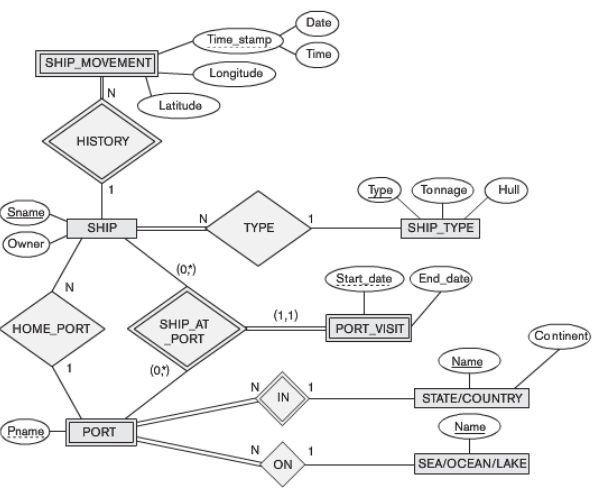
**Assignment – 3**

1. The following figure shows an ER schema for a database that can be used to keep track of transport ships and their locations for maritime authorities. Map this schema into a relational schema and specify all primary keys and foreign keys.

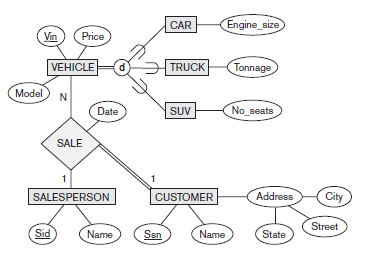
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1. Notown Records has decided to store information about musicians who perform on its albums, as well as other company data, in a database.

* Each musician that records at Notown has an SSN, a name, an address, and a phone number. Poorly paid musicians often share the same address, and no address has more than one phone.
* Each instrument used in songs recorded at Notown has a name (e.g. guitar, synthesizer, flute) and a musical key (e.g. C, B-flat, E-flat).
* Each album recorded on the Notown label has a title, a copyright date, a format (e.g. CD or MC), and an album identifier.
* Each song recorded at Notown has a title and an author.
* Each musician may play several instruments, and a given instrument may be played by several musicians.
* Each album has a number of songs on it, but no song may appear on more than one album.
* Each song is performed by one or more musicians, and a musician may perform a number of songs.
* Each album has exactly one musician who acts as its producer. A musician may produce several albums.

Draw the ER diagram for the database design. Convert the ER diagram to relations.

1. Consider the following EER diagram for a car dealer. Map the EER schema into a set of relations. For the VEHICLE to CAR/TRUCK/SUV generalization, consider the four options (8A, 8B, 8C and 8D) and show the relational schema design under each of those options.

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