

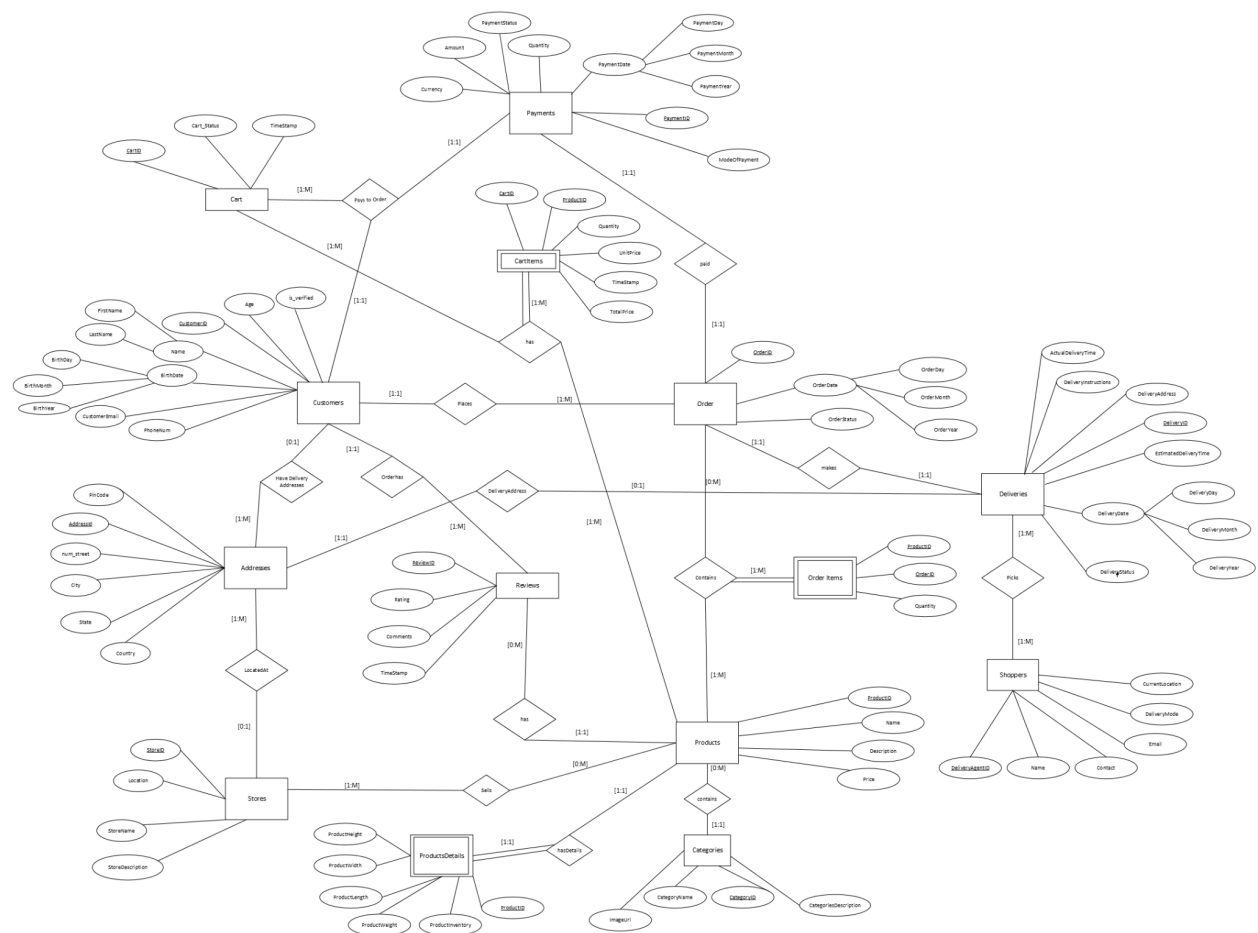
Course: INFO 579: SQL/NoSQL Databases for Data and Information Sciences

Group Project Details

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ER model of the InstaCart Application:



ER to Relational Model of the InstaCart Application:

- CUSTOMERS (CustomerID, FirstName, LastName, CustomerEmail, PhoneNum, Age, is_verified, BirthDay, BirthMonth, BirthYear)

- CUSTOMERCARTPAY(CustomerID, PaymentID, CartID)
 - Foreign Key (CustomerID) references CUSTOMERS
 - Foreign Key (PaymentID) references PAYMENTS
 - Foreign Key (CartID) references CART
- CART (CartID, Cart_Status, Timestamp, CustomerID)
 - Foreign Key (CustomerID) references CUSTOMERS
- CARTITEMS (CartID, ProductID, Quantity, UnitPrice, Timestamp, TotalPrice)
 - Foreign Key (CartID) references CART
 - Foreign Key (ProductID) references PRODUCTS
- ORDER (OrderID, OrderDay, OrderMonth, OrderYear, OrderStatus, OrderYear, PaymentID, DeliveriesID, CustomerID)
 - Foreign Key (PaymentID) references PAYMENTS
 - Foreign Key (DeliveriesID) references DELIVERIES
 - Foreign Key (CustomerID) references CUSTOMERS
- ORDERITEMS (OrderID, ProductID, Quantity)
 - Foreign Key (OrderID) references ORDERS
 - Foreign Key (ProductID) references PRODUCTS
- PAYMENTS (PaymentID, Amount, Currency, PaymentDay, PaymentMonth, PaymentYear, Quantity, ModeOfPayment, PaymentMethod, OrderID)
 - Foreign Key (OrderID) references ORDERS
- DELIVERIES (DeliveryID, ActualDeliveryTime, EstimatedDeliveryTime, DeliveryDate, DeliveryMonth, DeliveryYear, DeliveryInstructions, DeliveryAddress, DeliveryStatus, OrderID, AddressID)
 - Foreign Key (OrderID) references ORDERS
 - Foreign Key (AddressID) references ADDRESSES
- SHOPPERS (DeliveryAgentID, Name, Contact, CurrentLocation, DeliveryMode, Email)
- DELIVERYSHOPPER(DeliveryID, DeliveryAgentID)
 - Foreign Key(DeliveryID) references DELIVERIES
 - Foreign Key(DeliveryAgentID) references SHOPPERS
- PRODUCTS (ProductID, Name, Description, Price, CategoryID)
 - Foreign Key (CategoryID) references CATEGORIES
- PRODUCTSTORE(ProductID, StoreID)
 - Foreign Key (ProductID) references PRODUCT
 - Foreign Key (StoreID) references STORES

- **PRODUCTDETAILS** (ProductID, ProductWeight, ProductHeight, ProductLength, ProductDiameter, ProductInventory)
 - ForeignKey (ProductID) references PRODUCTS
- **STORES** (StoreID, Location, StoreName, StoreDescription, AddressID)
 - Foreign Key (AddressID) references ADDRESSES
- **CATEGORIES** (CategoryID, CategoryName, CategoryDescription, ImageUrl)
- **ADDRESSES** (AddressID, PinCode, Num_street, City, State, Country)
- **CUSTOMERADDRESS**(CustomerID,AddressID)
 - Foreign Key (CustomerID) references CUSTOMERS
 - Foreign Key (AddressID) references ADDRESSES
- **REVIEWS** (ReviewID, ProductID, CustomerID, Rating, Comments, Timestamp)
 - Foreign Key (ProductID) references PRODUCTS
 - Foreign Key (CustomerID) references CUSTOMERS

Assumptions and notes on the ER model are subject to change:

1. A chain of stores will have multiple addresses; hence we have considered it as one store name will have multiple addresses.
2. Each cart corresponds to exactly one payment.
3. Every payment corresponds to one order. Not considering refunds, or multiple payments.
4. Each delivery has exactly one delivery address.
5. Each product will fall under many cart, which is captured through carditem entity