Total Assumption

- Each car model can have many design, but they share a model name.
- Only finished design is stored in data base
- When a design for a model has changed, all emission and safety should be reassessed.
- But when a emission/safety report change, it may not change design.
- Advertising will be generated based on the data in this database, but not directly.
- We assume we know the emission standards from government. Therefor there is no need to store legislation detail in the database, so as safety standard.

Design Assumption

- Manufacturer is a strong entity because it can exist by itself. Even when a design's model can change, this manufacturer may still produce for other model.
- We assume when make in country change, this may also affect the design because of the possible change in production process.
- We must have reasons for changing design.

Emission Assumption

- A design for a car can have many emission report due to the possible change in emission standards, as well as change in manufacturer.
- Government recommends is cleared.
- If we know the data for 100km and tank capacity, we can calculate and generate the data for the whole fuel tank
- We must have reasons for do this emission test.
- A QR code is less than 256kb. So it can be stores in Long Varbinary

Safety Assumption

- Safety standards has a expire time
- All categories are weak entity as they must exist with the safety report
- A design may also have different safety Report due to the possible change in safety standards, or just expire
- Safety Standard's category is a strong entity because this standards and shape is regulated by the legislation, so it can exist by itself
- We must have reasons for generating the safety report.

- Since there is no rank, level for the individual item under each category, we store it as varchar(45) for maximum convenience