

Machine Learning

Database Schema - Challenge

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Task #1: Design a Schema for House Prediction

- Design a MySQL database schema to store predicting house prices.
- We mainly store the transaction informations for the sales of the houses.
- There are several key information about a house such as number of bedrooms, total square footage and the location

```
CREATE TABLE HouseInfo (  
    HouseID INT PRIMARY KEY AUTO_INCREMENT,  
    NumOfBedrooms INT,  
    NumOfBathrooms FLOAT,  
    SquareFootage INT,  
    ZIPCode INT,  
    FOREIGN KEY (ZIPCode) REFERENCES Location(ZIPCode)  
);
```

```
CREATE TABLE Location (  
    ZIPCode INT PRIMARY KEY,  
    City VARCHAR(50),  
    State VARCHAR(50)  
);
```

```
CREATE TABLE SalesTransactions (  
    TransactionID INT PRIMARY KEY AUTO_INCREMENT,  
    HouseID INT,  
    SaleDate DATE,  
    SalePrice INT,  
    FOREIGN KEY (HouseID) REFERENCES HouseInfo(HouseID)  
);
```

Task #2: Design a Schema for **Metadata**

- When we record data in complex environment, there are many metadata that we should store about the data and can later play a critical role in training
- For example
 - Person ID
 - Don't use for both train/val
 - Gender, Camera Location, etc
- Assume one of the tasks is DC for **Hands-on-wheel** task
- Brainstorm on all metadata
 - Design schema for the metadata
- Tip: utilize your DC scenarios & variables to derive the meta



“Acquire knowledge and impart it to the people.”

“Seek knowledge from the Cradle to the Grave.”

