BEFORE DIVING INTO REAL DATABASES OR QUERY LANGUAGES YOU NEED TO BE ABLE TO THINK OF DATA IN A LOGICAL MANNER

AND VISUALIZE AND IMAGINE THE STRUCTURE OF THE DATA BEFORE DESIGNING PERMANENT STORAGE FOR IT

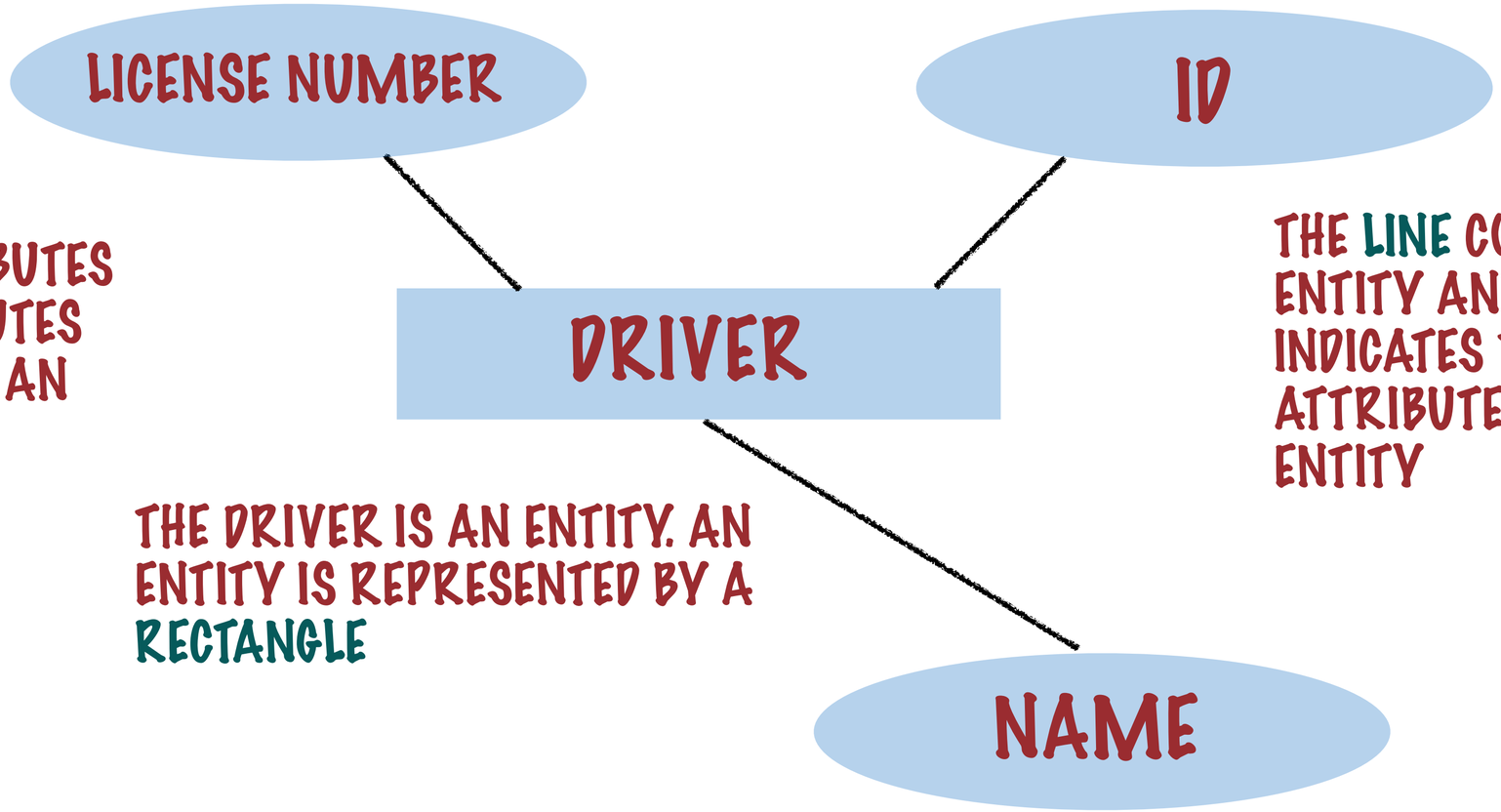
THE E-R MODEL

ENTITY

RELATIONSHIP - MORE ABOUT THIS LATER

A WAY TO USE DIAGRAMS TO LOGICALLY REPRESENT DATA

THE E-R MODEL

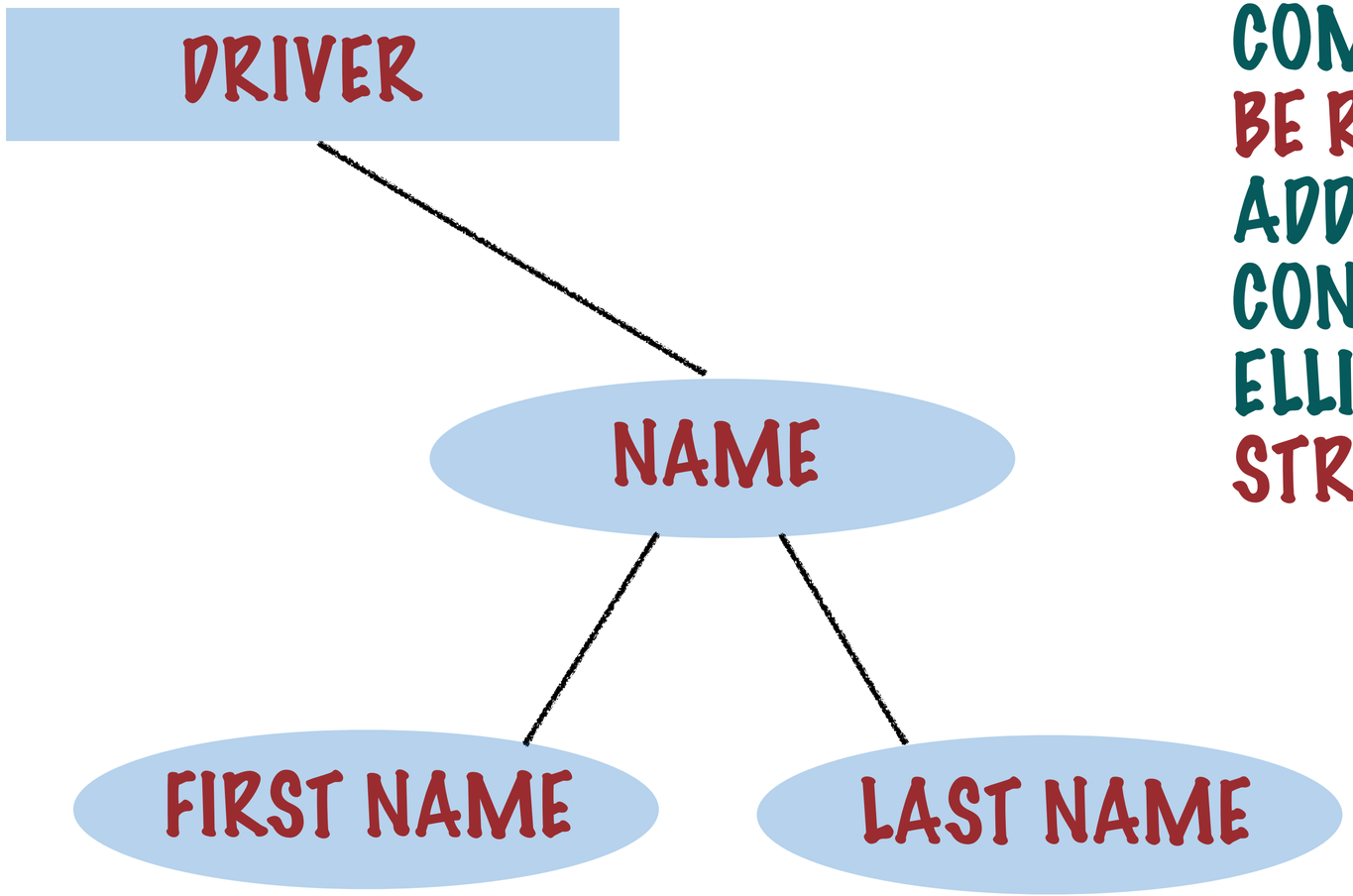


THESE ARE THE ATTRIBUTES OF A DRIVER, ATTRIBUTES ARE REPRESENTED BY AN ELLIPSE

THE LINE CONNECTING THE ENTITY AND THE ATTRIBUTES INDICATES THAT THE ATTRIBUTES ARE FOR THAT ENTITY

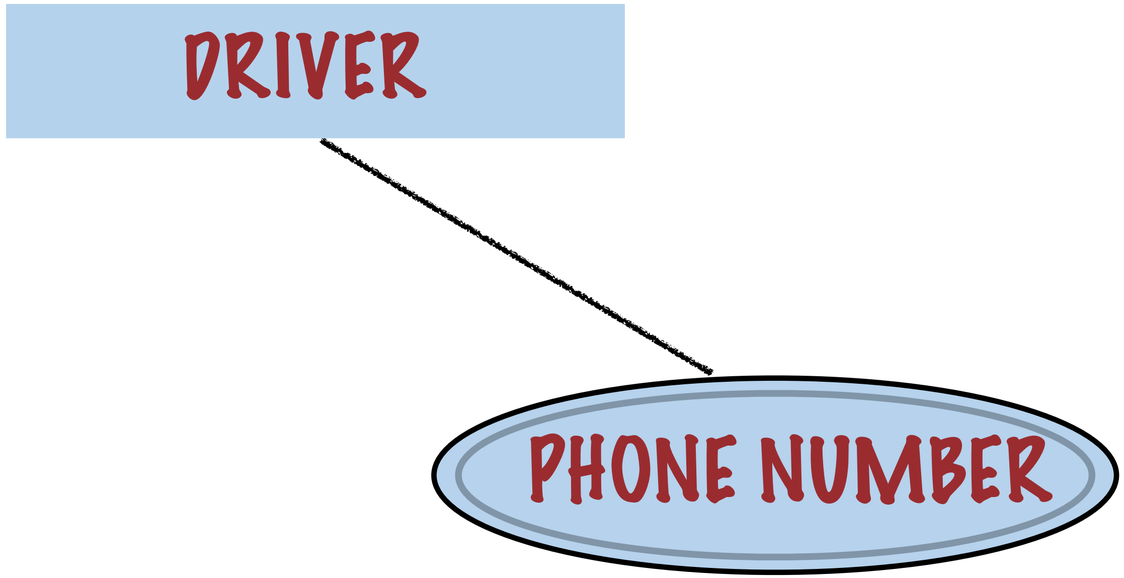
THE DRIVER IS AN ENTITY. AN ENTITY IS REPRESENTED BY A RECTANGLE

THE E-R MODEL



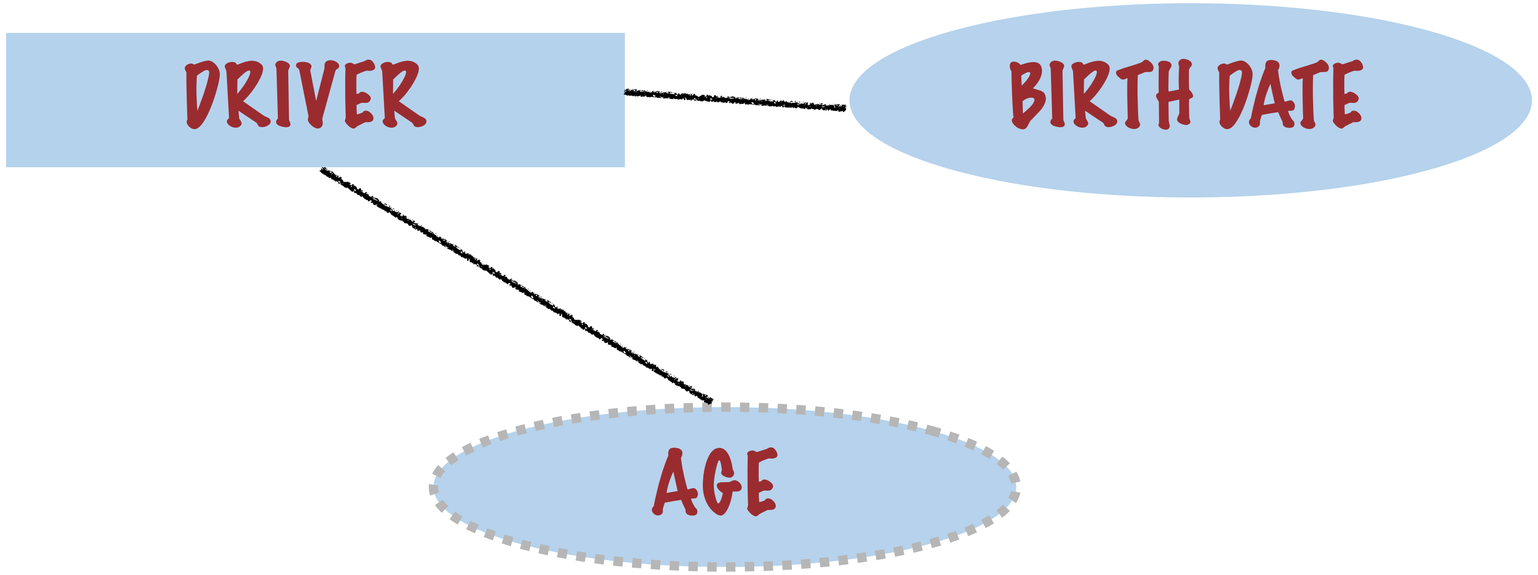
COMPOSITE ATTRIBUTES CAN BE REPRESENTED WITH ADDITIONAL ELLIPSES WHICH CONNECT WITH THE ORIGINAL ELLIPSE FORMING A TREE-LIKE STRUCTURE

THE E-R MODEL



MULTI-VALUED ATTRIBUTES CAN BE REPRESENTED WITH A DOUBLE ELLIPSE

THE E-R MODEL



DERIVED ATTRIBUTES CAN BE REPRESENTED WITH A DASHED OUTLINE OF THE ELLIPSE