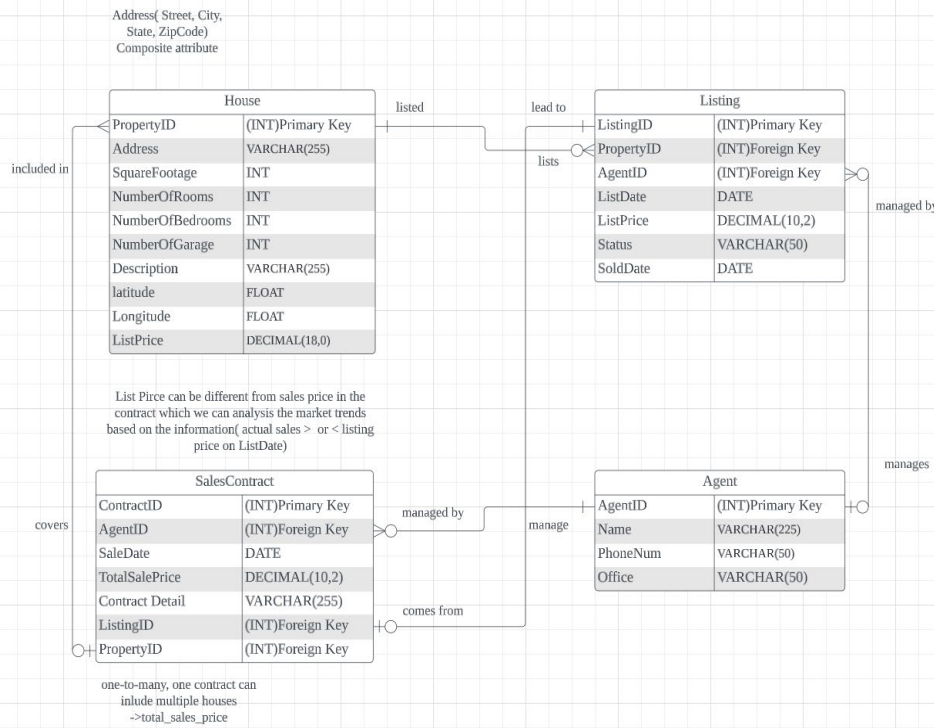


Database Group Project House Sales ER Diagram



Relationships

- House - Listing**
A house can have zero or many listings over time (if it is re-listed), A listing can list one house.
- Agent - Listing**
An agent can manage zero or many listings, and a listing is managed by zero or one agent.
- SalesContract - Agent**
An SalesContract can be managed by one agent, and an agent can manage many SalesContract.
- House - SalesContract**
A house can be included in zero or one SalesContract, a SalesContract can covers many houses.
- Listing - SalesContract**
A listing leads to zero or one sales contract, a contract comes from one listing.

1. House - Listing: A house can have zero or many listings over time if it is re-listed. This is a one-to-many relationship since one house (identified by "PropertyID") can lead to multiple listings (identified by "ListingID"), but each listing is for one specific house.

2. Agent - Listing: An agent can manage zero or many listings, and a listing is managed by zero or one agent. This is a zero or one-to-many relationship, which is established by the foreign key "AgentID" in the Listing table referencing the primary key "AgentID" in the Agent table. It allows for the possibility that a listing might not have an agent assigned (hence zero or one).

3. **SalesContract - Agent:** A SalesContract can be managed by one agent, and an agent can manage many SalesContracts. This is a many-to-one relationship, indicated by the "AgentID" in the SalesContract table.

4. **House - SalesContract:** A house can be included in zero or one SalesContract, while a SalesContract can cover many houses. This is a one-to-many relationship, as seen by the "PropertyID" in the SalesContract table, which allows a SalesContract to be linked to multiple houses (though the diagram seems to suggest a one-to-zero/one relationship, which might be a discrepancy needing clarification).

5. **Listing - SalesContract:** A listing leads to zero or one sales contract, and a contract comes from one listing. This is a one-to-zero/one relationship. It's defined by the "ListingID" in the SalesContract table, which means that each sales contract is directly related to a single listing, but not all listings result in a sales contract.