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