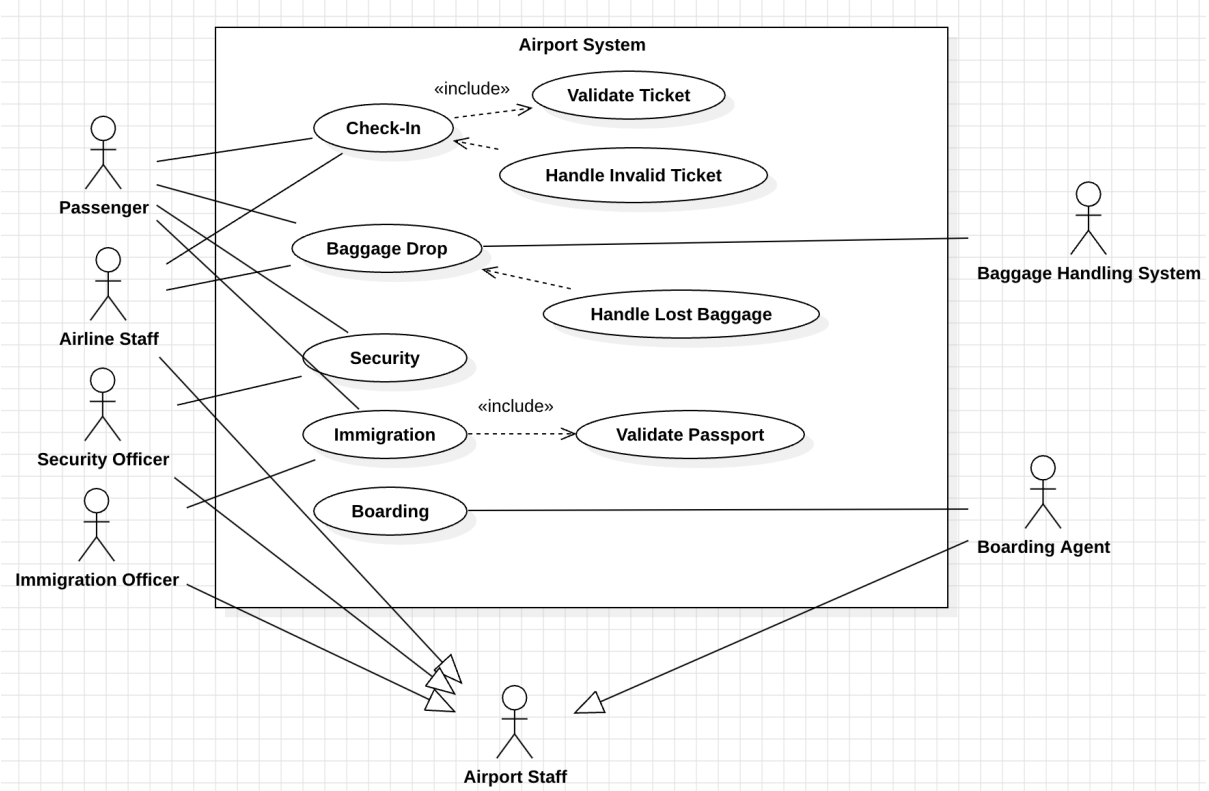
Lab 3
Merve Pakcan

1.Context Diagram



2.

Actors:

- Passenger
- Airline Staff
- Baggage Handling System

Preconditions

- Passenger has already completed the **Check-In** process.
- A valid **boarding pass** must be available.
- The baggage must meet the airline's weight and security requirements.

Basic Behaviour (Main Flow)

1. The passenger comes to the baggage drop counter.
2. The staff asks for the passenger's boarding pass or scans it automatically.
3. The system checks if the boarding pass is valid.
4. The passenger places the baggage on the belt.
5. The system weighs the baggage and compares it with the allowed limit.
6. If everything is fine, the system prints a baggage tag and attaches it.
7. The baggage is sent to the **Baggage Handling System** for loading.
8. The system confirms that the baggage has been successfully dropped off.

Alternative Flows

Overweight Baggage:
If the baggage is heavier than allowed, the system shows a warning message.
The passenger is redirected to the payment desk (or the staff helps) to pay the extra fee.
After payment, the baggage can be accepted normally.

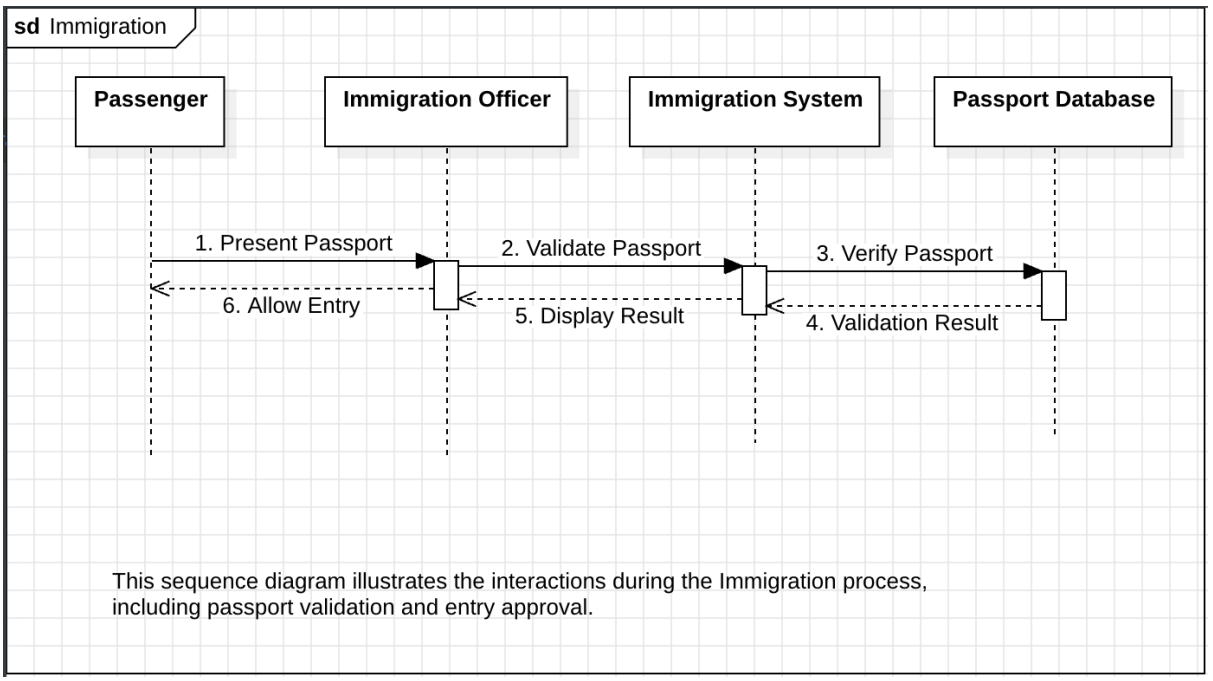
Invalid Boarding Pass:
If the boarding pass can't be validated, the system rejects the baggage.
The passenger must go back to the Check-In counter to fix the issue.

Technical Error:
If the connection with the baggage system fails, the staff manually registers the baggage information in the system.

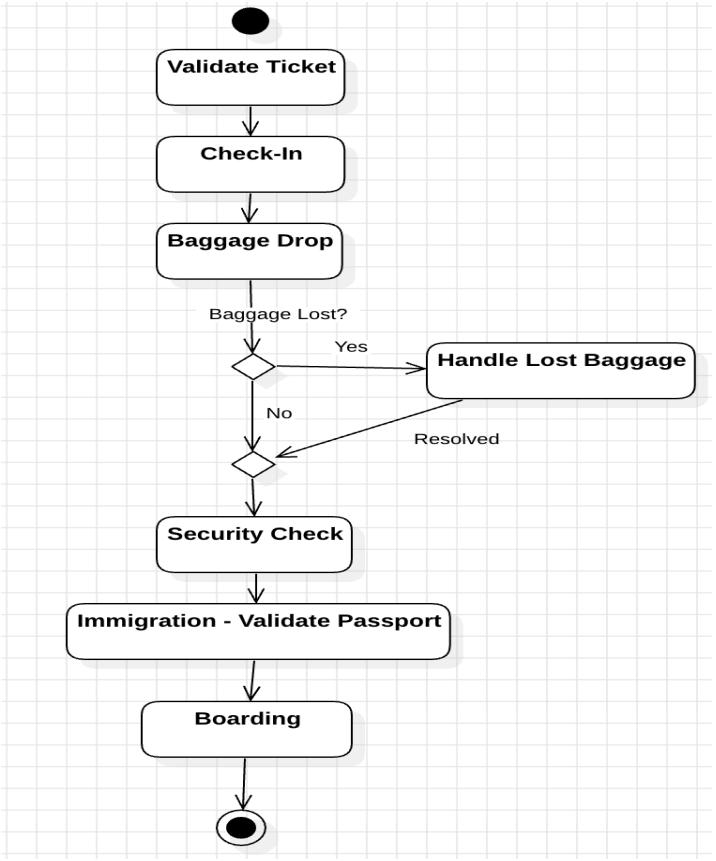
Postconditions

- Baggage information is successfully stored and linked to the passenger's flight.
- The baggage receives a tracking number.
- The passenger gets confirmation that the baggage has been accepted.

3. Sequence Diagram



4.Activity Diagram



BPMN Diagram