MOVIE TICKET BOOKING APPLICATION
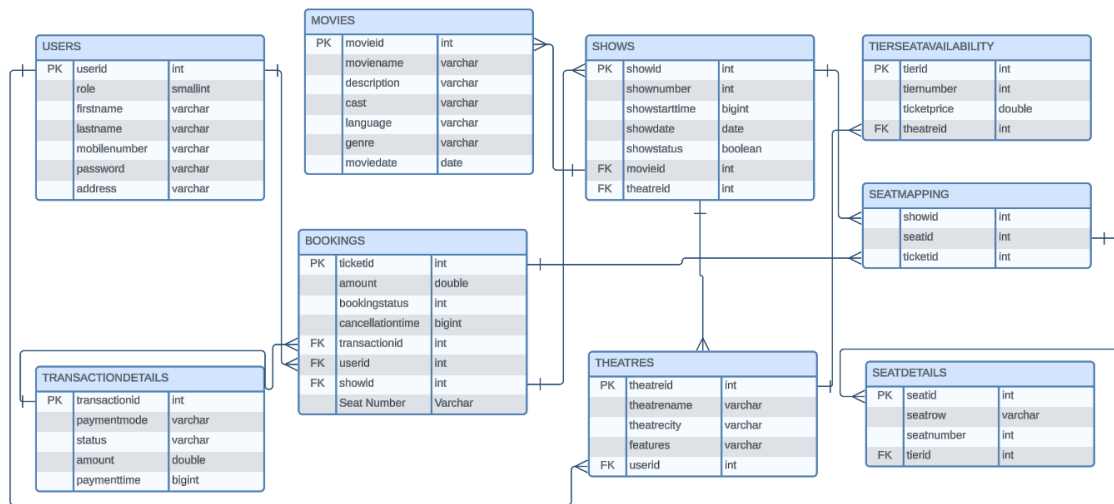
PROJECT OVERVIEW:

STATEMENT :

To design a web application for the movie ticket booking, and this has to be shared among the different theatres.
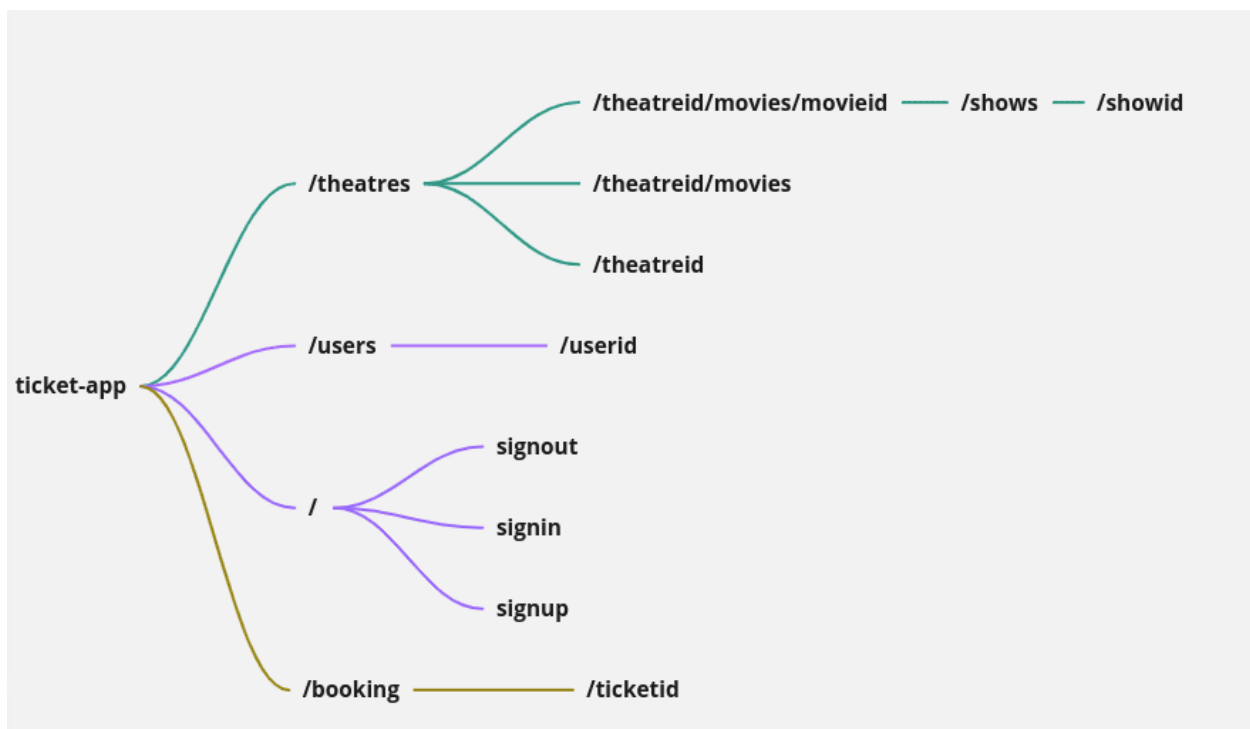
FEATURES:

1. Primarily, there are three users for this application.
2. The first one is customers (who are going to use this application) and the second one is managers, and the final one is super admin.
3. The role of the manager is to add movies and add shows to the theatre, and he/she can be able to cancel the show.
4. Moreover, the manager will also be able to view the available and booked tickets for the show and the total price collected for the show.
5. The users can see the theatres and can filter the theatres based on the location and the date and time.
6. The users can book the tickets for the show.
7. If they want to cancel, it should be done before 24 hours for the show time or else they can't.Timing can be varied, and that should be dynamic.
8. And also, they can't cancel a single ticket if they have booked more than one ticket.If they want to cancel, it has to be cancelled as a whole.The super admin can be able to assign a manager to the theatre and add theatres.

DATABASE SCHEMA:

USERS

PK		
PK	userid	int
	role	smallint
	firstname	varchar
	lastname	varchar
	mobilenumber	varchar
	password	varchar
	address	varchar

MOVIES

PK		
PK	movieid	int
	moviename	varchar
	description	varchar
	cast	varchar
	language	varchar
	genre	varchar
	moviedate	date

SHOWS

PK		
PK	showid	int
	shownumber	int
	showstarttime	bigint
	showdate	date
	showstatus	boolean
FK	movieid	int
FK	theatreid	int

TIERSEATAVAILABILITY

PK		
PK	tierid	int
	tiernumber	int
	ticketprice	double
FK	theatreid	int

BOOKINGS

PK		
PK	ticketid	int
	amount	double
	bookingstatus	int
	cancellationtime	bigint
FK	transactionid	int
FK	userid	int
FK	showid	int
	Seat Number	Varchar

SEATMAPPING

	showid	int
	seatid	int
	ticketid	int

TRANSACTIONDETAILS

PK		
PK	transactionid	int
	paymentmode	varchar
	status	varchar
	amount	double
	paymenttime	bigint

THEATRES

PK		
PK	theatreid	int
	theatrename	varchar
	theatrecity	varchar
	features	varchar
FK	userid	int

SEATDETAILS

PK		
PK	seatid	int
	seatrow	varchar
	seatnumber	int
FK	tierid	int

API DESIGN :

APPLICATION FLOW :

FRONT END : Ember js , SCSS .

BACK END : Java

DATABASE : PostgreSQL

CODE FLOW :

First of all , all the request that we will make will come to the filter , which is a Auth Filter again which is a java class and there are some methods that authenticate the valid api and authorization for the valid resource.

After the filter it will be redirected to the Main Servlet and based on the api endpoints through the reflection it will be redirected to the controller and based on the request method it will be handled and also there is a POJO class for the every data model for this application.For fetching the data from the database , I have done two separate class one for the connecting to the database and the other one for the query generation part.

While fetching data from the database,it usually returns the resultset and then I have converted it into JSONArray to easily handle the data in the front end.

For entire code,refer the below github repository

GITHUB REPO -> [MOVIE TICKET APP](#)
UI FLOW (ScreenShot) **APP ->** [FIGMA](#)