

Airport Baggage Management System Database Documentation

1. Overview

This document provides a high-level explanation of the relational database schema designed for managing **airport baggage**. The structure facilitates the tracking of baggage from check-in to loading, ensuring efficient and secure luggage handling.

2. Entity Descriptions and Relationships

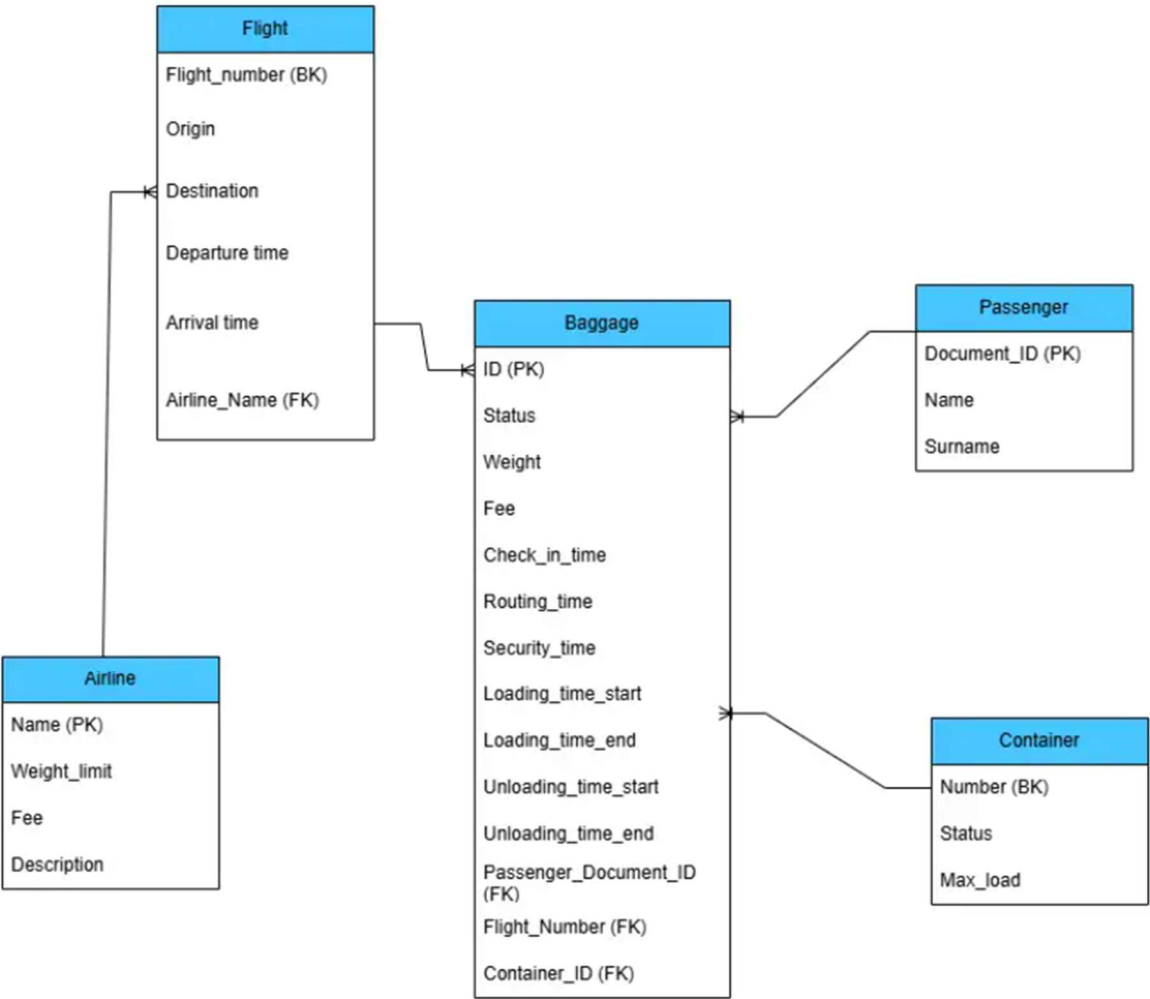


Table: Passenger

Column	Type	Key	Description
Document_ID	String	PK	Unique identifier for the passenger's travel document.
Name	String		The passenger's given name.
Surname	String		The passenger's surname.

Table: Airline

Column	Type	Key	Description
Name	String	PK	The official name of the airline.
Weight_limit	Decimal		The maximum allowable baggage weight limit defined by the airline.
Fee	Decimal		The standard fee charged by the airline for overweight baggage.
Description	String		A brief description of the airline.

Table: Container

Column	Type	Key	Description
Number	String	BK	Number assigned to the baggage container.
Status	String		The current operational status of the container.
Max_load	Integer/Decimal		The maximum weight or capacity the container can hold.

Table: Flight

Column	Type	Key	Description
Flight_number	String	BK	The unique flight number.
Origin	String		The city and country of departure.
Destination	String		The city and country of arrival.
Departure_time	Datetime		The scheduled departure time.
Arrival_time	Datetime		The scheduled arrival time.
Airline_Name	String	FK	Links to the Airline name.

Table: Baggage

Column	Type	Key	Description
ID	Integer	PK	Unique identifier for the individual piece of baggage.
Status	String		The current status of the baggage (e.g., 'Checked-in', 'Loaded', 'Claimed').
Weight	Decimal		The actual measured weight of the baggage.
Fee	Decimal		Any associated fee charged for this baggage (e.g., overweight fee).
Check_in_time	Datetime		Time the baggage was checked in by the passenger.
Routing_time	Datetime		Time spent routing the bag.
Security_time	Datetime		Time the baggage cleared security screening.
Loading_time_start	Datetime		Time when the baggage began being loaded.
Loading_time_end	Datetime		Time when the baggage finished being loaded.
Unloading_time_start	Datetime		Time when the baggage began being unloaded.
Unloading_time_end	Datetime		Time when the baggage finished being unloaded.
Passenger_Document_ID	String	FK	Links to the Document_ID in the Passenger table.
Flight_Number	String	FK	Links to the Flight_number in the Flight table.
Container_ID	Integer	FK	Links to the Number in the Container table.