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11/15/2017

Project ERD/Schema/3NF description

The PAntonio Hotel System has been normalized to be in 3NF. Our team went through all the requirements for 1NF, 2NF, and 3NF to be sure of this. 1NF only required that there are primary keys to differentiate data. 2NF must meet the requirements for 1NF while also keeping the related attributes only related to the whole key and not partial keys. There is one composite key in our database made up of RoomID and BuildingID, but the other attributes are not functionally dependent on either of those. For 3NF we know that we need some data to look at to make sure there are no transitive functional dependencies, but we have taken some steps to make sure non-key columns don’t determine other non-key columns. There is separate table for employee telephone numbers and customer phone numbers since they are both allowed to have more than one telephone number. We also separated the maintenance needs into a separate relation.



