OOP PROJECT:

Synopsis:

We are planning to implement an Airport Management database, which will assist us in efficiently managing airport and airline information. The project will involve the creation of a user interface using SDL (Simple DirectMedia Layer). Our database will encompass vital details, including airline names, specifications, airport names, terminals, runways, and aircraft types.

The project comprises several classes to facilitate the organization of information:

1. Airline:

• This class will store information such as airline ID, airline name, contact person's name, phone number, email address, headquarters country, and city.

2. Flights:

• This class will store data related to flights, including flight ID, flight name, departure time, flight status, tail number, Runway ID (from a derived class), Terminal ID (from a derived class), departure and arrival destinations, Gate ID (derived), flight type also it tells whether the flight is international or domestic.

3. Runway:

• This class will include the runway ID and runway number.

4. Terminal:

• This class will consist of terminal ID and terminal number.

5. Gate:

• This class will hold Gate Number and Gate IDs.

6. Airports:

• This class will store airport-related information, such as airport ID, airport name, country, and city.

7. Aircraft:

• This class will define aircraft types, aircraft type IDs, capacity, and the associated airline for each aircraft.

8- Pilot:

• This class will hold the information about the pilot, such as Pilot's license number, name, Id card number, phone number, email address and residential address.

This project aims to streamline airport and airline data management, making it more organized and accessible for various purposes, including flight scheduling, passenger services, and operational monitoring.