

Travel Agency Database:

1. Is the ability to model superclass/subclass relationships likely to be important in an agency environment such as Paradise Tours and Travels? Why or why not?

Super-sub class relationships prove to be useful in modeling the database, as many entities are comprised of classifications. Entities like employee, job, and customer classification are simplified by the extended relational model that includes super-sub classes, so it is important for this domain.

2. Can you think of 5 more business rules (other than the one explicitly described above) that are likely to be used in a travel agency environment? Add your rules to the above requirement to be implemented.

The branch contains details related to its location

An aide position exists. Aides have a work for relationship with a manager or salesperson. Both managers and salespeople may have aides, and an aide may work for multiple partners. This relationship is optional and does not have to exist for every manager or aide entity.

A gift card should have a gift card number, to be able to track the amount of each card in the database, and this will be a key attribute.

All contact names are tracked in a central table agnostic of customer / employee relation creating a name supertable for all human entities to come off of.

Receptionist employees have manager employees represented by a foreign key.

3. Justify using a Relational DBMS like Oracle for this project.

Because The database is being used for a travel agency's customers and employees, we want a relational schema-based database. This allows the info to be easily displayed into tables and rows. From an employee view, this allows easier access to customer records, or employee records, depending on their specific role and department. This differs from non-relational databases, where the data is stored in separate objects and documents. Oracle DBMS works for this project, as it requires and prefers this third normalized form version of the travel db.

Assumptions:

- Detail attributes will store multiple values, and may contain relational data to other entities. Several of these attributes are not expanded upon by the assignment specification, so currently they serve as abstract catch-alls for additional information.
- A package may include multiple hotel bookings, and a hotel may be booked under many packages.
- Type is multivalued for the case where a split transaction occurs, where cash and a gift card is used
- Types multi-value can also be used in the situation where multiple gift cards are used.
- Customer ID should be the only key attribute per customer, as the other attributes can share values between different accounts.
- Although a customer with a membership will have their unique customer ID, a membership ID will be made a key attribute as well.
- Salesperson type, internet or floor, is disjoint, a salesperson is either one or the other.