

## README

- Following technologies are used for making of this app
  - Frontend- ReactJS
  - Backend- NodeJS, Express
  - Database- MySQL
- Backend
  - APIs
    - /getTrainsInfo – To get a List of all trains from a given city to another on a given date.
    - /bookTicket- To book multiple seats for a passenger for a given trainNo, source, destination, date
    - /checkSeatInfo – To check how many seats are available for a given train and date
  - To handle multiple users booking ticket at same time, **database transaction** and **locks** have been used.
  - Database table with their schema is on the next page
- For searching the trains you can use the following data

### **Train 1-**

Stops:- MMCT, ADI, SUNR, RJT, HAPA

### **Train 2**

Stops:- MMCT, ADI, SUNR

For testing, one can only book tickets starting from today to 08/04/2022 and cannot book ticket of previous day

- If one searches train from between the stops then also these trains are displayed.
- If one reverse the (from-to) stations, then it does not show these trains as it is different route.
- One can book a maximum of 6 seats at time and see bookings from my bookings.

users	
id	CHAR(18)
name	VARCHAR(45)
email	VARCHAR(45)
password	VARCHAR(70)
Indexes	

booking	
PNR	BIGINT
userId	VARCHAR(45)
trainNo	INT
from	VARCHAR(45)
to	VARCHAR(45)
date	VARCHAR(45)
seat	JSON
Indexes	

seat_avail	
id	VARCHAR(45)
date	DATE
trainNo	INT
seatsLeft	INT
Indexes	

trains	
id	CHAR(18)
trainNo	INT
trainName	VARCHAR(45)
from	VARCHAR(45)
to	VARCHAR(45)
arrTime	TIME
depTime	TIME
day	INT
stops	JSON
schedule	JSON
Indexes	