Jane Doe",
    "v": 0,
    "company": "5caa3e8ca6c086b4686bcc37",
    "created_at": "2019-04-07T18:15:57.045Z",
    "available": true,
    "bookings": [],
    "role": "Driver",
    "id": "5caa3e5dde3576000871cf3a"
  },
  {
    "id": "5caa0b3d2ff74f00072e67ea",
    "email": "rhys301097@gmail.com",
    "name": "Rhys Evans",
    "v": 0,
    "company": "5caa3e8ca6c086b4686bcc37",
    "created_at": "2019-04-07T18:15:57.045Z",
    "available": true,
    "bookings": [],
    "role": "Driver",
    "id": "5caa0b3d2ff74f00072e67ea"
  },
]
```

### Add a Driver to a Company

Add a driver to a company's record.

#### Request Headers

Attribute	Description
Authorization (required)	the authorization token

#### Request Body

Attribute	Description
driver (required)	the driver to add

### Remove a Driver from a Company

Remove a driver to a company's record.

#### Request Headers

Attribute	Description
Authorization (required)	the authorization token

## Errors

### InvalidTokenError

This error is thrown if there is a token present in the request header, but it could not be validated.

Code	HTTP Status
1	403 (Forbidden)

### TokenExpiredError

Thrown if the token provided in the request header has expired.

Code	HTTP Status
2	403 (Forbidden)

### MissingTokenError

Thrown if no token was found in the request header. This could be because the token was provided under the wrong key.

Code HTTP Status  
3 401 (Unauthorized)

NoUsersFoundError

Thrown if a GET request for user(s) returns a 404. Pretty self explanatory.

Code HTTP Status  
4 404 (Not Found)

UserAlreadyExistsError

Thrown if new user could not be created due to a user record already existing with the provided email.

Code HTTP Status  
5 400 (Bad Request)

AuthenticationFailedError

Thrown if invalid credentials are POSTed to /users/login.

Code HTTP Status  
6 403 (Forbidden)

ValidationError

Thrown if there was an error validating contents request body. Specific validation error(s) are returned as a list within the response.

Code HTTP Status  
7 400 (Bad Request)

InvalidObjectIdError

Thrown if the ID passed in a /users/:id request is not a valid MongoDB Object ID.

Code HTTP Status  
8 400 (Bad Request)

UnauthorizedEditError

Thrown if an attempt to edit a record is made using a token that does not have the required permissions.

Code HTTP Status  
9 403 (Forbidden)

BookingNotFoundError

Thrown if a booking could not be found within the database

Code HTTP Status  
10 404 (Not Found)

CustomerAlreadyHasActiveBookingError

Thrown if a customer attempts to create a booking when they already have an active booking on their account.

Code HTTP Status  
11 403 (Forbidden)

UnauthorizedViewError

Thrown if an attempt to view a record is made using a token that does not have the required permissions.

Code HTTP Status  
12 403 (Forbidden)

InvalidRoleError

Thrown if a user attempts to perform a task that is not allowed within their current role, i.e. setting a customer as the driver of a booking.

Code HTTP Status  
13 403 (Forbidden)

MissingAuthenticationError

Thrown if a user attempts to log in with an invalid or missing Basic Auth string in the request header.

Code HTTP Status  
14 401 (Unauthorized)

CompanyNotFoundError

Thrown if a company could not be found within the database

Code HTTP Status  
15 404 (Not Found)

DriverAlreadyAddedError

Thrown if a Company Admin attempts to add a driver to a company, when the driver is already employed.

Code HTTP Status  
16 404 (Forbidden)