## X.4. Registered Users

In order for Moogle to be successful, it will need a lot of features, but the most important part of the business is to have users that are able to buy, sell, bit, and rate in the items that are being displayed on the website. Users will be able to have all the benefits of the website when they register in the website by creating an account name, providing their personal information such as phone number, email, credit card information for purchases, and some other basic information for transactions to be processed correctly and thoroughly. Next, we are interested to design a database model in which all this information would be stored and be linked to purchases where the current user has his/her information correctly extracted from the database. We would have a one-to-many relationship between the account name and phone number, address, and credit card information because one account can have more than one phone number, address, and credit card on file. An ER diagram is posted below to have a better idea on how all of the information for the registered user will be linked.
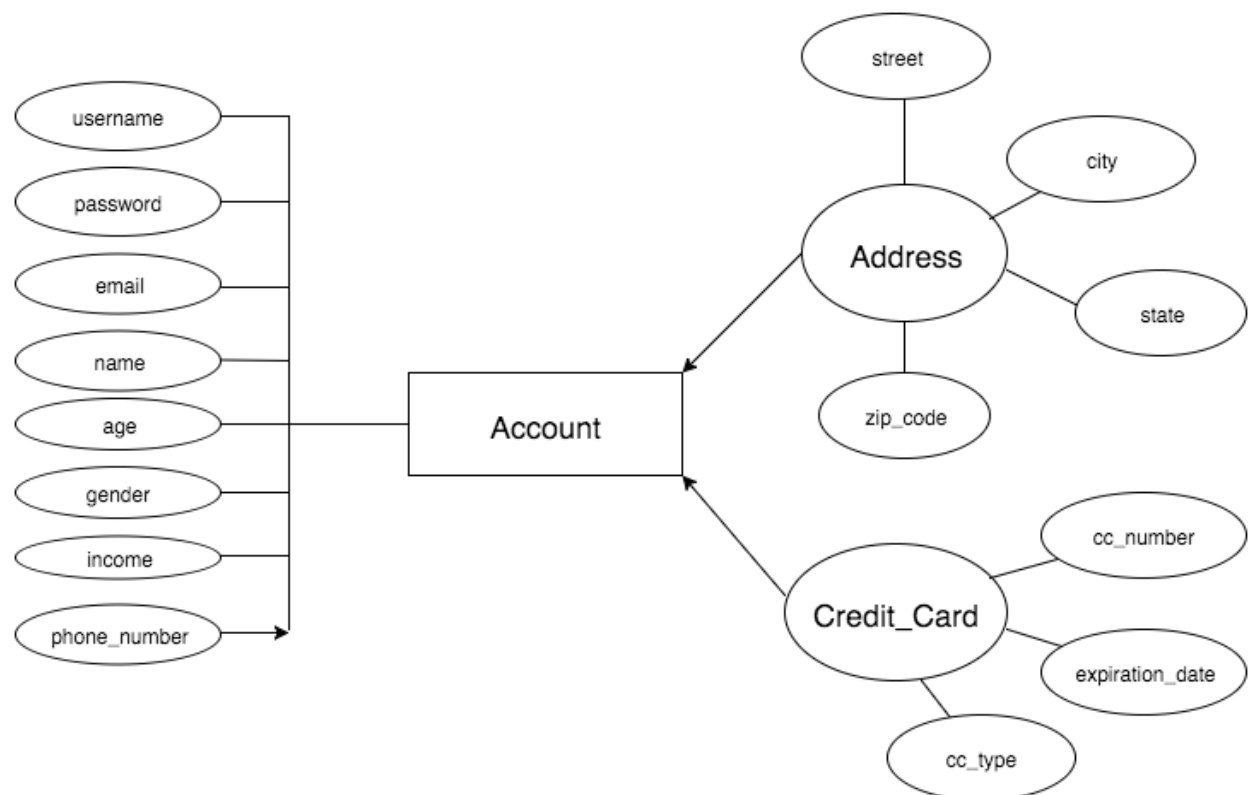
X.9. Bidding

We know that many websites have either sales or bidding, our goal for Moogle is to be versatile and incorporate both, sales and bidding. We would like to give the option to our customers not only to buy and item and perhaps be disappointed by the fact that it may be out of stock and they could not do anything about it, but also give them the opportunity to bid for an item they want and be able to bid as much as they want. Our main goal by incorporating this feature is to have a higher amount of people being registered and interested in a site that will be able to incorporate both methods of purchase. When adding this feature, there are also some restrictions in which will be placed for the bidders. For example, the supplier of the item will not be able to bid on his/her own item and counter-bids must be at least more than $2 than the previous bid. In the ER diagram posted below, we have bids as a relationship between registered users and sale items because a registered user is able to bid on an item that is for sale. The ER diagram is shown below.
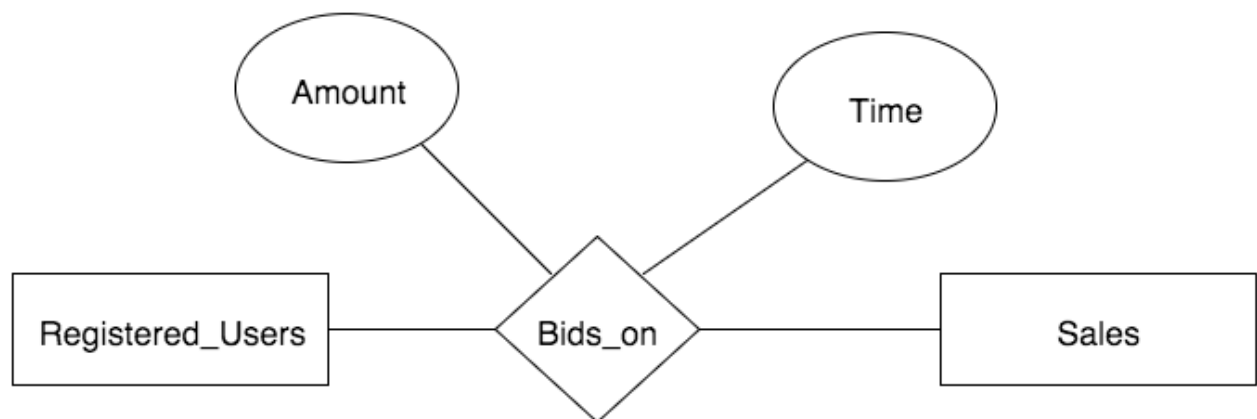
X.10. Orders and Sales Reports

At the end of every week, Moogle will generate orders and sales reports in order to understand how the business is doing and what items or categories are consumers purchasing the most off of. Orders and Sales reports both have the same attributes, they all include information about the user, summarizing where does the purchase leaves to in order to know the location and compare what items are most shipped to what place, method of payments, and other basic information about the user. We have generated an ER diagram for both of the reports, they are both shown below.