

FinanceManager	
instance: FinanceManager	
-CARD_REGEX: String = "[0-9]{16}\$"	
-FinanceManager()	
-isValidCardNo(cardNo: String): boolean	
-getCardNo(): String	
-checkCreditPrice(price: Int, user: User): boolean	
-applyCreditPrice(price: Int, user: User): Int	
-getTotalUserCredit(u: User): Int	
-issueReturn(price: Int, user: User)	

LoginRegisterManager	
instance: LoginRegisterManager	
-LoginRegisterManager()	
-login(u: User, password: String): User	
-renewUser(u: User): Int	
-createNewUser(email: String, password: String): User	
-registerUser(u: User, name: String, name: String, cardNo: String, SAddress: String)	

TicketManager	
instance: TicketManager	
-TicketManager()	
-getMovie(Movie: String): Movie	
-getShowTime(showTime: String): ShowTime	
-getShowTimeTickets(showTime: ShowTime): Array<List<Ticket>	
-getUserTickets(u: User): Array<List<Ticket>	
-purchaseTickets(tickets: Array<List<Ticket>, u: User, cardNo: String): Int	
-refundTicket(ticket: Ticket, u: User)	

Database	
username: String = "ensaf@r"	
password: String = "ensaf@r"	
connection: Connection = null	
-Database()	
-getConnection(): Connection	
-setConnection(newUrl: String, newUsername: String, newPassword: String): boolean	
-closeConnection()	

ButtonColumn	
table: Table	
action: Action	
originalBorder: Border	
focusBorder: Border	
renderButton: Button	
renderValue: Object	
-setButtonColumnEditor: boolean	
-ButtonColumn(table: Table, action: Action, column: Int)	
-getFocusBorder(): Border	
-getWhenFocus(): Int	
-getWhenFocusWhenFocus(): Int	
-getTableCellRendererComponent(table: Table, value: Object, isSelected: boolean, hasFocus: boolean, row: Int, column: Int): Component	
-actionPerformed(e: ActionEvent)	
-mousePressed(e: MouseEvent)	
-mouseClicked(e: MouseEvent)	
-mouseEntered(e: MouseEvent)	
-mouseExited(e: MouseEvent)	

TicketPage	
- gbc: GridBagConstraints=new GridBagConstraints()	
-mainFrame: JFrame	
-user: User	
-loginPage: JPanel=new JPanel(new GridBagLayout())	
-ticketPage: JPanel=new JPanel(new GridBagLayout())	
-email: JTextField=new JTextField(32)	
-password: JLabel=new JLabel("Password: ")	
-main: JButton=new JButton("Main Page")	
-userTickets: JButton=new JButton("Tickets")	
-purchase: JButton=new JButton("Purchase")	
-refund: JButton=new JButton("Refund")	
-tableModel: DefaultTableModel	
-movieTable	
-movieScroll	
-spacer: JLabel=new JLabel()	
-tableSet()	
-ticketMenuSetup()	
-actionPerformed(e: ActionEvent)	

CheckoutPage	
- gbc: GridBagConstraints=new GridBagConstraints()	
-mainFrame: JFrame	
-purchase: Array<List<Ticket>	
-user: User	
-main: JButton=new JButton("Main Page")	
-tickets: JLabel=new JLabel("Tickets")	
-tableModel: DefaultTableModel	
-movieScroll: JScrollPane	
-creditLabel: JLabel=new JLabel("Credit: ")	
-credit: JTextField=new JTextField(32)	
-price: JTextField=new JTextField(32)	
-creditCard: JLabel=new JLabel("Credit Card: ")	
-creditCard: JTextField=new JTextField(32)	
-purchase: JButton=new JButton("Purchase")	
-spacer: JLabel=new JLabel()	
-CheckoutPage(mainFrame: JFrame, purchase: Array<List<Ticket>, user: User)	
-tableSet()	
-checkoutPageSetup()	
-actionPerformed(e: ActionEvent)	

SeatingPage	
- gbc: GridBagConstraints=new GridBagConstraints()	
-mainFrame: JFrame	
-showTime: ShowTime	
-purchase: Array<List<Ticket>	
-purchase: Array<List<Ticket>	
-seatingTable: JPanel=new JPanel(new GridBagLayout())	
-seatingPage: JPanel=new JPanel(new GridBagLayout())	
-tableModel: DefaultTableModel	
-checkout: JButton=new JButton("Checkout")	
-purchase: Array<List<String>=new Array<List<String>	
-spacer: JLabel=new JLabel()	
-listener: ActionListener=new ActionListener	
-tableSet()	
-seatingPageSetup()	
-actionPerformed(e: ActionEvent)	

UserTicketPage	
- gbc: GridBagConstraints=new GridBagConstraints()	
-mainFrame: JFrame	
-user: User	
-userTickets: Array<List<Ticket>	
-ticketPage: JPanel=new JPanel(new GridBagLayout())	
-main: JButton=new JButton("Main Page")	
-ticketLabel: JLabel=new JLabel("Tickets")	
-ticketPage: JPanel=new JPanel(new GridBagLayout())	
-creditLabel: JLabel="Credit"	
-creditLabelModel: DefaultTableModel	
-ticketTable: Table	
-creditTable: Table	
-creditTable: JScrollPane=new JScrollPane()	
-creditTable: JScrollPane=new JScrollPane()	
-spacer: JLabel=new JLabel()	
-tableSet()	
-ticketMenuSetup()	
-actionPerformed(e: ActionEvent)	

Credit	
-issueDate: LocalDate	
-amount: Int	
-id: Int	
-hasExpired: boolean	
-redeemCredit(amount: Int)	

Showtime	
ShowDate: LocalDate	
Movie: String	
Room: Int	
PremiumSeats: Int	
Seats: Int	
Name: String	

TheatreRoom	
+CAPACITY: Int	
+ROOM_NO: Int	

Application	
+mainPage: String	

MovieTheatre	
-locName: String	
-sAddress: String	
-theatreRooms: Array<List<TheatreRoom>	

User	
-email: String	
-password: String	
-name: String	
-cardNo: String	
-expDate: LocalDate	
-credit: Array<List<Credit>	
-type: String	

Ticket	
-TICKETNO: Int	
-PRICE: Int	
-SHOWTIME: Showtime	
-email: String	