**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