

Cardinality Explanation Report

Manufacturer – Handgun cardinality;

The handgun is an entity that is produced by a manufacturer. Every handgun should have a manufacturer and a database can contain more than one handgun which is produced by the same manufacturer. So we can see the handguns which have the same manufacturerID. That means the same manufacturer produced those handguns.

Customer – Borrower cardinality;

Customers can be borrowers if they borrow a handgun. However, if a customer borrowed a handgun, the others cannot borrow that handgun. Customer is a borrower.

Borrower – Handgun cardinality;

Borrower borrows handgun. It keeps handgunID as a foreign key because of this relationship. We know that it has already a primary key (customerID) because of the “is a” relationship between customer.

Borrower – Room cardinality;

A borrower can use polygon's rooms but one borrower can use only one room at the same time. However, a room can be used more than once by borrowers at the same time. Borrowers use room. So borrowers keep roomID as a foreign key because of this relationship.

Handgun – Category cardinality;

Handgun has a category. Categories have a primary key (catName) and handguns keep that as a foreign key because of this relationship.

Employee- Worker and Room Officer cardinality;

Employee can be a room officer or a worker. We know that from the first report every worker and room officer have the same attributes with the employee entity. In addition to these attributes, workers have a role. We used specialization in here.

Room Officer – Room cardinality;

A room officer should be responsible for one or more rooms. Every room should have a room officer but a room cannot have different room officers. Room officers have roomID as a foreign key because of this relationship.