Project Report: Airline Reservation System

1. Introduction

The Airline Reservation System is a structured database management project developed using MySQL. It simulates real-time airline booking operations such as reserving and cancelling flight seats. The system manages flight details, customer information, seat availability, and booking records efficiently.

2. Abstract

This project illustrates the use of relational database design. It features interconnected tables for flights, customers, seats, and bookings. Stored procedures handle booking and cancellation, while triggers maintain seat status automatically. The system supports smooth operations with validation and reporting.

3. Tools Used

- MySQL Workbench
- SQL Language (DDL, DML, Triggers, Stored Procedures)
- Data Normalization Techniques

4. Steps Involved in Building the Project

- Created relational tables with constraints
- Inserted sample data
- Wrote stored procedures for booking
- Applied triggers for seat updates
- Used join queries for detailed reports

5. Conclusion

The Airline Reservation System demonstrates database principles and SQL automation tools. It ensures data accuracy and a reliable booking workflow. This project models an efficient system suitable for airline operations using SQL programming.