COMP2511 CINEMA BOOKING SYSTEM
UML CLASS DIAGRAM
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Session

+ movieName : String
+ movieTime : String
+ cinema : Cinema
+ Bookings : ArrayList<Booking>

+ Session(String movieName, String movieTime, Cinema cinema)
+ String getMovieName() : movieName
+ setMovieName(String movieName)
+ getMovieTime() : movieTime
+ setMovieTime(String movieTime)
+ getCinema() : Cinema
+ setCinema(Cinema cinema)
+ printBookingInfo()
+ insertBooking(int bookingID, int numOfTickets, int changeBooking)
+ cancelBooking(int bookingID, int changeBooking)
+ checkChangeAvailability (int bookingID, int newNumOfSeats) : retVal
+ bubbleSortBookingsInSeatOrder()
+ printSessionInfo()

Booking

+ bookingID : int
+ numberOfTickets : int
+ seatIndexStart : int
+ seatIndexEnd: int
+ row : String

+ Booking(int bookingID, int numberOfTickets)
+ getBookingID(): bookingID
+ setBookingID(int bookingID)
+ getNumberOfTickets() : numberOfTickets
+ setNumberOfTickets(int numberOfTickets)
+ getSeatIndexStart() : seatIndexStart
+ setSeatIndexStart(int seatIndexStart)
+ getSeatIndexEnd() : seatIndexEnd
+ setSeatIndexEnd(int seatIndexEnd)
+ getRow() : row
+ setRow(String row)
+ deepClone() : Booking

Cinema

+ CinemaNum : int
+ Rows : ArrayList<Row>

+ Cinema(int cinemaNum)
+ getCinemaNum() : CinemaNum
+ setCinemaNum(int cinemaNum)
+ getRows() : Rows
+ setRows(ArrayList<Row> rows)
+ insertRowAndSeatDetails (String rowName, int numOfSeats)
+ deepClone() : Cinema
+ printRowInfo ()

Row

+ rowName : String
+ Seating : ArrayList<Seat>
+ numOfSeats : int
+ startIndex : int
+ endIndex : int
+ numOfBookingsInThisRow : int

+ Row(String rowName, int numOfSeats)
+ getRowNum() : rowName
+ setRowNum(String rowName)
+ getSeating() : Seating
+ getStartIndex() : startIndex
+ setStartIndex(int startIndex)
+ getEndIndex() : endIndex
+ setEndIndex(int endIndex)
+ setSeating(int numOfSeats)
+ incrementStartAndEndIndex ()
+ findAndSetAvailabilityOfSeating(int bookingID, int numOfSeats) : retVal
+ resetStartAndEndIndex ()
+ printSeats()

Seat

+ seatNum : int
+ bookingID : int
+ taken : int

+ Seat(int seatNum)
+ getSeatNum() : seatNum
+ setSeatNum(int seatNum)
+ getBookingID() : bookingID
+ setBookingID(int bookingID)
+ isTaken() : taken
+ setTaken(int taken)