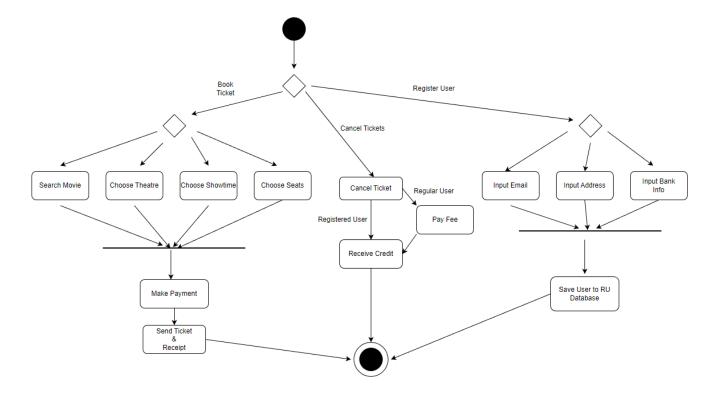
ENSF 480 Principles of Software Design Term Project

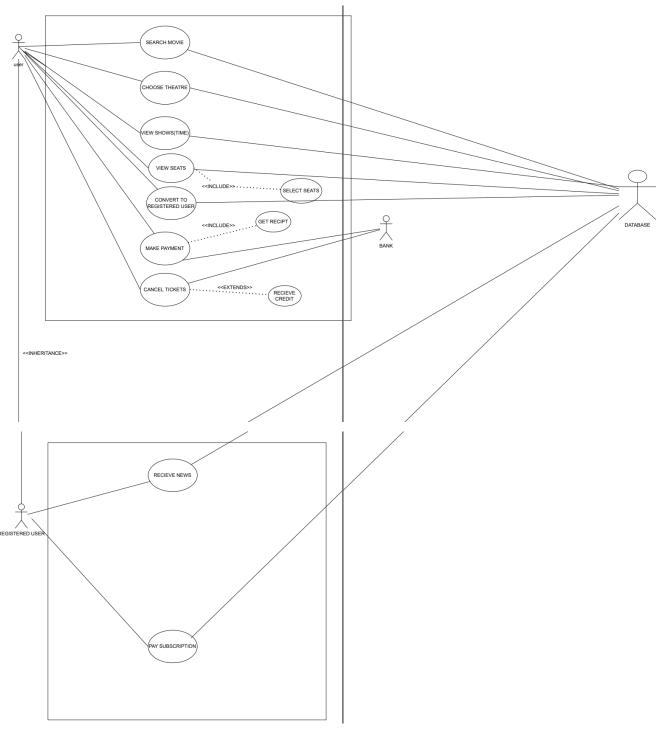
Daniel Le Ethan Kerr MD Shaherier Khan Syed Mohammed Abbas Kazmi

Group 16 Dec. 5, 2022

Activity Diagram



Use Case Diagram



Scenarios

- 1) User selects the <u>Movie Tab</u>, then searches for a movie from the <u>Movie List</u> and selects the desired <u>Movie</u>.
- 2) User selects the available <u>Showtime</u> from the <u>Showtime List</u> displayed after selecting a <u>Movie</u>.
- 3) User selects the <u>Theatre Tab</u> and displays the <u>Theatre List</u> and selects a <u>Theater</u>.
- 4) User views the seats and selects the desired <u>Seat</u> from graphically displayed <u>Seat</u> <u>Availability.</u>
- 5) User makes a <u>Payment</u> using the <u>Payment Tab</u> and gets a <u>Receipt</u> and <u>Ticket</u> for the transaction via <u>Email</u>.
- 6) User cancels the <u>Ticket</u> he owns from the <u>Cancel Tab</u> and may receive <u>Credit</u> for it.
- 7) User selects the <u>Register Tab</u>, then inputs <u>Email</u>, <u>Address</u>, <u>Debit/Credit Card Account</u> to be saved as a <u>Registered User</u>.
- 8) A registered user pays the <u>Subscription Fee</u> using the <u>Payment Tab</u>.
- 9) Registered User receives News about the upcoming movies

Objects:

- Movie Tab - Seat - Credit

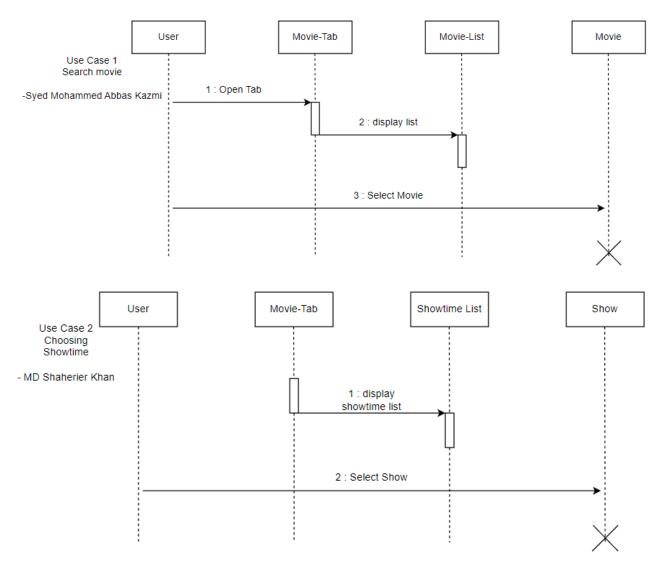
Movie List
 Movie
 Seat Availability
 Register Tab
 Address

Showtime
 Showtime List
 Theatre
 Payment Tab
 Receipt
 Registered User
 Subscription Fee

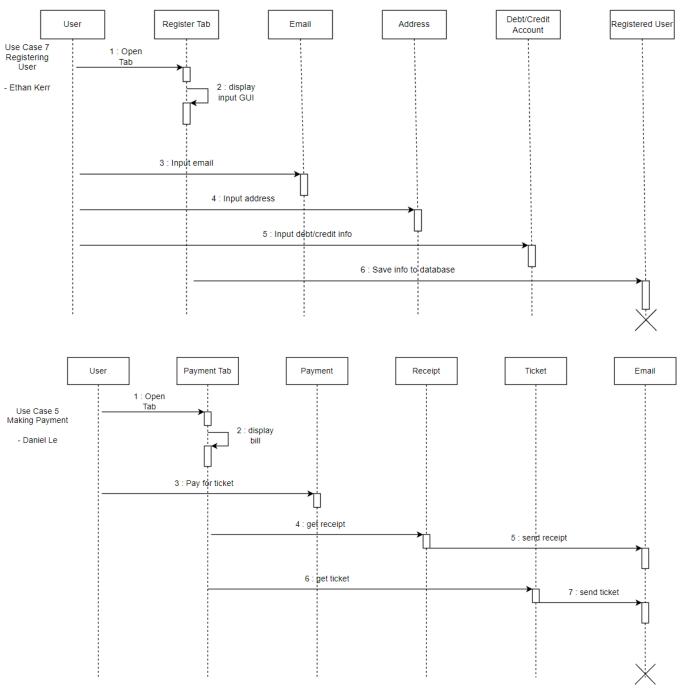
- Theatre List - Email - News

- Theatre Tab - Cancel Tab

Sequence/Interaction Diagrams

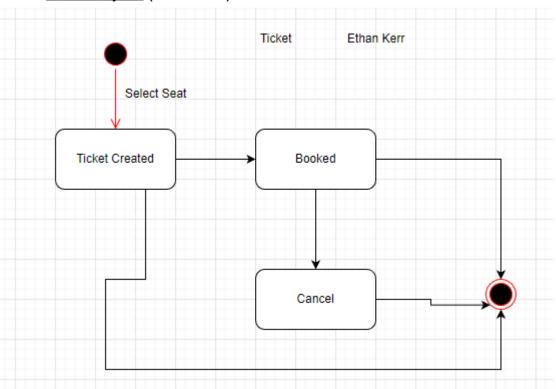


Sequence/Interaction Diagrams (cont.):

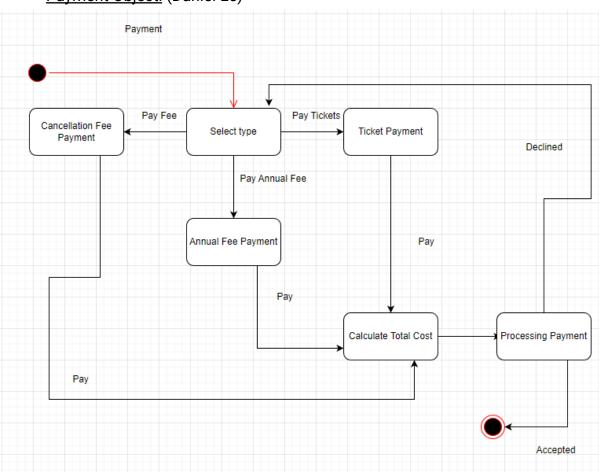


State Transition Diagrams:

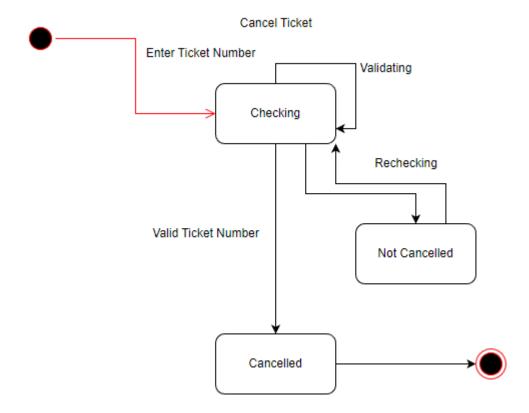
Ticket Object: (Ethan Kerr)



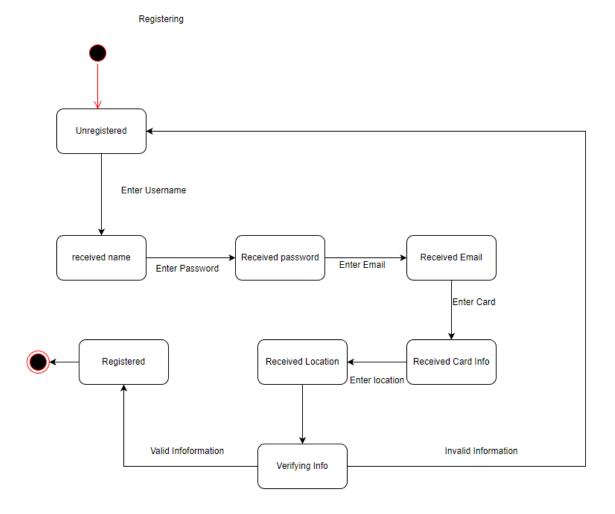
Payment Object: (Daniel Le)



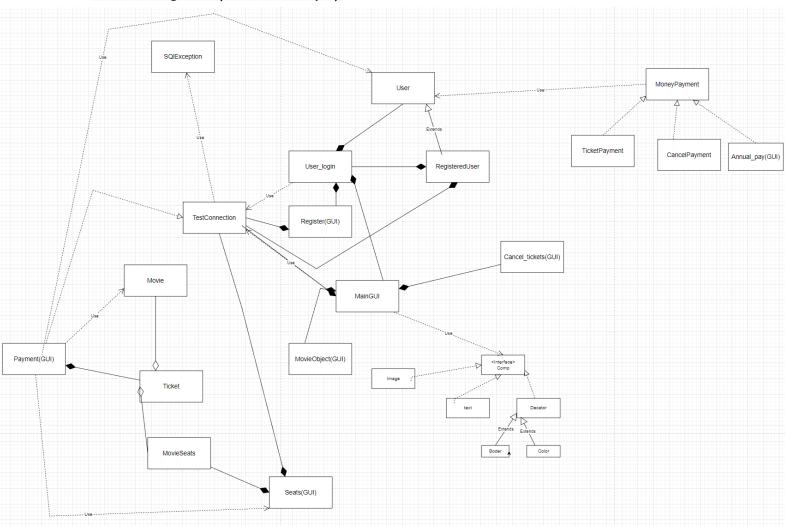
Cancel Ticket Object: (Syed Mohammed Abbas Kazmi)



Registering Object: (MD Shaherier Khan)



Class Diagram (Relationships):



Class Diagrams (Attributes/Methods):

-Entity Classes:

<<entity>> Theatre ~ theaterName: String location: String

~ availableMovies: ArrayList<Movie

<<entity>> AnnualFeePayment + calcPayment() : double

<<entity>>
CancelPayment
+ calcPayment() : double

<<entity>>
TicketPayment
+ calcPayment(): double

<<entity>>
 MoneyPayment
+ calcPayment() : double

<<entity>> RegisteredUser

email : String

~password : String

~regStatus : boolean

+ verifyUser() : boolean

	< <entity>> Ticket</entity>
~ ticke	etID: String
~ mov	vieTicket: Movie
~ sea	t: ArrayList <movieseats></movieseats>
~ ticke	etType: boolean
~ price	e: double

<<entity>> User

- ~ userID: int
- ~ ownedTickets: ArrayList<Ticket>
- ~ payment: MoneyPayment
- ~ email: String
- ~ status: boolean
- ~ joinDate: Date
- + addTicket(ticket: Ticket)
- + removeTicket(ticket: Ticket)
- + doPayment(payment: MoneyPayment): double

<<entity>>
 MovieSeats
~seatNumber: int

- <<entity>> Movie - original_language: String - original_title: String - poster_path: String - vote_average: String - year: Date

-Boundary Classes:

< <box>boundary>> MainGUI</box>
-jButton1 : JButton
-jButton2 : JButton
-jButton3 : JButton
-jButton4 : JButton
-jButton5 : JButton
-jLabel1 : JLabel
-jLabel10 : JLabel
-jLabel11 : JLabel
-jLabel12 : JLabel
-jLabel2 : JLabel
-jLabel3 : JLabel
-jLabel4 : JLabel
-jLabel5 : JLabel
-jLabel6 : JLabel
-jLabel8 : JLabel
-jLabel9 : JLabel
-jTabbedPane1 : JTabbedPane
- initComponents()
+actionPerformed(evt : ActionEvent)
- jButton1ActionPerformed(evt : ActionEvent)
- jButton2ActionPerformed(evt : ActionEvent)
- jButton3ActionPerformed(evt : ActionEvent)
- jButton4ActionPerformed(evt : ActionEvent)

- jButton5ActionPerformed(evt : ActionEvent)

< <boundary>> Register</boundary>
jButton1 : JButton
jButton2 : JButton
jLabel1 : JLabel
jLabel2 : JLabel
jLabel3 : JLabel
jLabel4 : JLabel
jLabel5 : JLabel
jLabel6 : JLabel
jLabel7 : JLabel
jTextfield1 : JTextField
jTextfield2 : JTextField
jTextfield3 : JTextField
jTextfield4 : JTextField
jTextfield5 : JTextField
initComponents()
+actionPerformed(evt : ActionEvent)
jButton1ActionPerformed(evt : ActionEvent)
jButton2ActionPerformed(evt : ActionEvent)
jTextField3ActionPerformed(evt : ActionEvent)
jTextField2ActionPerformed(evt : ActionEvent)
jTextField4ActionPerformed(evt : ActionEvent)
jLabel9ActionPerformed(evt : ActionEvent)

	< boundary>> Payment
~use	rTicket : Ticket
~c : A	ArrayList <string></string>
-jButt	on1 : JButton
-jButt	on3 : JButton
-jLab	el1 : JLabel
-jLab	el2 : JLabel
-jLab	el3 : JLabel
-jLab	el4 : JLabel
-jLab	el5 : JLabel
-jLab	el6 : JLabel
-jLab	el8 : JLabel
-jLab	el9 : JTextField
-jPan	el1 : JPanel
-jText	tfield1 : JTextField
-jText	tfield2 : JTextField
-jText	tfield3 : JTextField
-jText	tfield4 : JTextField
- init(Components()
+acti	onPerformed(evt : ActionEvent)
- jBut	ton1ActionPerformed(evt : ActionEvent)
- jBut	ton3ActionPerformed(evt : ActionEvent)
- jTex	tField2ActionPerformed(evt : ActionEvent)
- jTex	tField4ActionPerformed(evt : ActionEvent)
- jLab	pel9ActionPerformed(evt : ActionEvent)

<pre><<bur>boundary>></bur></pre> Annual_pay
-jButton1 : JButton
-jLabel1 : JLabel
-jLabel2 : JLabel
- initComponents()
+actionPerformed(evt : ActionEvent)

- jButton1ActionPerformed(evt : ActionEvent)

<pre>< toundary>> User_login</pre>
+ currentUser: User
- jButton1: JButton
- jButton2: JButton
- jButton4: JButton
- jLabel1: JLabel
- jLabel1: JLabel
- jLabel2: JLabel
- jLabel3: JLabel
- jLabel4: JLabel
- jLabel6: JLabel
- jLabel7: JLabel
- jLabel8: JLabel
- jPasswordField1: JPasswordField
- jTextField1: JTextField

+ main(args: String[])

+ currentoser. Oser	-jButton1 : .
- jButton1: JButton	-iLabel1 : J
- jButton2: JButton	1
- jButton4: JButton	-jLabel2 : J
- jLabel1: JLabel	-jLabel3 : J
- jLabel1: JLabel	-jLabel4 : J
- jLabel2: JLabel	-jTextfield1
- jLabel3: JLabel	-jTextfield2
- jLabel4: JLabel	
- jLabel6: JLabel	- initCompo
- jLabel7: JLabel	+actionPer
- jLabel8: JLabel	- jButton1A
- jPasswordField1: JPasswordField	
- jTextField1: JTextField	
- initComponents()	
- jButton1ActionPerformed(evt: ActionEvent)	
- jButton2ActionPerformed(evt: ActionEvent)	
- jButton4ActionPerformed(evt: ActionEvent)	
- jTextField1ActionPerformed(evt: ActionEvent)	

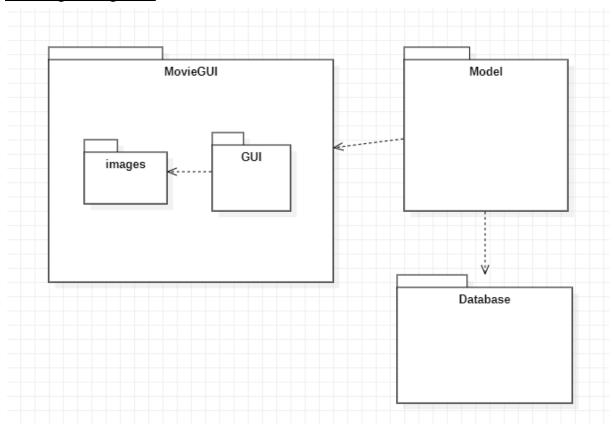
<pre>< cancel_tickets</pre>
-jButton1 : JButton
-jLabel1 : JLabel
-jLabel2 : JLabel
-jLabel3 : JLabel
-jLabel4 : JLabel
-jTextfield1 : JTextField
-jTextfield2 : JTextField
- initComponents()
+actionPerformed(evt : ActionEvent)
- jButton1ActionPerformed(evt : ActionEvent)

-Controller Classes

< <controller>> TestConnection</controller>
- myConnection: Connection
<u>+ makeConnection(username: String, password: String)</u>
+ validateUser(email: String, password:String): boolean
+ registerUser(username: String, password: String, location: String, email: String, cardNo: int, credit: int)
+ addCredit(credit: int, email: String)
+ bookSeat(seatNo: int, date: Date, email: String, showtime: String, movie: String, ticket: String)
+ cancelTicket(ticket: String, email: String)
+ getBookedSeats(showtime: String, movie: String, date: Date): ArrayList <integer></integer>
+ getMovieSummary(name: string): String
+ getMovieYear(name: string): Date
+ setJoinedYear(date: Date, email: String)
+getJoinedYear(email: String): Date
+ getMovieLang(name: String): String
+ getUrlImage(name: String): String
+ getMovieRating(name: String): String
+ main(args: String[])

=	< <control>> MovieObject</control>
-showdate : Date	
showTime : Strir	ng
jButton1 : JButto	n
jButton10 : JButt	on
jButton2 : JButto	n
jButton3 : JButto	n
jButton4 : JButto	n
jButton5 : JButto	n
jButton6 : JButto	n
jButton7 : JButto	n
jButton8 : JButto	n
jButton9 : JButto	n
jLabel1 : JLabel	
jLabel2 : JLabel	
jLabel3 : JLabel	
jLabel4 : JLabel	
jLabel5 : JLabel	
jLabel6 : JLabel	
jLabel7 : JLabel	
jLabel8 : JLabel	
jLabel9 : JLabel	
initComponents()
+actionPerformed	l(evt : ActionEvent)
jButton1ActionP	erformed(evt : ActionEvent)
jButton2ActionP	erformed(evt : ActionEvent)
jButton3ActionP	erformed(evt : ActionEvent)
jButton4ActionP	erformed(evt : ActionEvent)
jButton5ActionP	erformed(evt : ActionEvent)
jButton6ActionP	erformed(evt : ActionEvent)
jButton7ActionP	erformed(evt : ActionEvent)
jButton8ActionP	erformed(evt : ActionEvent)
jButton9ActionP	erformed(evt : ActionEvent)
· jButton10Action	Performed(evt : ActionEvent)
<u> </u>	

Package Diagram:



Deployment Diagram:

