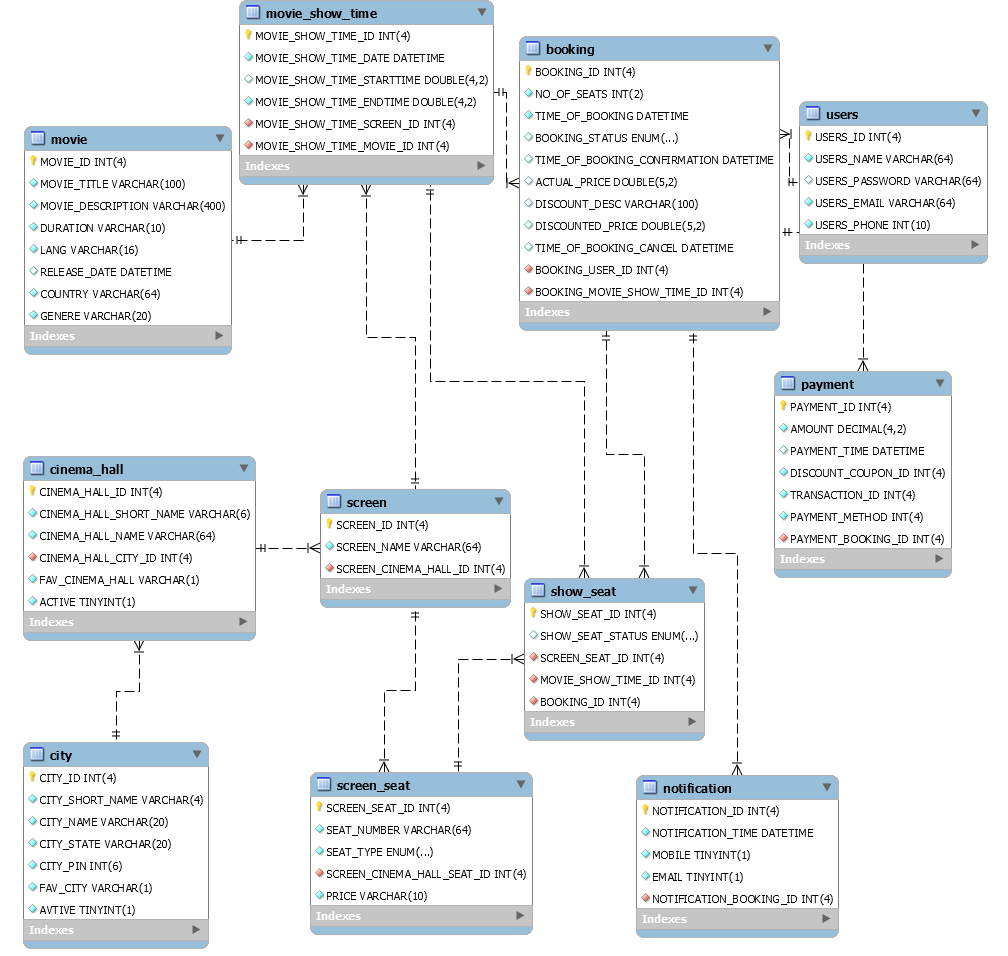
Fun Time

**Overview**

Create a movie ticket booking platform, which will cater both B2C and B2B

**Data Base modeling**

I have chosen RDBMS as there are structured visualization of data. In this case I have used mySql.



**Database transactions scenarios**

One transaction scenario I would like to say is "Booking of a seat". Scenarios can be

1. Me and Others are try to book a same seat -

* My seat will be reserved for me for 5minutes. Other will receive and error message. I did it with simple database search operations. Others will not be able to see the seats when searched. When a user checkout a booking a status(Pending) is maintained in both Booking and ShowSeat table with timestamp.

2. I am booking seat no say 1,2,3 and some other one has already taken 2,3,4. So, in two bookings seat no 2 & 3 is common.

* Same as point no 1

3. I have check out the bookings but got busy in some other works more than 5 minutes.

* A crawler service is there which checks of the exceeded timeframe ( i.e. 5 minute) every minute and make those booking invalidated. In booking table the status will be changed for the particular booking\_id.

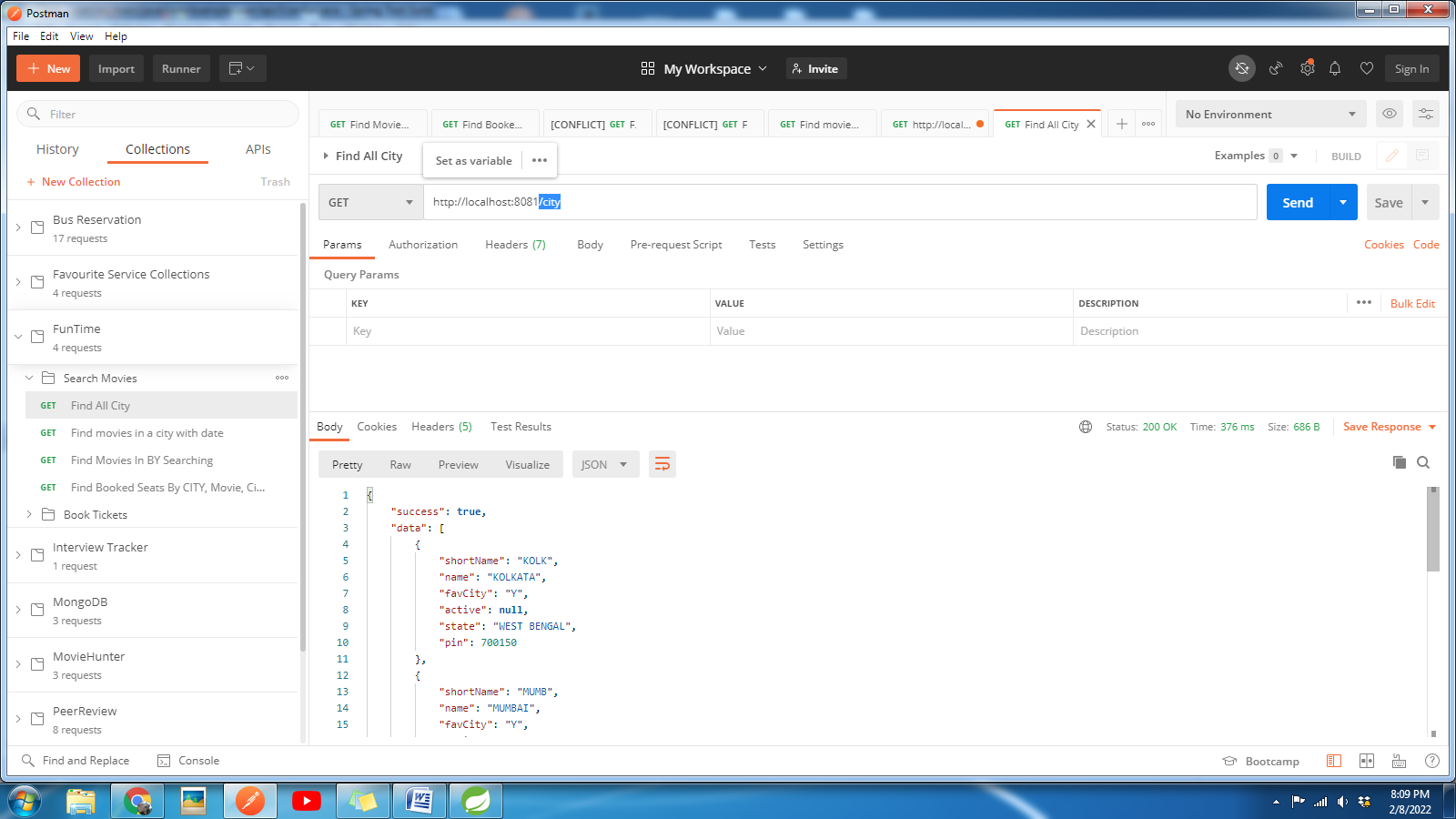
I did it with db interactions. I want to reduce some db network calls, I would like to introduce **caching** to store the key of **date, screen\_id, seat\_id**.

For better isolation, we can use mysql "**for update**" and lock the rows pessimistically. Programmatically, we have ensured the isolation, this will give additional protection if anything goes wrong. Crawler then will have additional responsibly to release those locking.

**Rest Api Overviews Module Wise**

**Search Management (srchmgnt)**

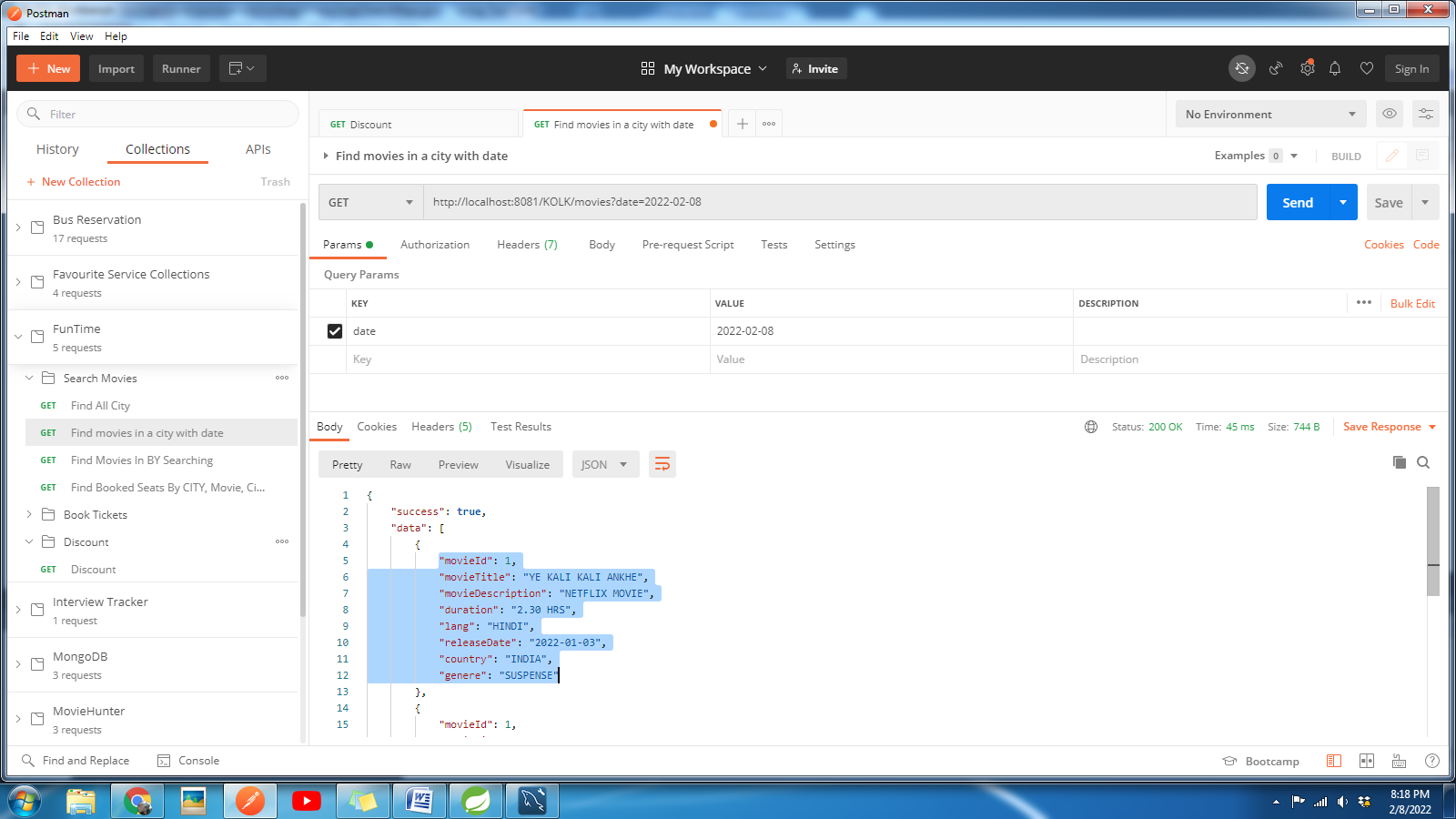
1. Search all CIty - /city

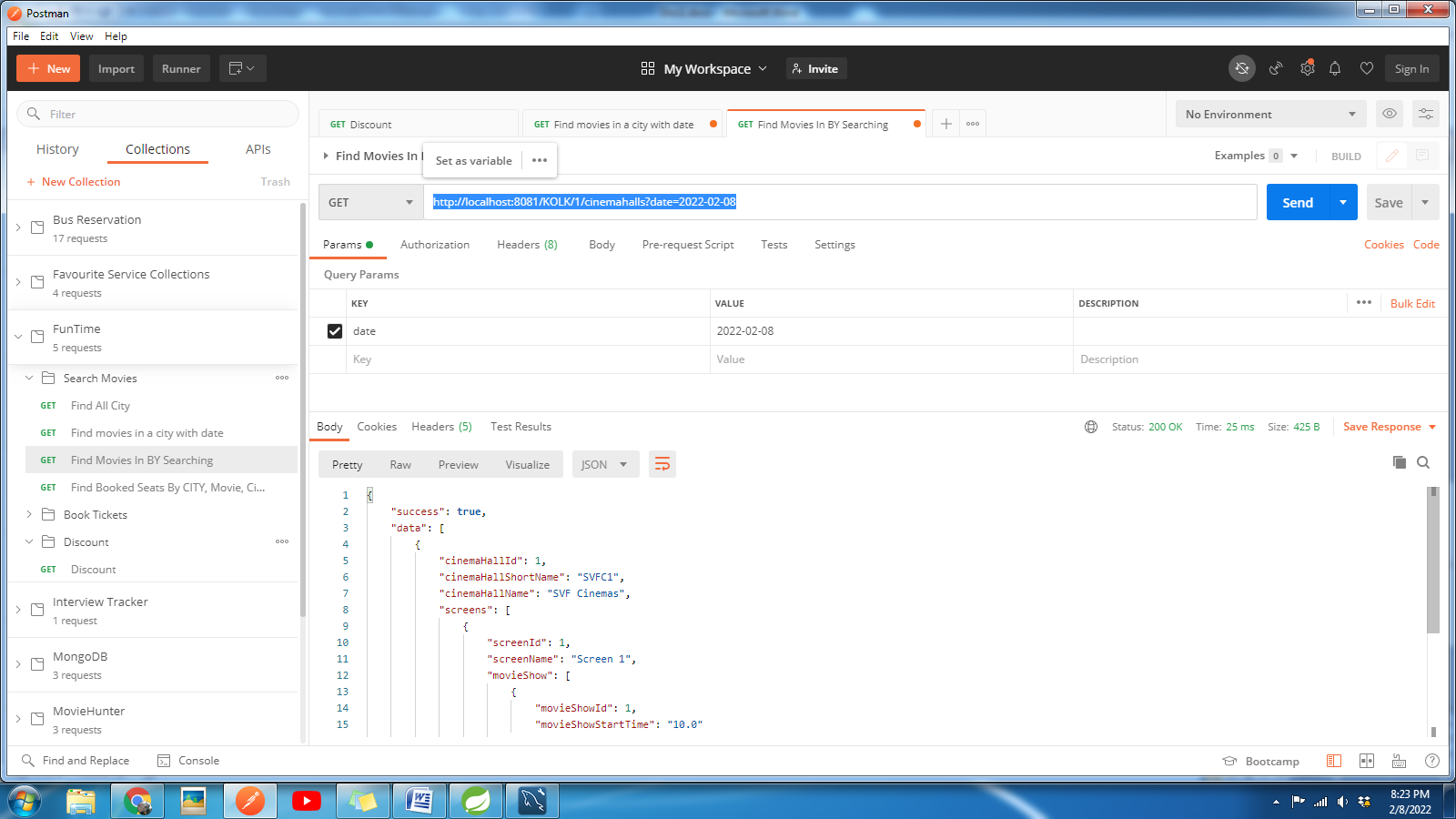
****

this will provide shortName that to be used in further Apis.

2. Search movie with city and date - http://localhost:8081/KOLK/movies?date=2022-02-08

I want to seach what are the movies currently in CITY in the given date.

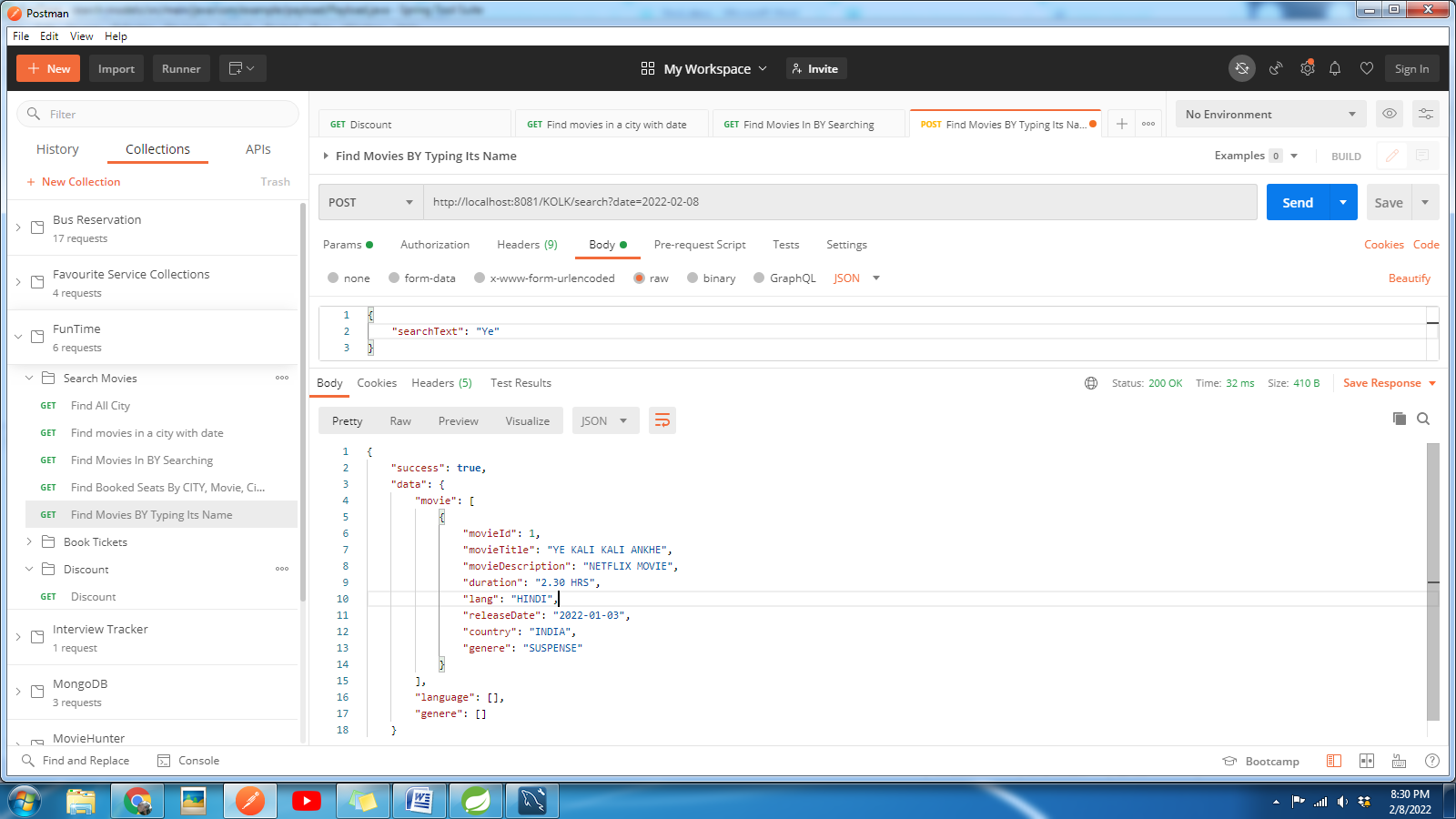
 movieId to be used

3. I want to search what are the movies currently in CITY and what are the cinema halls screening them. - /{city}/{movie}/cinemahalls? date

You will find the hall informations with Screens and and showTimings

4. As an user I want search movies by typing its name - /{city}/search? date

It will search movies by movies, lang and genere.



5. Check seat details of a show