Use Case Diagram

Actors: customer, administrator

Use cases: check ticket cost, view seat loadouts, make payment, login, select concert, book seats, edit seat, view booking details, cancel booking, view all concerts, update ticket prices, view bookings, add concert, view total payments, add customer, add booking

Relationships: «include», «extend»

UC Reference Name: login

Overview:	This is used for customers to login their user account to proceed their actions.
Related use case:	Select concert, view all concerts
Actors:	Customer
Pre-Conditions:	The customer has valid user account with username and password to proceed.
Post-Conditions:	The user accesses the account page.

UC Reference Name: select concert

Overview:	The user selects a specific concert to proceed the action from the concert list with concerts' details.
Related use case:	Check ticket cost, view seat loadouts, book seats, view booking details, view all concerts.
Actors:	Customer
Pre-Conditions:	The customer successfully logged into the account and the program shows all concerts to the customer.
Post-Conditions:	The chosen concert will display its details with availabilities.

UC Reference Name: view all concerts

Overview:	The user views all the available concerts from the concert list.
Related use case:	Login, update ticket prices
Actors:	Customer, administrator
Pre-Conditions:	The customer successfully logged into the account; the administrator will be able to see all concerts.
Post-Conditions:	All concerts are shown to the users.

UC Reference Name: check ticket cost

Overview:	The user will be able to check the price of the ticket after selecting a specific concert.
Related use case:	Select concert
Actors:	Customer
Pre-Conditions:	The customer selected one specific concert to proceed.
Post-Conditions:	The interface displays the price of the ticket in different locations and types.

UC Reference Name: view seat loadouts

Overview:	The user will be able to see the seat loadouts of a specific concert.
Related use case:	Select concert
Actors:	Customer
Pre-Conditions:	The customer selects one specific concert to proceed.
Post-Conditions:	The interface displays the seat loadouts of a specific concert.

UC Reference Name: book seats

Overview:	The user uses the interface to book seats for a specific concert.
Related use case:	Select concert, make payments
Actors:	Customer
Pre-Conditions:	The customer selects one specific concert to proceed.
Post-Conditions:	The customer selects the wanted seats to proceed and the program will calculate and return the price of the selected seats.

UC Reference Name: make payment

Overview:	The user uses the program to make payments to secure the tickets.
Related use case:	Books seats
Actors:	Customer
Pre-Conditions:	The customer selected the wanted seats to proceed.
Post-Conditions:	The customer successfully makes the payments that secures all the selected seats.

UC Reference Name: view booking details

Overview:	The user uses the program to check the paid tickets.
Related use case:	Select concert, view bookings
Actors:	Customer
Pre-Conditions:	The customer selected one specific concert to proceed.
Post-Conditions:	The interface shows all bookings of a selected concert of a customer.

UC Reference Name: update ticket prices

Overview:	The program allows the administrator to change ticket prices of concerts.
Related use case:	Select concert, view all concerts
Actors:	Administrator
Pre-Conditions:	The program displays all the concerts to the administrator. For concerts that are not fully sold, the administrator could release lower price to boost up sales if needed.
Post-Conditions:	The updated prices of tickets will be stored in the program.

UC Reference Name: view bookings

Overview:	The program will show all the bookings of concerts to the administrator.
Related use case:	View booking details
Actors:	Administrator
Pre-Conditions:	The program is in administrator mode.
Post-Conditions:	All the booking of concerts will be shown, the administrator could select specific booking of a concert and the relevant details.

UC Reference Name: add concert

Overview:	The program will allow the administrator to add new concerts to the system
Related use case:	
Actors:	Administrator
Pre-Conditions:	The program is in administrator mode with concert details.
Post-Conditions:	The newly added concert will be stored in the concert list.

UC Reference Name: view total payments

Overview:	The program will allow the administrator to check all payments of a concert.
Related use case:	
Actors:	Administrator
Pre-Conditions:	The program is in administrator mode
Post-Conditions:	The total payment is shown to the administrator.

UC Reference Name: add customer

Overview:	The program will allow the administrator to add customer and the account to the list of customers
Related use case:	
Actors:	Administrator
Pre-Conditions:	The program is in administrator mode with customer details.
Post-Conditions:	The new customer is added to the customer list.

UC Reference Name: add booking

Overview:	The program will allow the administrator to add booking to the list of bookings.
Related use case:	
Actors:	Administrator
Pre-Conditions:	The program is in administrator mode with booking details.
Post-Conditions:	The new booking is added to the booking list.

UC Reference Name: edit seat

Overview:	This is used for customers to change their seats of current purchased ticket
Related use case:	View booking details
Actors:	Customer
Pre-Conditions:	The customer has their booking details.
Post-Conditions:	The customer successfully changed their seats of a concert.

UC Reference Name: cancel booking

Overview:	The user cancels an existing booking from the account.
Related use case:	View booking details
Actors:	Customer
Pre-Conditions:	The customer has their booking details.
Post-Conditions:	The user successfully cancelled their seats of a concert with refund.