

Use Case: Sign Up [U]

Step	User's Action	System's response
1		Asks to enter [U] to sign up, [I] to sign in, and [X] to exit
2	Enters [U]	
3		Asks to enter unique id and password
4	Enters id and password	
5		Creates an account with the id and password

Variation #1:

- In step 4, user enters id that is not unique i.e. already taken by someone else
- System says: The user id is already taken
- Continue to step 1

Variation #2:

- In step 4, user enters without typing anything
- System says: Id and Password cannot be blank
- Continue to step 1

Use case: Sign In [I]

Step	User's Action	System's response
1		Asks to enter [U] to sign up, [I] to sign in, and [X] to exit
2	Enters [I]	
3		Asks to enter valid id and password
4	Enters id and password	
5		Checks the validity of the id and password
6		Signs the user in

Variation #1:

- In step 4, the user enters wrong id or password

- System says: Invalid username or invalid password
- Continue to step 1

Variation #2:

- In step 4, user enters without typing anything
- System says: Id and Password cannot be blank
- Continue to step 1

Use case: Exit [X]

Step	User's Action	System's response
1		Asks to enter [U] to sign up, [I] to sign in, and [X] to exit
2	Enters [X]	
3		Copies valid reservations of all registered users to a file named "reservations.txt"
4		Terminates the program

Use case: Reserve seat [R]

Step	User's Action	System's response
1		Asks to enter [R] to reserve, [V] to view, [C] to cancel, and [O] to sign out
2	Enters [R]	
3		Asks to enter date and time of the show
4	Enters date and time of the show	
5		Displays all available seats for the show across all sections
6	Enters a seat number of one section	
7		Reserves it
8		Asks if the user wants to make more reservation or to confirm the current reservation

9	Enters to confirm the reservation	
10		Saves all reserved seats in an Arraylist
11		Ends the reservation session

Variation #1:

- In Step 4, user enters wrong date or time
- System says: Invalid date or time
- Continue to step 3

Variation #2:

- In step 6, user enters a seat number that is not available
- System says: Seat is not available. Please choose another seat.
- Continue to step 5

Variation #3:

- In step 6, user enters multiple seat numbers across different sections
- Reserves all seats
- Continue to step 8

Variation #4:

- In step 6, user enters multiple seat numbers across different sections
- If one or more seats entered are not available, system asks the user to enter a different seat number
- Continue to step 5

Variation #5:

- In step 9, the user enters to make another reservation
- Continue to step 3

Use case: View[V]

Step	User's action	System's response
1		Asks to enter [R] to reserve, [V] to view, [C] to cancel, and [O] to sign out
2	Enters [V]	

3		Asks to enter the date to view the reservation for that date or, entire reservation made by the user
4	Enters the particular date	
5		Displays the reservation for that date

Variation #1:

- In step 4, the user enters a wrong date
- System says: Invalid date
- Continue to step 3

Variation #2:

- In step 3, the user enters to the entire reservation
- System displays the entire reservation made by the user in order of date and time

Use case: Cancel Reservation

Step	User's action	System's response
1		Asks to enter [R] to reserve, [V] to view, [C] to cancel, and [O] to sign out
2	Enters [C]	
3		Asks to enter the date and time
4	Enters date and time of the show	
5		Displays all seat numbers reserved across all sections for that show
6		Asks to enter the seat numbers to cancel
7	Enters seat numbers to cancel	
8		Cancels seat numbers entered by the user from the arraylist

Variation #1:

- In step 4, the user enters a wrong date and time
- System says: Invalid date or time

- Continue to step 3

Variation #2:

- In step 7, the user enters wrong seat numbers or numbers that were not reserved by the user
- System says: Invalid seat numbers or You never made reservation for this seat
- Continue to step 5

Use case: Sign out [O]

Step	User's action	System's response
1		Asks to enter [R] to reserve, [V] to view, [C] to cancel, and [O] to sign out
2	Enters [O]	
3		Displays a receipt for the transaction including confirmation number, all shows with reserved seats in order of date and time, total price of the transaction. Inside each show, there is date, time, reserved seat numbers and total price for that show.
4		Prompts the initial menu to either sign up, sign in or exit the program