

Seat/Client Assignment Class Project – Full Scope

FIRST DRAFT

July 16th, 2019

Goals

To create an application which assigns clients to seats similar to a booking system for a movie theatre. (see <https://www.amctheatres.com/> for inspiration on some aspect of the class projects)

Note: this document can evolve over time, we may be adding extra features as we see fit. But it is definitively a good starting point for the overall goals to achieve. There will be extra documentation added for both mid and final term expectations.

Evolution of project

While initially, this will be a project that will function using a terminal/command prompt (this means that the control of the output will not be in STS or other IDE), eventually, this will mutate into a full Java app using GUI and then a full web app using services, database and web interface.

Core Features

- Can handle multiple rooms
- Allows a client to register, logon and logout and book/unbook a seat in any given room
- Allows an admin to login and logout and manage the app

Note: there is no money exchange to worry about, no payment plan.

Client Feature

- Choose a room
- View the current assignments (seats available)
- Choose a seat
- Lock the seat as confirmed
- Unbook a seat
- Provide detail about the booking (room and seat)
- Client can unregister and as such, if any assignment to any room, these get removed as well

Note: client can only have 1 seat in 1 room and therefore cannot book another seat, until his seat is 'unbooked'

Admin Feature

- Choose a room

- View the current assignments (seats available)
- View any detail for a given seat arrangement
- Book a seat based on an existing client (from clients that are registered)
- Unbook any seat
- View a list per room of clients assigned to seat
- Unbook an entire room

App Features

- Rooms can have different configurations
- Use the “M” or “m” key to view a menu <- this is for command prompt base app
- Use the “Q” or “q” key to exit the app
- Use the “L” key to either login or logout
- When app first appears, always ask to login
- Every command issues will display who is logged in “Admin” or “Client’s name”
- Admin can reset any room of assignments
- When the application leave, it will keep its state of all rooms and bookings
- When the application enters, it will load the state of all rooms and bookings
- Client info can be pull from a file
- Rooms are from 1 to 5 (press 1 to 5 to access the room’s booking)

Room Features

- Different Configurations (room size by rows/columns)
- Exclusion of seats by design to fit a physical configuration

Login State in App

Admin

- Can never book a room for self

Not Logged On

- Until a valid logon is done, cannot be using the for any feature, merely login or quit