

In general, the representation of entities by means of a relational model is straightforward. We begin by defining a relation for each entity. The name of the relation is the name of the entity, and the attributes of the relation are the attributes of the entity. Then we will examine each relation according to a normalization criteria. It may or may not be necessary to change this initial design.

The example in this [figure](#) is an entity. The CUSTOMER entity contains the following attributes: CustNumber, CustName, Address, City, State, Zip, ContactName, and phone Number. To represent this entity with a relation, we define a relation for the entity and place the attributes in it as columns in the relation. If we know from the data model which attribute identifies this entity, that attribute will become the key of the relation. Otherwise we must investigate the requirements to determine what attribute or attributes can identify an entity. In this case, we assume that CustNumber is the key, it being underlined.

THE ROLE OF NORMALIZATION During the requirements phase, the only stipulation placed on an entity is that it be important to the user. No attempt is made to determine whether the entity fits any of the criteria for normalization. Therefore, once a relation has been defined for an entity, it should be examined according to the normalization criteria.