

# Design Problem Statement

## Design backend for online ticketing system that sells movie tickets

### like Book My Show:

#### ● **Functional Requirements:**

- The system should be able to show the list of cities, movies released and its available shows.
- Upon selecting the respective show, the details of seating arrangement should be available
- Before booking, the system should distinguish between available seats from the booked ones.
- User should be able to book multiple seats according to their choice.
- The selected seats should be kept on hold till the user finalize the payment process.

#### ● **Non-Functional Requirements:**

- The system would need to be highly concurrent as there will be multiple booking requests for the same seat at any particular point in time. The design should be such that system handles such ambiguity fairly.

#### **Notes:**

- 1) Create High level system architecture
- 2) Use necessary Design patterns
- 3) Define Tech Stack
- 4) Consider non functional requirements like scalability, performance, logging, exception handling in solution design.
- 5) Mention assumptions, if any