# 2.1. Rating

Rating is an important measure for a seller’s reputation. A user might want to know what rating a seller might have. A lot of websites now have rating system for sellers. For example, sellers on ebay can earn stars based on the number of ratings they get1. The rating system in this database can be modeled by the relationship, *User sells Items*, as shown in Figure 1. The application quality entity Rating is created with primary key ratingid, a scale based non-key attribute “value” and a textual non-key attribute “explanation.”

Macintosh HD:Users:Eros:Downloads:rating (1).png

Figure 1

Each occurrence of the relationship *User sells Items* has a rating value. Since the *User sells Items* is a many-to-many relationship, the primary key of the gerund is the concatenation of the keys of *User* and *Items*. Then a new relationship ‘*User sells Items’ has ratings* has been created. The “value” is a scale attribute that can be selected from 1 star to 5 stars. The “explanation” is a textual attribute that allows a user to explain why one gives such scaled-rating or any additional comments. A seller will also have an average rating showing on his/her profile. The average rating calculates the mean of each rating value then rounds to the nearest star scale.

## 2.2. Searching

On shopping website like Amazon2, a user might want to search for a series of specific items. This can be modeled by two kinds of relationships, *User search Items*, and *User choose Categories then search Items*, as shown in Figure 2.

Macintosh HD:Users:Eros:Downloads:search.pngFigure 2

If a user chooses to input keywords, the database will look for items that contains these keywords. A user can also choose certain categories or other filters first then input keywords to narrow down the results. Attributes in Items like name, description, brand, etc. shall be searchable.

Citation

1. "Feedback Scores, Stars, and Your Reputation." Feedback Scores, Stars, and Your Reputation. N.p., n.d. Web. 13 Sept. 2016.

2. "Amazon." Amazon. N.p., n.d. Web. 13 Sept. 2016.