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Final Report

All GITHUB FILES CAN BE FOUND AT: [Design Docs](#)

CRC CARDS:

```
1  +-----+-----+
2  | Class: User      | Collaborators:      |
3  |                 | - Reservation      |
4  | Responsibilities: | - Event            |
5  | - User types    | - Ticket           |
6  | - User information |                   |
7  | - Login         |                   |
8  | - View schedule |                   |
9  | - Make reservation |                   |
10 | - Cancel reservation |                   |
11 +-----+-----+
12
13 +-----+-----+
14 | Class: Reservation | Collaborators:      |
15 |                 | - Facility          |
16 | Responsibilities:  | - User              |
17 | - Reservation details | - Event            |
18 | - Calculate cost   |                   |
19 | - Enforce rules    |                   |
20 | - Process payment  |                   |
21 | - Cancel reservation |                   |
22 +-----+-----+
23
24 +-----+-----+
25 | Class: Facility    | Collaborators:      |
26 |                 | - Reservation      |
27 | Responsibilities:  |                   |
28 | - Facility details |                   |
29 | - Availability     |                   |
30 | - Schedule         |                   |
31 | - Reservation limits |                   |
32 +-----+-----+
33
34 +-----+-----+
35 | Class: Event       | Collaborators:      |
36 |                 | - Ticket            |
37 | Responsibilities:  | - Reservation      |
38 | - Event details   |                   |
39 | - Attendees       |                   |
40 | - Ticket sales     |                   |
41 | - Waitlist         |                   |
42 | - Cancellations    |                   |
43 | - Refunds          |                   |
44 +-----+-----+
45
```

| | |
|-------------------|----------------|
| Class: Ticket | Collaborators: |
| | - User |
| Responsibilities: | - Event |
| - Ticket details | |
| - User | |
| - Event | |
| - Price | |

| | |
|------------------------|----------------|
| Class: FacilityManager | Collaborators: |
| | - Facility |
| Responsibilities: | - Reservation |
| - Manage budget | |
| - Approve reservation | |
| - Process refund | |

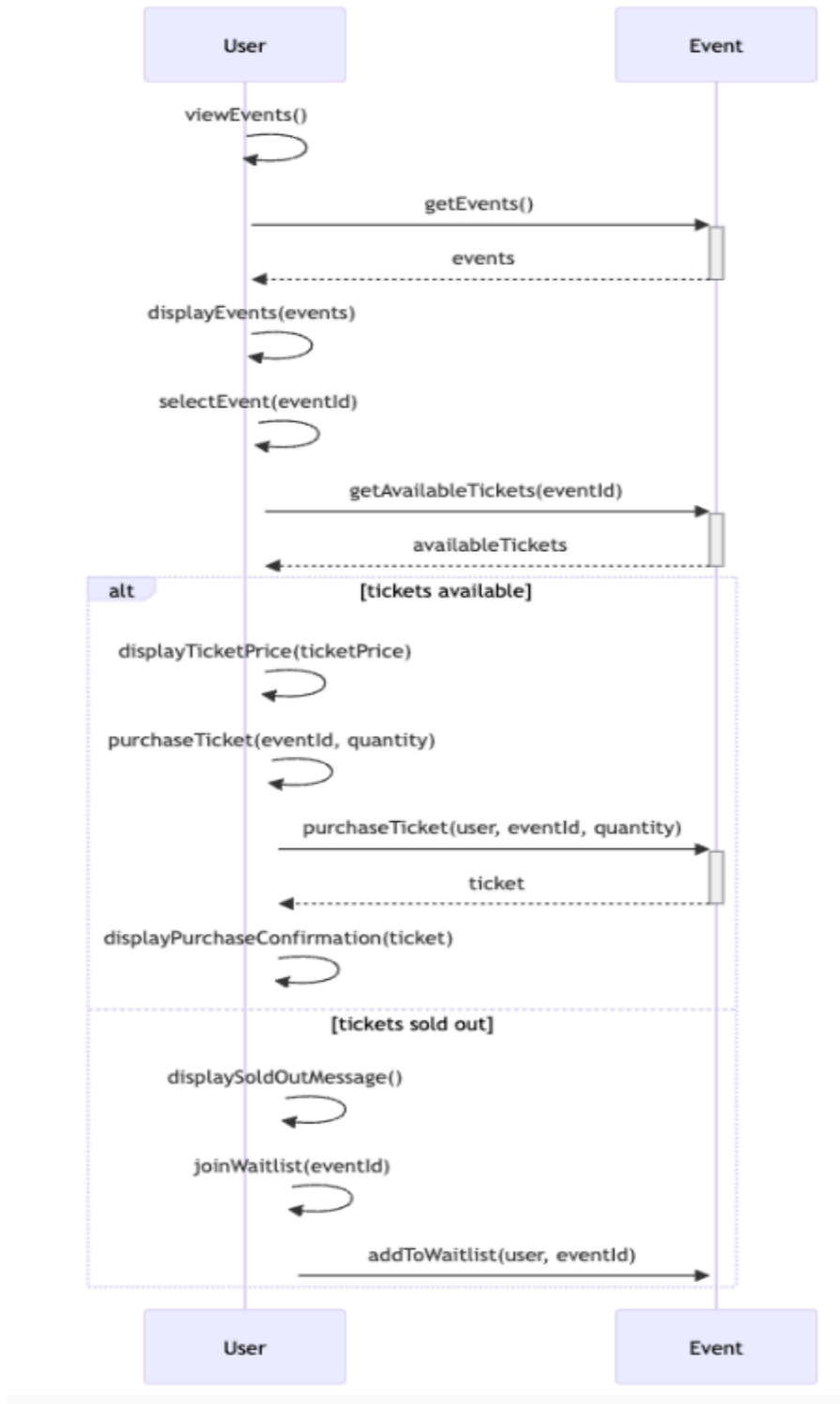
| | |
|--|----------------|
| Class: CityUser | Collaborators: |
| | - User |
| Responsibilities: | |
| - Inherits from User | |
| - Additional city-specific details and behaviors | |

| | |
|--|----------------|
| Class: NonResident | Collaborators: |
| | - User |
| Responsibilities: | |
| - Inherits from User | |
| - Additional non-resident specific details and behaviors | |

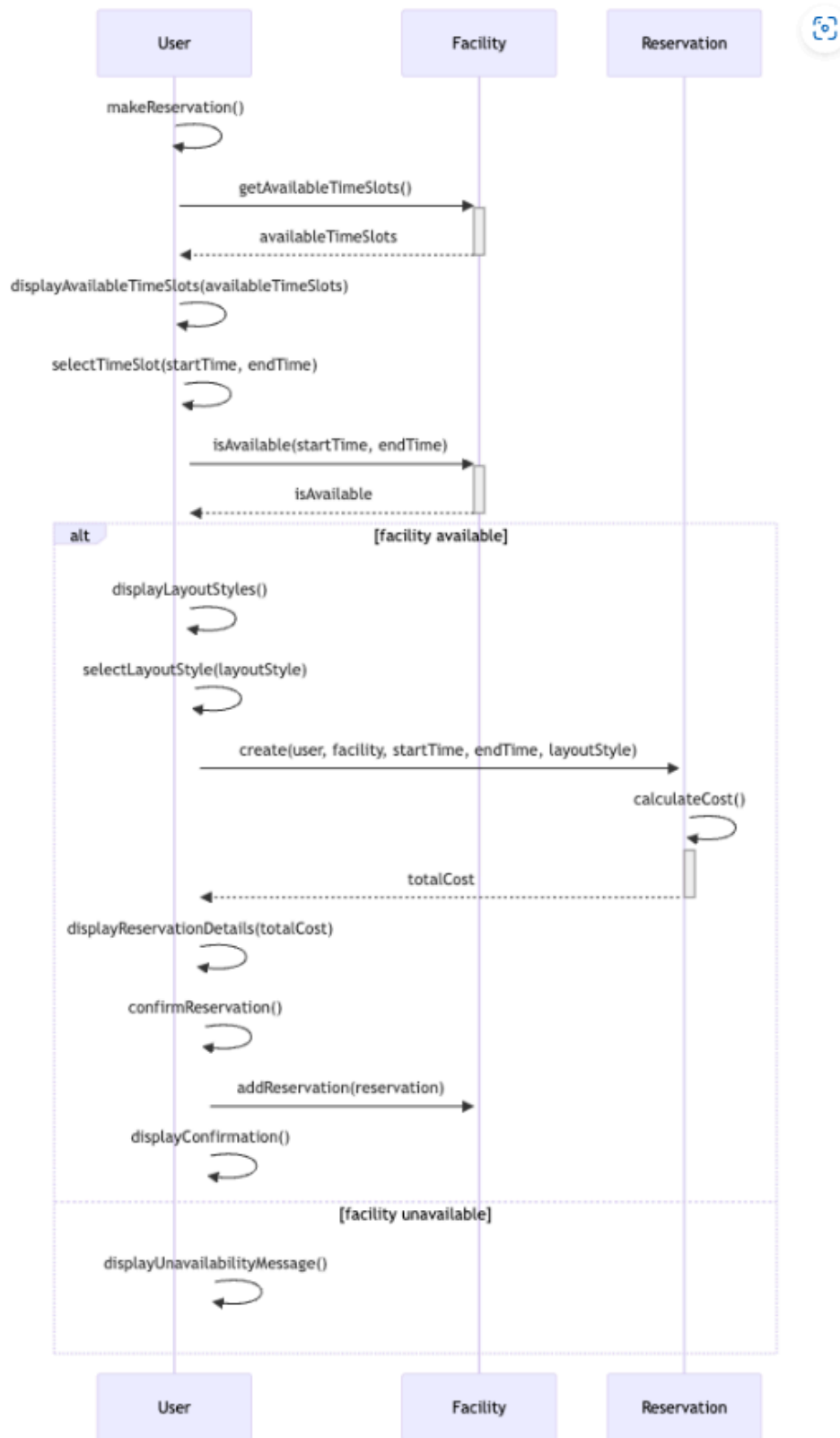
| | |
|--|----------------|
| Class: Resident | Collaborators: |
| | - User |
| Responsibilities: | |
| - Inherits from User | |
| - Additional resident-specific details and behaviors | |

Sequence Diagrams:

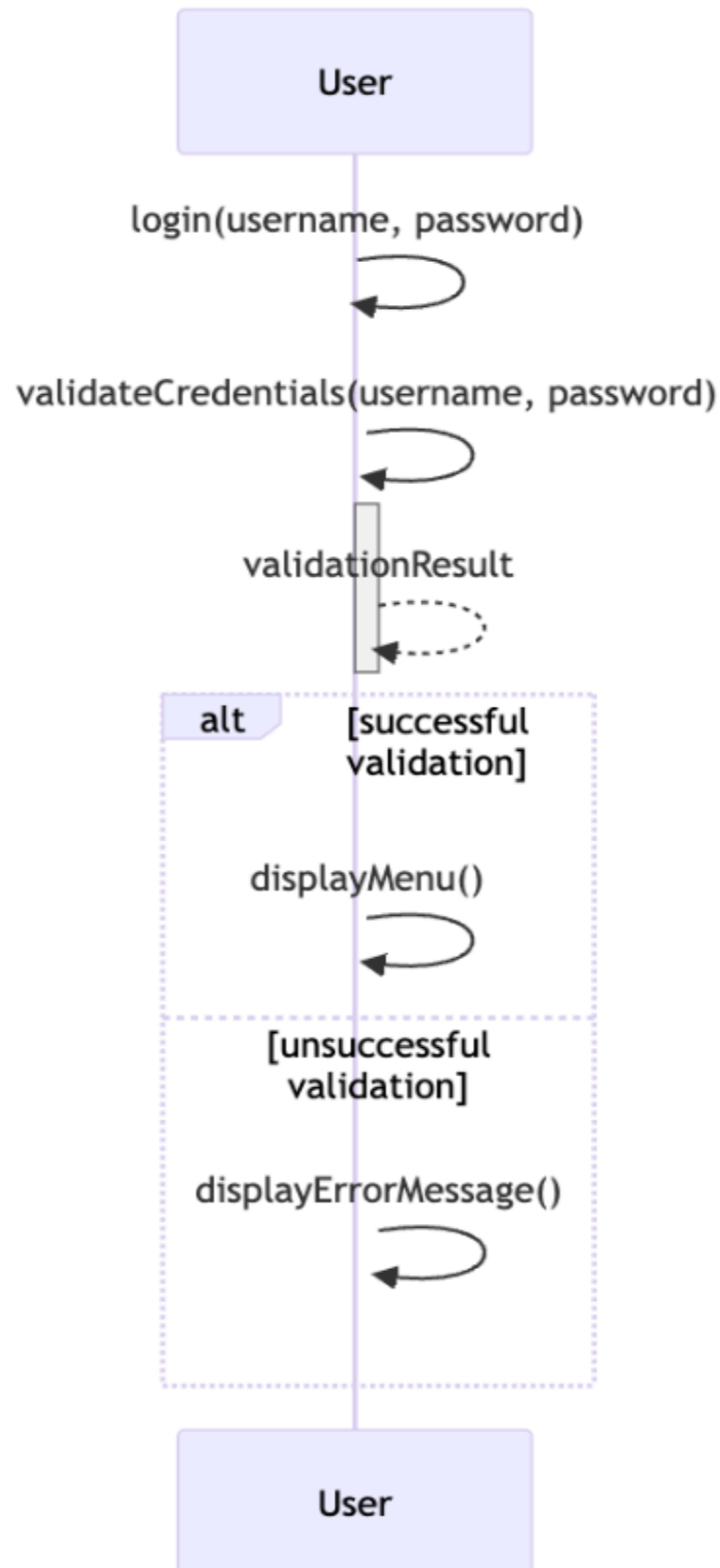
Event Sequence Diagram:



Purchase Ticket Sequence Diagram:



Login User Sequence Diagram



UML Diagram:

