# **SUMMARY REPORT**

# **AIRLINE TICKETING SYSTEM**

**Subject**: Database Management Systems Group: 03

**Summary:** To manage reservations and bookings for flights, airlines and travel agencies use an automated system called an airline ticketing system. The technology allows users to look for flights, determine whether seats are available, make reservations, purchase tickets, cancellations if needed and luggage managing with manage their bookings. The airline ticketing system's goals are to hasten the booking process, lower errors, and improve customer service.

Airlines and travel agencies need airline ticketing systems in order to efficiently handle and sell airline tickets. Additionally, they provide helpful data that airlines can utilize to evaluate and improve their productivity.

Recent developments in airline ticketing systems use machine learning and artificial intelligence to customize offers and enhance revenue management. Mobile apps and online booking portals, which are quickly gaining in popularity, allow travellers to plan and manage their travel using their smartphones and laptops.

The major entities we have identified are Customers, Booking, Passengers, Flights, Luggage’s and Cancellations.

**Entities and Relationships:**

**Customers**: One customer can have many bookings, but each booking belongs to one customer.

**Bookings**: One passenger can have multiple bookings, but each booking will be having only one passenger. (many-to-one)

**Passengers**: Although one traveller may make numerous reservations, each booking only belongs to one passenger. (one-to-many).

**Flights**: A flight can be associated with many bookings, and each booking can have only one flight. (one-to-many).

**Luggage**: Each person in the flight has multiple luggage and each luggage is tagged to only one person. (one-to-many).

**Cancellation**: One passenger can have multiple cancellations, but each cancellation is associated with only one passenger (one-to-many).

