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In [10]: ▶ class TicketInfo:
2     def __init__(self, row, col):
3         self.row = row
4         self.col = col
5         self.user_details = {}
6
7     def options(self, option):
8         if option == 1:
9             self.show_seats()
10
11         elif option == 2:
12             self.buy_ticket()
13
14         elif option == 3:
15             self.statistics()
16
17         elif option == 4:
18             self.user_info()
19         else:
20             print('Enter a valid Option')
21
22
23     def show_seats(self):
24         for i in range(self.row + 1):
25             for j in range(self.col + 1):
26                 row 0
27                 if i == 0:
28                     col 0
29                     if j == 0:
30                         print(' ', end = ' ')
31                     row 0 and col 1 -> n
32                     else:
33                         print(j, end = ' ')
34                 else:
35                     col 0 and row 1 -> n
36                     if j == 0:
37                         print(i, end = ' ')
38                     row and col != 0
39                     else:
40                         if self.seat_status(i, j):
41                             print('B', end = ' ')
42                         else:
43                             print('S', end = ' ')
44             print()
45
46
47     def buy_ticket(self):
48         row = int(input("For which row you are planning to book the ticket:"))
49         col = int(input("For which column you are planning to book the ticket:"))
50         seat_id = str(row) + str(col)
51         total_seats = self.row * self.col
52         half_seats = total_seats // 2
53         if total_seats < 60 or (total_seats > 60 and row <= half_seats):
54             price = 10
55         else:
56             price = 8

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57         if self.seat_status(row, col):
58             print("That seat is already reserved")
59         else:
60             print('Price of the selected seat is', price, '$')
61             choice = input('Enter Yes to continue to purchase the ticket')
62             if choice.lower() == 'yes':
63                 name = input('Enter your Name')
64                 gender = input('Enter your Gender')
65                 age = input('Enter your Age')
66                 mobile_number = input('Enter your Mobile Number')
67                 self.user_details[seat_id] = [name, gender, age, mobile_num
68             print('Your ticket is booked your seating id is', seat_id)
69             self.user_details[seat_id] = name + gender + age + mobile_
70         else:
71             print('No problem visit back soon.....')
72
73
74     def statistics(self):
75         reserved_tickets = len(self.user_details)
76         percentage = (reserved_tickets / (self.row * self.col)) * 100
77         total = 0
78         {'22': [name, gend, age, mob, 10]}
79         for price in self.user_details.values():
80             total += price[4]
81         seats = self.row * self.col
82         income = 0
83         if seats <= 60:
84             income = seats * 10
85         else:
86             half_seats = (self.row // 2) * self.col
87             income = half_seats * 10 + (seats - half_seats) * 8
88             9 8 4 5
89         s = 'Number of Purchased Tickets {} \nPercentage of Tickets booked
90         print(s)
91
92     def user_info(self):
93         pass
94     def seat_status(self, row, col):
95         s_id = str(row)+str(col)
96         if s_id in self.user_details.keys():
97             return True
98         False
99
100 opt = """1. Show the seats
101 2. Buy a Ticket
102 3. Statistics
103 4. Show booked Tickets User Info
104 5. Exit\n"""
105
106
107
108 row = int(input('How many rows available in theater'))
109 col = int(input('How many columns available in theater'))
110 Admin = TicketInfo(row, col)
111 while True:
112     user_option = int(input(opt))
113     if user_option == 0:

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114         break
115     else:
116         Admin.options(user_option)

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How many rows available in theaters
How many columns available in theater5
1. Show the seats
2. Buy a Ticket
3. Statistics
4. Show booked Tickets User Info
0. Exit
1
  1 2 3 4 5
1 S S S S S
2 S S S S S
3 S S S S S
4 S S S S S
5 S S S S S
1. Show the seats
2. Buy a Ticket
3. Statistics
4. Show booked Tickets User Info
0. Exit
3
Number of Purchased Tickets 0
Percentage of Tickets booked 0.0
  Current Income 0
  Total Income250
1. Show the seats
2. Buy a Ticket
3. Statistics
4. Show booked Tickets User Info
0. Exit
2
For which row you are planning to book the ticket: 2
For which column you are planning to book the ticket: 2
Price of the selected seat is 10 $
Enter Yes to continue to purchase the ticketyes
Enter your Nameanil
Enter your Genderm
Enter your Age99
Enter your Mobile Number9876543210
Your ticket is booked your seating id is 22
1. Show the seats
2. Buy a Ticket
3. Statistics
4. Show booked Tickets User Info
0. Exit
3
Number of Purchased Tickets 1
Percentage of Tickets booked 4.0
  Current Income 10
  Total Income250
1. Show the seats
2. Buy a Ticket
3. Statistics
4. Show booked Tickets User Info

```

0. Exit
0



Enhancements

- Check if seat is available or not
- User details validation
 - Name
 - Gender
 - Mobile Number
 - Age
- User info