

Assumptions:

- A customer has at least 1 car and can have multiple cars
- A car is owned by 1 customer and only 1 customer
- A Policy can cover multiple cars, but a car can only be covered by one policy, and all cars are covered.
- A customer can have multiple policies and a policies can also be signed by multiple customers, and a customer has at least one policy and a policy were signed by at least one customer
- A claim is made based on the car and a customer (car owner), a claim must be filled by a customer and with a car, but there can be customers/cars that never make any claim.

Entities:

- CUSTOMER(SSN, First, MI, Last)
- CAR(VIN, color, make, model, year)
- POLICY(ID, CurrExpDate, StartingDate, Deductible)
- CLAIM(Date, AmountOfDamage) – Weak entity

Relationships:

- Insure<CAR, CUSTOMER> 1:M total/total
- Cover<POLICY, CAR> 1:M total/total
- OWN<CUSTOMER, POLICY> M:N total/total
- CREATE<CUSTOMER, CLAIM, CAR> 1:M:N partial/total/partial

Schemas:

- CUSTOMER<SSN, First, MI, Last>
- CAR<VIN, SSN, color, make, model, year>
 - o FK(SSN) -> CUSTOMER(SSN)
- POLICY<ID, VIN, SSN, CurrExpDate, StaringDate, Deductible>
 - o FK(VIN)-> CAR(VIN)
 - o FK(SSN) -> CUSTOMER(SSN)
- CLAIM<Date, AmountOfDamage, SSN, VIN>
 - o FK(VIN) -> CAR(VIN)
 - o FK(SSN) -> CUSTOMER(SSN)