

# RESTful Booker API

The **RESTful Booker API** is a sample API used to practice REST API testing with operations like creating, retrieving, updating, and deleting hotel bookings.

## **1. Authentication (Auth)**

### **Create Token**

**Purpose:** Get a token to access protected endpoints like **PUT** and **DELETE** booking.

- **Endpoint:** POST https://restful-booker.herokuapp.com/auth
- **Headers:**  
Content-Type: application/json
- **Body:**

```
{  
    "username": "admin",  
    "password": "password123"  
}
```

- **Success Response:**

```
{  
    "token": "abc123"  
}
```

Use this token in a cookie/header for secured operations like update or delete.

## **2. Booking Operations**

### **Get All Booking IDs**

**Purpose:** Get a list of all existing booking IDs.

- **Endpoint:** GET https://restful-booker.herokuapp.com/booking
- **Optional Filters:**
  - firstname
  - lastname
  - checkin (format: YYYY-MM-DD)
  - checkout (format: YYYY-MM-DD)

- **Response Example:**

```
[  
  { "bookingid": 1 },  
  { "bookingid": 2 }  
]
```

## Get Booking by ID

**Purpose:** Fetch full details of a booking by ID.

- **Endpoint:** GET `https://restful-booker.herokuapp.com/booking/{id}`
- **Headers:**  
`Accept: application/json`
- **Response Example:**

```
{  
  "firstname": "Sally",  
  "lastname": "Brown",  
  "totalprice": 111,  
  "depositpaid": true,  
  "bookingdates": {  
    "checkin": "2013-02-23",  
    "checkout": "2014-10-23"  
  },  
  "additionalneeds": "Breakfast"  
}
```

## Create Booking

**Purpose:** Add a new booking.

- **Endpoint:** POST `https://restful-booker.herokuapp.com/booking`
- **Headers:**
  - `Content-Type: application/json`
  - `Accept: application/json`

- **Body Example:**

```
{
  "firstname": "Jim",
  "lastname": "Brown",
  "totalprice": 111,
  "depositpaid": true,
  "bookingdates": {
    "checkin": "2018-01-01",
    "checkout": "2019-01-01"
  },
  "additionalneeds": "Breakfast"
}
```

- **Response Example:**

```
{
  "bookingid": 1,
  "booking": {
    ...
  }
}
```

## Update Booking (Full)

**Purpose:** Replace the full booking details.

- **Endpoint:** PUT <https://restful-booker.herokuapp.com/booking/{id}>
- **Headers:**
  - Content-Type: application/json
  - Accept: application/json
  - Cookie: token=abc123 (*or use Authorization header*)
- **Body:** Same structure as **Create Booking**
- **Success Response:** Updated booking JSON

## Partial Update Booking

**Purpose:** Update only some fields of a booking.

- **Endpoint:** PATCH https://restful-booker.herokuapp.com/booking/{id}
- **Headers:** Same as PUT
- **Body Example:**

```
{  
    "firstname": "James",  
    "lastname": "Brown"  
}
```

- **Response:** Updated fields + existing booking data

## Delete Booking

**Purpose:** Delete a booking by ID.

- **Endpoint:** DELETE https://restful-booker.herokuapp.com/booking/{id}
- **Headers:**
  - Cookie: token=abc123 or
  - Authorization: Basic YWRtaW46cGFzc3dvcmQxMjM=
- **Response:**

HTTP/1.1 201 Created

## Quick Tips

- Always authenticate before **updating or deleting** bookings.
- Use tools like **Postman** to test endpoints.
- Format dates as YYYY-MM-DD.