Structure

Movie
- movie id
- title
- synopsis
- classification/rating
- release date
- director
- cast
- duration (minutes)

Showing → objects
- showing id
- movie id (or [and title])
- store movie object
- session → Morning / Afternoon / Evening
- date
- cinema Room (A | S | B) → adjust price
- cinema id (location)
  - seats offered
  - seats available
  - seats taken
- price
→ Object store

Report
↓
Booking
summary

Booking Transaction
- booking ID
- number of seats
- timestamp
- user name
- name
- show ID
- payment method
- transaction complete boolean

Report
for cancelled
transactions

Person

Customer
- username
- name
- password
- credit card no } optional
- credit card pin
* save details(s)

Staff
- staff id
- name
- username
- password
- is manager boolean

Methods
* insert
* delete } showings / movies
* modify
→ manager
* add gift cards
* delete
→ hire / fire staff

Card

Create Card
- card no
- card pin

Gift card
- 16 digit + cvc
- redeemable boolean

→ make changes

Cinema
- cinema id → location
- address
- number of rooms
- how many of each { A: 5, B: ?, S: 2 }
- movies in this cinema
- shows in this cinema

Methods
* # of bookings { }
* getter letter
* # how many of each
* book() (a show)
  ↓

Cinema Room
- cinema ID
- Room type (screen) → A, B, S
- room id
  x1.5, x1, x1.2 (price adjustment methods)
- number of seats (rows)
- each seat no → { front: (available, taken), middle: ( ), back: ( ) }
- total no of available seats

Data Base
- Booking Transactions
  - Cancelled Transactions
- All movies across all cinemas (movie object)
- (show objects)
- All showings across all cinemas
- All showings across all cinemas this week → methods
- Credit card
- Gift cards
- Staff
- Customers
- Report output

Report Generator
Based on Database