Real Estate Database Requirements

1. The intended user: staff in a real estate company which sells homes. Clients of this database will need to browse, insert, update, and delete home entries to keep their business well organized.
2. The database needs to include the following classes:
   1. Home (including various features about the home)
   2. Price (including the market price, bid price, and last price)
   3. Property Owner (including the name, contact phone number, and address)
   4. Buyer (including the name, contact phone number, and address)
   5. Agent (including the name, contact phone number, and address)
   6. Property Status (types: active, contingent, pending, sold, and coming soon)
3. Home features:
   1. Main features:
      1. Home type
      2. Location
      3. Number of beds & baths
      4. Interior livable area
   2. Other features:
      1. Parking
      2. Heating
      3. Cooling
      4. Year built
      5. Lot
      6. Price/sqft
      7. View
4. Home Feature description
   1. Price needs to be positive integers and in dollars.
   2. Number of bedrooms needs to be positive integers starting from 1 to 5 and more. Number of bathrooms grows from 1 to 5 and more but allows 0.5 to exits.
   3. Livable area and lot need to be positive integers and in square feet.
   4. Location of the house needs to be standard addresses which include street number, street name, city name, and postal code.
   5. Home types needs to be one of the following options: houses, manufactured, condos/co-ops, multi-family, apartments, lots/land, townhouses.
   6. Parking spaces are positive integers.
   7. Year built are positive integers which have four digits.
   8. Price/sqft needs to be in positive integers and in dollars.
   9. View of the homes needs to be one of the following options: city, park, mountain, and water.
5. Real Estate Business Rules
   1. Each home is linked to multiple owners and buyers.
   2. Each home can have only one price for each price type and only one property status.
   3. Except for view and property owner, which have multiple values, all the other features can have only one value.
   4. The interior livable area should be smaller than or equal to lot.
   5. Lot and view are optional features that can be left unfilled.
   6. Owners and buyers can leave their home address unfilled, but agents have to fill out their home addresses.