**Logical Data Requirements**

Data Requirements

* The database will store buyers along with their name and unique ID number.
* A buyer has preferences that are uniquely identified by a preference ID number.
* Preferences are further described by their type and can also be broken down into different categories such as, a “yes or no” preference, a “value” preference, and a “minimum maximum" preference.
* A buyer can tour a house. Tours have a date and time.
* Buyers can contact an agent and provide their phone number, email, and a message.
* Agents are tied to the property the list.
* A name, email, phone number, and employment agency are all kept track of regarding an agent.
* When an agent lists a property, the price, date listed, status, and the agent themselves are all included.
* Agents can also post open house events, which are tied to the house the event is for. Open houses include a date and time.
* A property can consist of a piece of land, a house, or both. The database stores the address (house number, street name, city, state, and zip code), distance to city limits, property ID, and utilities of a property.
* A piece of land has characteristics such as acreage, terrain, and a unique land ID number.
* A house includes information about the existence of a basement or garage, the number of stories, the number of bedrooms, the number of bathrooms, the year it was built, the square footage, and a house ID number.
* An inspection company makes a report when they inspect houses. The database stores the name, phone number, email, and company ID number of the inspection company.
* Properties exist in neighborhoods, which include the city where it’s located and the name of the neighborhood.
* HOAs are tied to a neighborhood. HOAs may have rules, which include the name of the rule and a short description of it.
* HOAs may also have fees. Fees are described by the name of the service (reason for the expense), amount, and time collected.
* Properties also exist in a school district. The database stores the ID number and name of the school district.
* School districts can be further broken down into elementary, middle, and high school.

Functional Requirements

* Users can enter their preferences for a property.
* Users can view properties that match with the maximum number of preferences.
* Users can tour a house.
* Users can view an inspection report for a house if one is provided.
* Users can view information about a property’s HOA if applicable.
* Users can view information about a property’s neighborhood if applicable.
* Users can view information about a property’s school district if applicable.
* Users can contact the agents associated with a listed property and provide their phone number, email, and a message.
* Agents can create a new listing for a property.
* Agents can delete a listing of a property.
* Agents can post open house events for users to view.
* Agents can remove open house events.