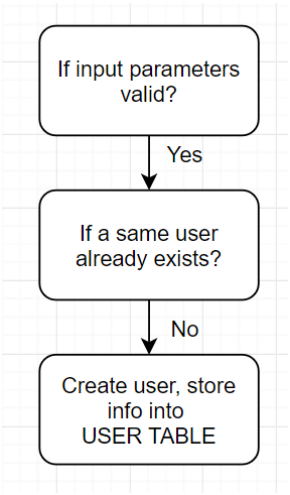
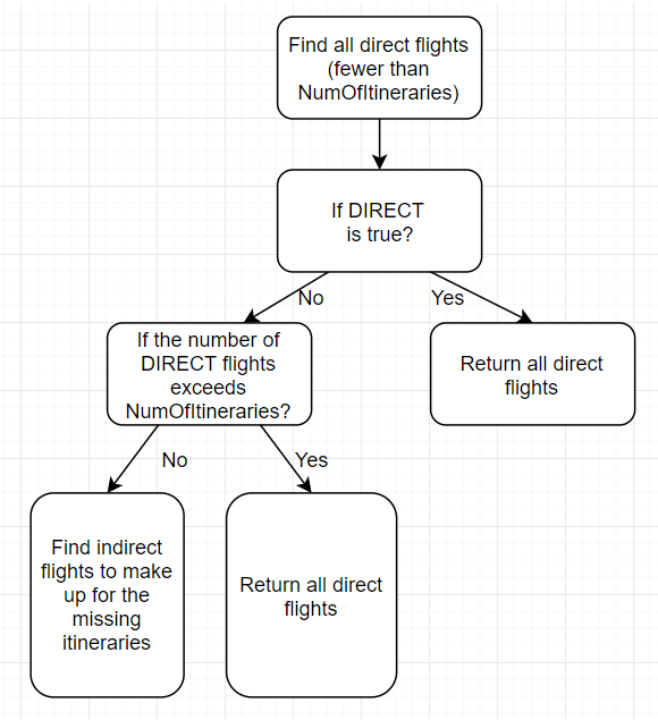
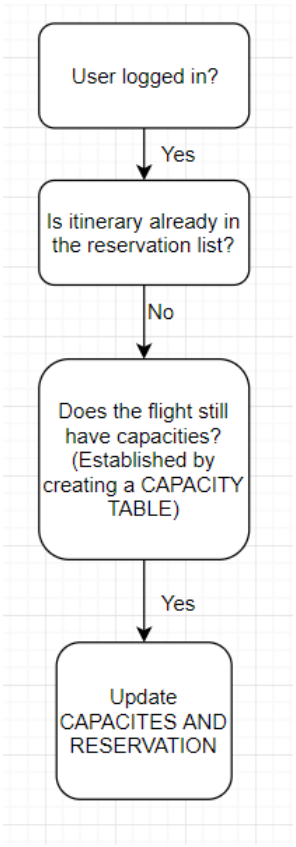
1. We need to create a table **USER** to store the user information, which consists of username, password and account balance
2. Because users need to book/pay/cancel a reservation from time to time, we need to create a **Reservation** table to store all reservation info.
3. It's not necessary to establish an Itinerary table because users will not operate on Itineraries. Here we just need to print all itineraries, so we can store them as a list.
4. We need to create a **CAPACITIES** table to track changes of capacities of all flights
5. **Create:**



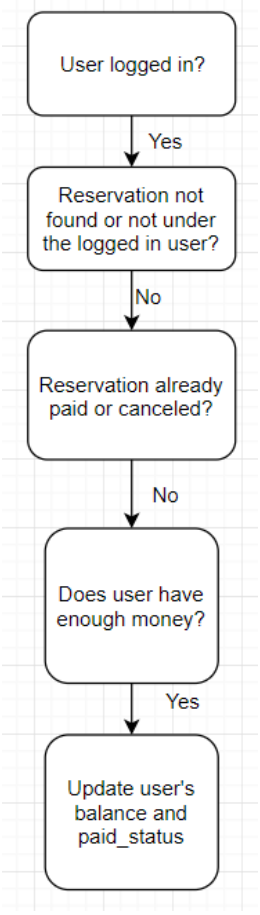
6. **Search:**



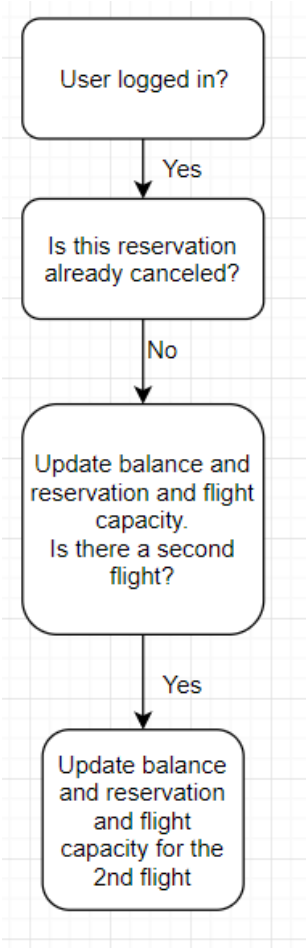
7. **Book:**


User logged in?
Yes
Is itinerary already in the reservation list?
No
Does the flight still have capacities? (Established by creating a CAPACITY TABLE)
Yes
Update CAPACITES AND RESERVATION

8. Pay


User logged in?
Yes
Reservation not found or not under the logged in user?
No
Reservation already paid or canceled?
No
Does user have enough money?
Yes
Update user's balance and paid_status

9. cancel


User logged in?
Yes
Is this reservation already canceled?
No
Update balance and reservation and flight capacity.
Is there a second flight?
Yes
Update balance and reservation and flight capacity for the 2nd flight