

**Candidate Keys:**

Account:

* Username
* Email
* Phone\_Number

Admin:

* Username
* SSN

User:

* Username
* User\_ID

Buyer:

* Username

Seller:

* Username

Seller-Posts:

* Listing\_ID

Listing:

* Listing\_ID

Listing-Photos:

* Listing\_ID, Photos

ProductCategory:

* Category\_ID

Review:

* Review\_ID
* Listing\_ID, Reviewer\_Username, Reviewee\_Username

Membership:

* Membership\_ID
* Username, End\_Date

MembershipType:

* Tier

**Functional Dependencies:**

Account:

* Username -> Password, Email, First\_Name, Last\_Name, Phone\_Number
* Email -> Username, Password, First\_Name, Last\_Name, Phone\_Number

Admin:

* Username -> SSN, Address, Salary
* SSN -> Username, Address, Salary

User:

* Username -> User\_ID, Gender, Registration\_Date
* User\_ID -> Username, Gender, Registration\_Date

Buyer:

* Username -> Username

Seller:

* Username -> Bio

Seller-Posts:

* Username, Listing\_ID -> Post\_Date
* Listing\_ID -> Username, Post\_Date

Listing:

* Listing\_ID -> Name, Description, Price, Category\_ID, Buyer\_Username, Buy\_Date

Listing-Photos:

* Listing\_ID, Photos -> Listing\_ID, Photos

ProductCategory:

* Category\_ID -> Category\_Name

Review:

* Review\_ID -> Review\_Text, Rating, Successful\_Transaction, Listing\_ID, Reviewer\_Username, Reviewee\_Username
* Listing\_ID, Reviewer\_Username, Reviewee\_Username -> Review\_ID, Review\_Text, Rating, Successful\_Transaction

Membership:

* Membership\_ID -> Username, End\_Date, Tier
* Username, End\_Date -> Membership\_ID, Tier

MembershipType:

* Tier -> Duration, Max\_Listings, Price

Team 7