

Derived Attributes

Reservation Table:

Total rental price is a derived attribute that comprises the sum of prices for the rental period and stored for history purposes as price_history. While deposit and balance are derived from the price_history at the time of rental as the total rental price can vary from time to time

Review Table:

top_review attribute is derived from the COUNT OF of likes for a review.

Villa Table:

age and price_today is derived from the con_year and the Price Table respectively.

Composite Attributes:

Person Table:

cellphone comprises of country code , area code and phone_number from the Phone Table.

User Table:

DoB is a DATE field comprising of the day , month and year of the user

Reservation Table:

start_date and end_date are TIMESTAMPS which comprise day , month , year, hour , minute and second of day .This allows for CHECKS to figure out if the user leaves before 12pm.

Inspection Table:

inspection_date is a DATE field comprising of day, month and year

Log Table:

date_added and date_deleted are TIMESTAMPS which comprise day , month , year, hour , minute and second of day .

Misc.

I would have implemented the Log table differently using Triggers since this is a better approach and allows more flexibility - but right now only the owner can generate a log. There is no way to show Triggers in an EERD so I have just designed it for the owner to generate it.

Triggers may be applied towards the pricing calculations and coupon expiry as well - but once again there is no way to show this in the ERD.