Product [Item Number (PK), Seller Account (FK on Seller), Condition, Color, Category, Description, Weight, Brand, isSold]

Type 1 [Item Number (PK), Seller Account (FK on Seller), Condition, Color, Category, Description, Weight, Brand, isSold]

Type 1_Extra Attributes [Attribute Name (PK)]

Type 2 [Item Number (PK), Seller Account (FK on Seller), Condition, Color, Category, Description, Weight, Brand, isSold]

Type 2_Extra Attributes [Attribute Name (PK)]

Type 3 [Item Number (PK), Seller Account (FK on Seller), Condition, Color, Category, Description, Weight, Brand, isSold]

Type 3_Extra Attributes [Attribute Name (PK)]

Has A [Item Number (PK, FK on Product), Bid Number (PK, FK on Bid)]

Bid [Bid Number (PK), Bidder Account (FK on Buyer), Date]

AutoBidder [Bid Number (PK, FK on Bid), AB_ID, (PK, FK on Bid)]

Placed In [Bid Number (PK, FK on Bid), Auction Number (PK, FK on Auction)]

Auction [Auction Number (PK), Winner (FK on Buyer), Bid History, Current Price, Initial Price, Reserve Price, Time Remaining, End_Date, End_Time, Start_Date, Start_Time]

Auction_Creates_Seller [Auction Number (PK, FK on Auction), Email (PK, FK on End User), Username (PK, FK on Account)]

Wins [Auction Number (PK, FK on Auction), Email (PK, FK on End User), Username (PK, FK on Account)]

Bid_Creates_Buyer [Bid Number (PK, FK on Bid), Email (PK, FK on End User), Username (PK, FK on Account)]

Auction_ Removes_Customer Rep [Auction Number (PK, FK on Auction), Email (PK, FK on Customer Rep), Username (PK, FK on Account)]

Bid_Removes_Customer Rep [Bid Number (PK, FK on Bid), Email (PK, FK on Customer Rep), Username (PK, FK on Account)]

Sales Report [Email (PK, FK on Admin), Username (PK, FK on Account)]

Admin [Email (PK), Username (PK, FK on Account), Password, Phone, Address_Line1, Address_Line2, County, State, Zip Code, First_Name, Middle_Name, Last_Name, Age, Birthdate, Access Level, isActive, Last Seen]

Customer Rep [Email (PK), Username (PK, FK on Account), Password, Phone, Address_Line1, Address_Line2, County, State, Zip Code, First_Name, Middle_Name, Last_Name, Age, Birthdate, Access Level, isActive, Last Seen]

Admin_Creates_Customer Rep [Admin_Email (PK, FK on Admin), Admin_Username (PK, FK on Account), Customer Rep_Email (PK, FK on Customer Rep), Customer Rep_Username (PK, FK on Account)]

Asks [Customer Rep_Email (PK, FK on Customer Rep), Customer Rep_Username (PK, FK on Account), End User_Email (PK, FK on End User), End User_Username (PK, FK on Account), qID, Question, Answer]

Edits [Customer Rep_Email (PK, FK on Customer Rep), Customer Rep_Username (PK, FK on Account), End User_Email (PK, FK on End User), End User_Username (PK, FK on Account)]

End User [Email (PK), Username (PK, FK on Account), Password, Phone, Address_Line1, Address_Line2, County, State, Zip Code, First_Name, Middle_Name, Last_Name, Age, Birthdate, Access Level, isActive, Last Seen]

Buyer [Email (PK, FK on End User), Username (PK, FK on Account), Password, Phone, Address_Line1, Address_Line2, County, State, Zip Code, First_Name, Middle_Name, Last_Name, Age, Birthdate, Access Level, isActive, Last Seen]

Seller [Email (PK, FK on End User), Username (PK, FK on Account), Password, Phone, Address_Line1, Address_Line2, County, State, Zip Code, First_Name, Middle_Name, Last_Name, Age, Birthdate, Access Level, isActive, Last Seen]

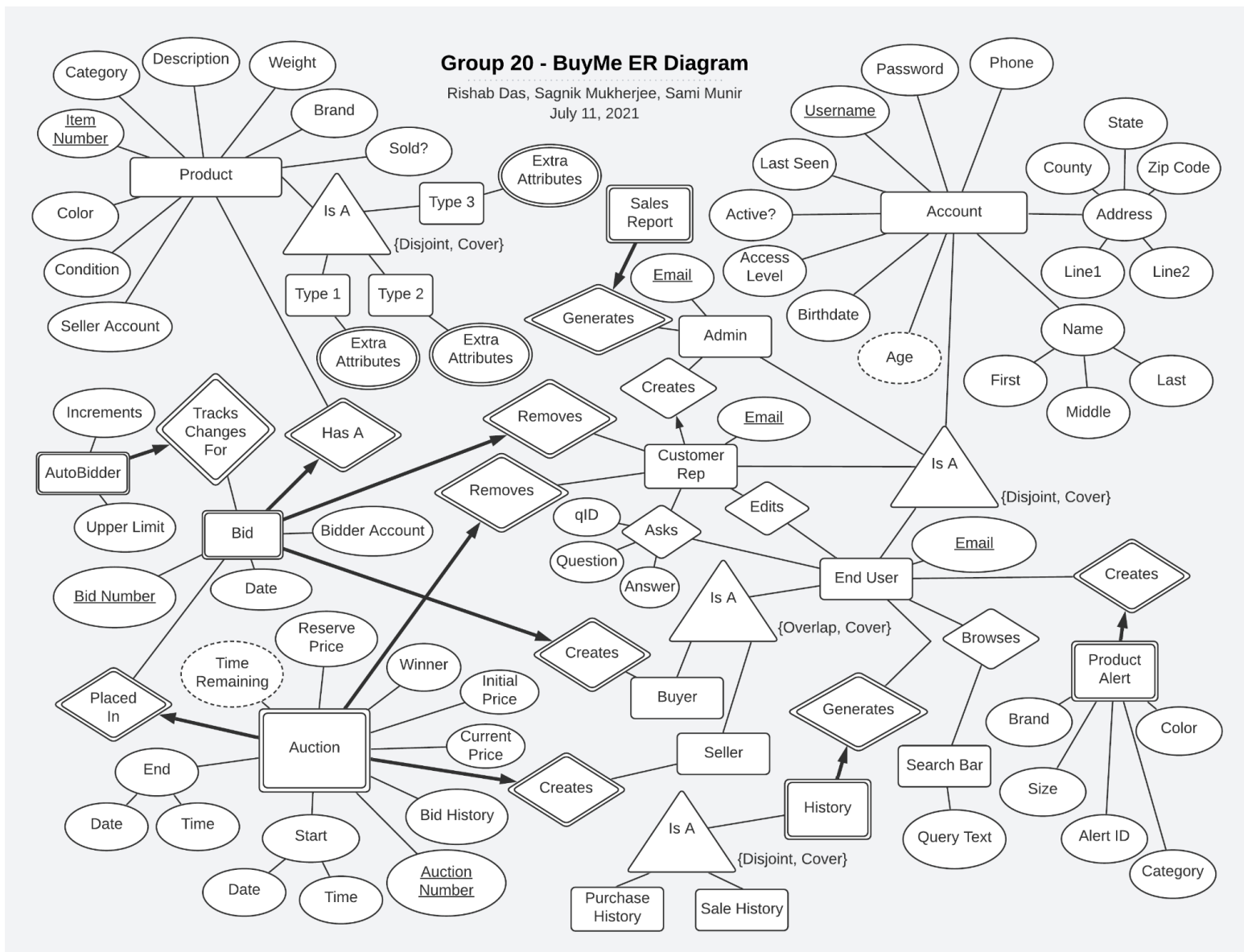History [Email (PK, FK on End User), Username (PK, FK on Account)]

Purchase History [Email (PK, FK on End User), Username (PK, FK on Account)]

Sale History [Email (PK, FK on End User), Username (PK, FK on Account)]

Product Alert [Alert ID (PK), Brand, Size, Category, Color]

End User_Creates_Product Alert [Alert ID (PK, FK on Product Alert), Email (PK, FK on End User), Username (PK, FK on Account)]
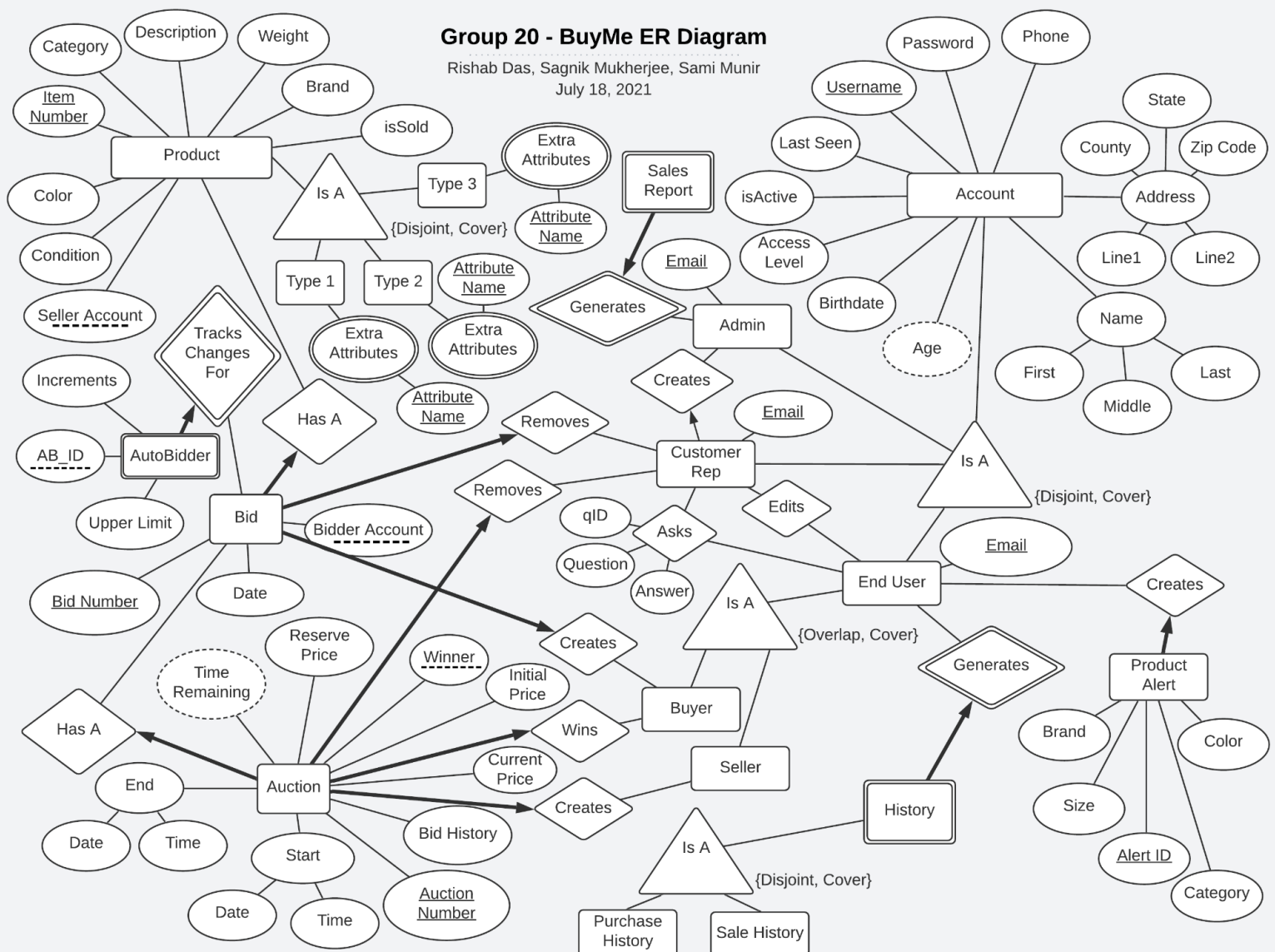
Account [Username (PK), Password, Phone, Address_Line1, Address_Line2, County, State, Zip Code, First_Name, Middle_Name, Last_Name, Age, Birthdate, Access Level, isActive, Last Seen]

Group 20 - BuyMe ER Diagram
Rishab Das, Sagnik Mukherjee, Sami Munir
July 11, 2021

(Original ER Diagram Iteration)

ER DIAGRAM CHANGE NOTES
- Change Seller Account to FK.
- Bidder Account to FK.
- add FK AB_ID to AutoBidder.
- Bid is Strong Entity and "Has A" is Strong.
- Auction is Strong Entity and "Placed In" is Strong.
- Product Alert is Strong Entity.
- all the "Creates/Removes" Relationships are Strong.
- Alert ID should be PK.
- add a "Wins" Relationship for Buyer to Auction (Many-to-One) (a Buyer might win Many Auctions but Auction has One Buyer as the Winner).
- change Winner to FK.
- add "Attribute Name" PK to the "Extra Attributes" multivalued attributes.
- change "Sold? "and "Active?" to isSold and isActive.
- remove Browses/Search Bar/Query Text.

Group 20 - BuyMe ER Diagram
Rishab Das, Sagnik Mukherjee, Sami Munir
July 18, 2021

(Current, updated version)