

Bus Booking System API Documentation

Middleware Usage

This API uses middleware to verify users and admins:

- Only Admins can add and update buses.
- Users can update their own profile.
- Authentication tokens are stored in cookies.
- Data is stored in MongoDB.

1. User Registration

Endpoint:

POST /api/user/register

Base URL:

http://localhost:4000

Description:

Registers a new user in the system.

Request Body:

```
{  
  "username": "saran",  
  "email": "saran.k@gmail.com",  
  "password": "saran12345"  
}
```

Success Response:

```
{  
  "success": true,  
  "message": "User registered successfully",  
  "user": {
```

```
"id": "67b8953ab3252c5c17a1fc9d",  
"username": "saran",  
"email": "saran.k@gmail.com"  
}  
}
```

MongoDB:

QUERY RESULTS: 1-1 OF 1

```
▶ _id: ObjectId('67b8953ab3252c5c17a1fc9d')  
  username : "saran"  
  email : "saran.k@gmail.com"  
  password : "$2b$10$twOBdFHeZ0E7vARtY9jfNeYarkIClrKI6zBUwWDa5dnQJysY8udMa"  
  isAdmin : false  
  createdAt : 2025-02-21T15:01:14.621+00:00  
  updatedAt : 2025-02-21T15:04:17.356+00:00  
  __v : 0
```

2. User Login

Endpoint:

POST /api/user/login

Description:

Authenticates a user and returns a JWT token stored in cookies.

Request Body:

```
{  
  "email": "saran.k@gmail.com",  
  "password": "saran12345"  
}
```

Success Response:

```
{
```

```
"message": "Login successful",
"token": "<JWT_TOKEN>",
"user": {
  "_id": "67b8953ab3252c5c17a1fc9d",
  "username": "saran",
  "email": "saran.k@gmail.com",
  "isAdmin": false
}
}
```

3. Update User(User ONLY)

Endpoint:

PUT /api/user/updateUser/:userId

Description:

Updates the user details. Users can only update their own profile.

Request Body:

```
{
  "username": "SARAN.K-ECE"
}
```

Success Response:

```
{
  "message": "User is updated",
  "updatedUser": {
    "_id": "67b8953ab3252c5c17a1fc9d",
    "username": "SARAN.K-ECE",
    "email": "saran.k@gmail.com"
  }
}
```

```
}  
}
```

MongoDB:

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('67b8953ab3252c5c17a1fc9d')  
username: "SARAN.K-ECE"  
email: "saran.k@gmail.com"  
password: "$2b$10$tw0BdFHeZ0E7vARtY9jfNeYarkIClrKI6zBUwWDa5dnQJysY8udMa"  
isAdmin: false  
createdAt: 2025-02-21T15:01:14.621+00:00  
updatedAt: 2025-02-22T05:07:32.523+00:00  
__v: 0
```

4. Admin Registration

Endpoint:

POST /api/admin/register

Description:

Registers an admin user.

Request Body:

```
{  
  "username": "admin",  
  "email": "admin@gmail.com",  
  "password": "admin12345"  
}
```

Success Response:

```
{  
  "message": "Admin user has been created successfully",  
  "admin": {  
    "adminName": "admin",
```

```
    "isAdmin": true
  }
}
```

MongoDB:

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('67b8966e16e8e2fbe5c4863d')
username : "admin"
email : "admin@gmail.com"
password : "$2b$10$zw5bhGAocuG43CKJJzo9Puf7kDQei/ACa2Zdi1HPtBbZQHQ0hj fja"
isAdmin : true
createdAt : 2025-02-21T15:06:22.495+00:00
updatedAt : 2025-02-21T15:06:22.495+00:00
__v : 0
```

5. Admin Login

Endpoint:

POST /api/admin/login

Description:

Authenticates an admin and returns a token stored in cookies.

Request Body:

```
{
  "email": "admin@gmail.com",
  "password": "admin12345"
}
```

Success Response:

```
{
  "message": "Login successful",
  "_id": "67b8966e16e8e2fbe5c4863d",
```

```
"username": "admin",  
"email": "admin@gmail.com"  
}
```

6. Add Bus (Admin Only)

Endpoint:

POST /api/bus/addBus

Description:

Adds a new bus to the system. Only admins can perform this action.

Request Body:

```
{  
  "name": "Audi AC",  
  "number": "TN401",  
  "busType": "Sleeper",  
  "totalSeats": 38,  
  "availableSeats": 19,  
  "route": "Salem to Bangalore",  
  "departureTime": "9:00 PM",  
  "arrivalTime": "8:00 AM"  
}
```

Success Response:

```
{  
  "success": true,  
  "message": "Bus added successfully",  
  "bus": {  
    "name": "Audi AC",
```

```
    "number": "TN401",
    "busType": "Sleeper",
    "totalSeats": 38,
    "availableSeats": 38,
    "route": "Salem to Bangalore"
  }
}
```

MongoDB:

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('67b81b5665b301e8fc2b39a1')
name : "BENZ AC"
number : "TN101"
busType : "Sleeper"
totalSeats : 38
availableSeats : 38
route : "Salem to Bangalore"
departureTime : "9:00 PM"
arrivalTime : "8:00 AM"
createdAt : 2025-02-21T06:21:10.223+00:00
updatedAt : 2025-02-21T06:21:10.223+00:00
__v : 0
```

7. View All Buses

Endpoint:

GET /api/bus/allbus

Description:

Fetches all available buses.

Success Response:

```
{
  "success": true,
```

```
"buses": [  
  {  
    "name": "BENZ AC",  
    "number": "TN101",  
    "busType": "Sleeper",  
    "totalSeats": 38,  
    "route": "Salem to Bangalore"  
  },  
  {  
    "name": "Audi AC",  
    "number": "TN401",  
    "busType": "Sleeper",  
    "totalSeats": 38,  
    "route": "Salem to Bangalore"  
  }  
]  
}
```

MongoDB:

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('67b81b5665b301e8fc2b39a1')
name : "BENZ AC"
number : "TN101"
busType : "Sleeper"
totalSeats : 38
availableSeats : 38
route : "Salem to Bangalore"
departureTime : "9:00 PM"
arrivalTime : "8:00 AM"
createdAt : 2025-02-21T06:21:10.223+00:00
updatedAt : 2025-02-21T06:21:10.223+00:00
__v : 0
```



```
_id: ObjectId('67b95c711344202fdb19e6c')
name : "Audi AC"
number : "TN401"
busType : "Sleeper"
totalSeats : 30
availableSeats : 30
route : "Chennai to Bangalore"
departureTime : "10:00 PM"
arrivalTime : "6:30 AM"
createdAt : 2025-02-22T05:11:13.325+00:00
updatedAt : 2025-02-22T05:11:13.325+00:00
__v : 0
```

8.Update Bus(Admin Only)

Endpoint:

PUT /api/bus/updateBus/:busId

Description:

Updates the details of a specific bus. Only admins can update buses.

Request Body:

```
{  
  "busType": "SemiSleeper"  
}
```

Success Response:

```
{  
  "success": true,  
  "message": "Bus is updated",  
  "updatedBus": {  
    "_id": "67b95c711344202fdbbc19e6c",  
    "name": "Audi AC",  
    "number": "TN401",  
    "busType": "SemiSleeper",  
    "totalSeats": 30,  
    "availableSeats": 30,  
    "route": "Chennai to Bangalore",  
    "departureTime": "10:00 PM",  
    "arrivalTime": "6:30 AM",  
    "createdAt": "2025-02-22T05:11:13.325Z",  
    "updatedAt": "2025-02-22T05:17:03.626Z",  
    "__v": 0  
  }  
}
```

MongoDB:

```
_id: ObjectId('67b95c711344202fdb19e6c')
name : "Audi AC"
number : "TN401"
busType : "SemiSleeper"
totalSeats : 30
availableSeats : 30
route : "Chennai to Bangalore"
departureTime : "10:00 PM"
arrivalTime : "6:30 AM"
createdAt : 2025-02-22T05:11:13.325+00:00
updatedAt : 2025-02-22T05:17:03.626+00:00
__v : 0
```

9. Book a Bus

Endpoint:

POST /api/booking/book

Description:

Books a seat in a bus.

Request Body:

```
{
  "busId": "67b896f623b0ecd1c782415b",
  "seats": 1,
  "payment": "Paid"
}
```

Success Response:

```
{
  "message": "Booking successful",
  "booking": {
    "bus": "67b896f623b0ecd1c782415b",
    "seats": 1,
```

```
    "payment": "Paid",
    "status": "Booked"
  }
}
```

MongoDB:

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('67b81c2365b301e8fc2b39b2')
user : ObjectId('67b81b5565b301e8fc2b399d')
bus : ObjectId('67b81b5665b301e8fc2b39a1')
seats : 1
payment : "Paid"
status : "Booked"
bookedAt : 2025-02-21T06:24:35.420+00:00
__v : 0
```

10. Cancel Booking

Endpoint:

DELETE /api/booking/cancel/:bookingId

Description:

Cancels an existing bus booking.

Success Response:

```
{
  "message": "Booking cancelled successfully",
  "booking": {
    "status": "Cancelled"
  }
}
```

MongoDB:

```
▶ {
  _id: ObjectId('67b89add23b0ecd1c7824161')
  user: ObjectId('67b8966e16e8e2fbe5c4863d')
  bus: ObjectId('67b896f623b0ecd1c782415b')
  seats: 1
  payment: "Paid"
  status: "Cancelled"
  bookedAt: 2025-02-21T15:25:17.606+00:00
  __v: 0
}
```

11. My Bookings

Endpoint:

GET /api/booking/my-bookings

Description:

Retrieves all bookings of the logged-in user.

Success Response:

```
{
  "bookings":
  [ { "bus":
    {
      "name": "Audi AC",
      "totalSeats": 38,
      "route": "Salem to Bangalore"
    },
    "seats": 1,
    "payment": "Paid",
    "status": "Booked"
  }
]
```

```
}]
```

```
}
```

MongoDB:



```
_id: ObjectId('67b89add23b0ecd1c7824161')
user : ObjectId('67b8966e16e8e2fbe5c4863d')
bus : ObjectId('67b896f623b0ecd1c782415b')
seats : 1
payment : "Paid"
status : "Cancelled"
bookedAt : 2025-02-21T15:25:17.606+00:00
__v : 0
```

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('67b81c2365b301e8fc2b39b2')
user : ObjectId('67b81b5565b301e8fc2b399d')
bus : ObjectId('67b81b5665b301e8fc2b39a1')
seats : 1
payment : "Paid"
status : "Booked"
bookedAt : 2025-02-21T06:24:35.420+00:00
__v : 0
```