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Title: Coursework 2 airline management system review

Part 1

I independently crafted the airline management system, drawing inspiration from my passion for travel and aeroplanes. Opting for a design that genuinely excited me ensured that the process of creating and designing the management system was both engaging and straightforward. This approach made implementing and establishing a database more enjoyable for me.

In coursework 1, I learned the importance of planning the database, particularly through crafting the Entity-Relationship Diagram (ERD) and the Physical Model. The ERD provided a visual roadmap for organising attributes and establishing entity connections using cardinalities, crucial for maintaining order within my airline management system. The physical data model played a vital role in realising the actual database, guiding decisions on data types like Varchar (50), bool, and DATE, facilitating smooth table creation in coursework
2.

In coursework 2, while creating tables using SQL was straightforward, inserting data posed challenges. Data Definition Language (DDL) statements like Alter and Drop allow modifications or rectifying errors in the database structure, allowing implementation of necessary changes such as dropping tables and columns.

Challenges were determining appropriate cardinality, especially regarding boarding passes,
where balancing multiple passes for one person with one pass for one person required careful consideration. In the physical model, I initially hesitated about connecting all foreign keys (FKs) but feedback clarified the necessity, enhancing my understanding of FK connections. Coursework 2 presented additional challenges, like assigning multiple flight IDs for a family of five. Adjusting the primary key to an index resolved this issue, ensuring proper linkage. Similar challenges arose with seat IDs. Looking ahead, I see room for improvement, particularly in planning. Designating a separate section for flight IDs within seat IDs could enhance clarity and functionality, accommodating scenarios where multiple passengers share the same seat on different flights.