Read Me:

- The project is built on the Java, Spring boot
- The database is the H2 database.

Problem:

- I want to create an online scheduler website for the car service agency. The agency has many service operators who must take in appointments for customers for a limited time.
- A Service operator can take 1-hour appointments for all 24 hours, and they are available 24 x 7 x 365 days (sorry no vacation for them).
- If a Service operator is booked for a specific time slot, he obviously cannot take any more customer appointments.
- I want to be able to do the following:
 - Ability to 'book' an appointment slot by specific Operator or any
 - Ability to 'reschedule' or 'cancel' appointment
 - Ability to show all booked appointments of an operator. This should display all individual appointments i.e. 1-2, 2-3, 3-4
 - Ability to show open slots of appointments for an operator. This should merge all consecutive open slots and show as 4-14 instead of 4-5, 5-6 ... 13-14.

Assumptions:

- Number of service operators can be any.
- The booking is done for one hour by the customer (by default).
- 24 hour format is used to specify the time.

The following APIs are implemented here:

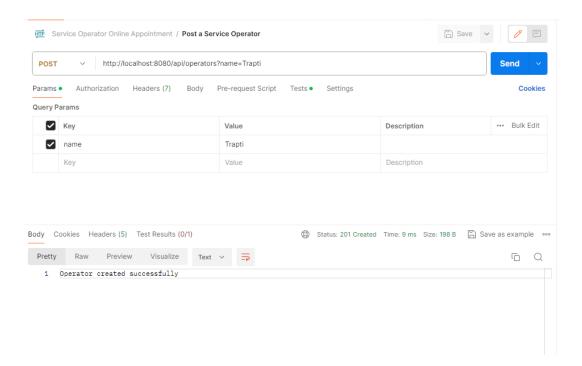
1. Make a service operator

Request: POST

URL: {url}/api/oerators

Request Parameters:

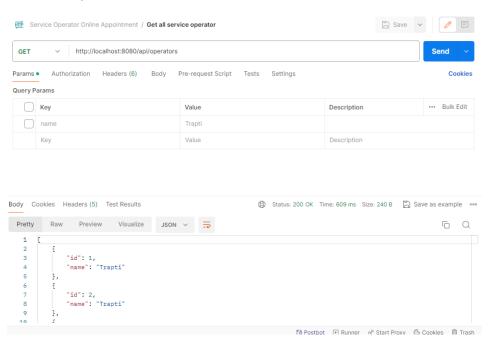
name: name of the operator(have to pass)



2. Get all service operator

Request: GET

URL: {url}/api/oerators



3. Make a booking/appointment

Request: POST

URL: {url}/api/booking

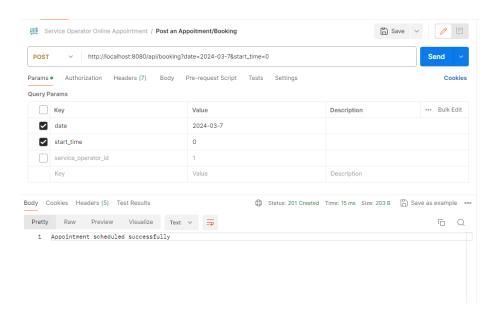
Request Parameter:

date: date of the appointment(has to pass)

start_time: start_time of the appointment(has to pass)

service_operator_id: operator id(optional)

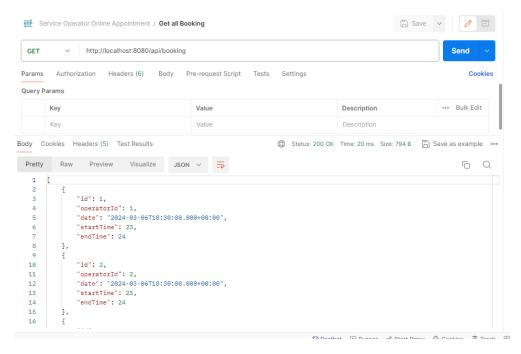
(if service_operator_id will not pass then any operator id is taken at random)



4. GET all the bookings

Request: GET

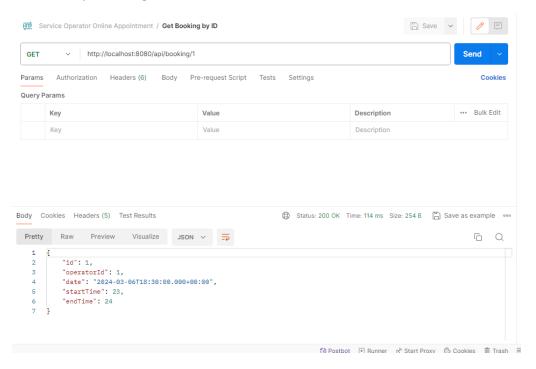
URL: {url}/api/booking



5. GET a booking by Id

Request: GET

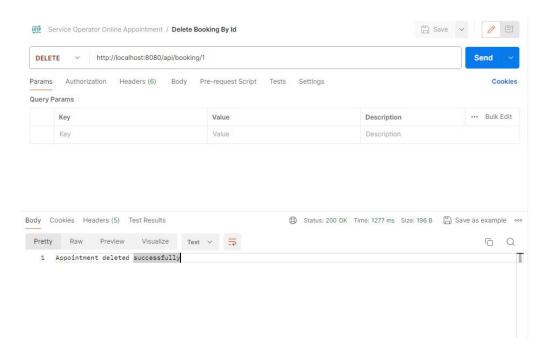
URL: {url}/api/booking/{id}



6. **DELETE a booking**

Request: DELETE

URL: {url}/api/booking/{id}



7. Reschedule a booking/appointment

Request: PUT

URL: {url}/api/booking/{id}

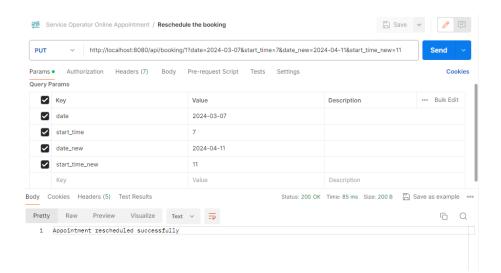
Request Parameter:

date: date of the original appointment (has to pass)

start_time: start_time of the original appointment (has to pass)

date_new: date of the new appointment (has to pass)

start_time_new: start_time of the new appointment (has to pass)



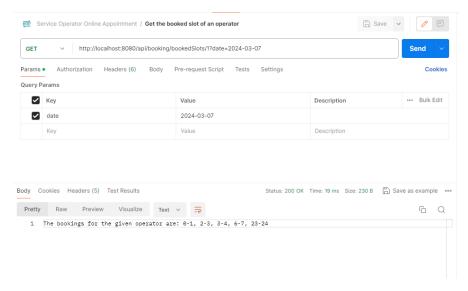
8. Get all the booked slots of an operator

Request: GET

URL: {url}/api/booking/bookedSlots/{operator_id}

Request Parameter:

date: particular date for appointments (has to pass)



9. Get all the open slots of an operator

Request: GET

URL: {url}/api/booking/openSlots/{operator_id}

Request Parameter:

date: particular date for open slots (has to pass)

