Assignment 1 - EER model
Video Rental Company

Group Members:
Gonzalaz, Ryan Henry
Qureshi, Junaid
Lam, Nancy
Mahendravada, Anvesh
Vu, Nicholas T

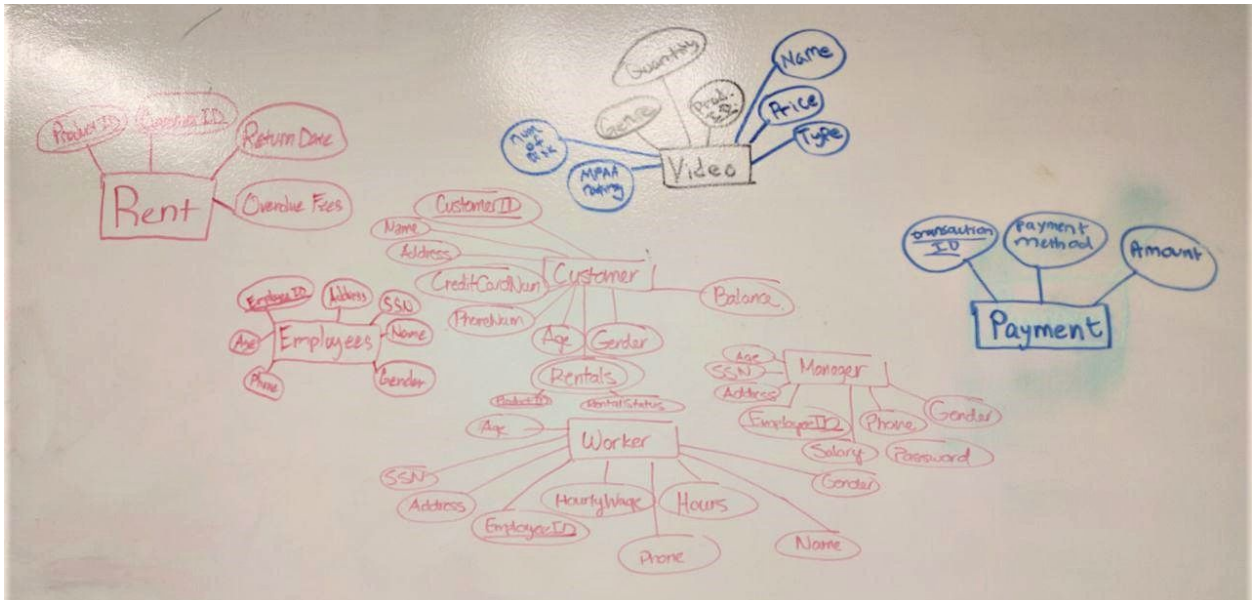
1) 1-paragraph description (plain English) of what your database should be able to do. Include in this description the type of data you plan to store, how they should be used, who has access to it, and any other useful information concerning your database. The question you are trying to answer is: *how is my database going to help the company that uses it*?

   The database will be able to track all of the videos, customer's, transactions, and employees of the store. For the video and employee information, the only person with access would be the manager. The employees won't be able to access the database directly. Ideally this database will be able to ease inventory management and log all transactions.

2) Model of single entities, including all attributes. Specify composite, multivalued and key attributes.

   Video (Super) {Genre, Quantity, ProductID, Price, NumDiscs, Name, MPAARating, Type}
   Rent {ProductID, CustomerID, ReturnDate, OverdueFees}
   Customer {CustomerID, Name, Address, CreditCardNum, PhoneNum, Age, Gender, Rentals(*composite - ProductID, Rental Status*), Balance}
   Employees (Super) {EmployeeID, Address, SSN, Name, Gender, Age, Phone}
   - **Worker** (Sub) {HourlyWage, Hours}
   - **Manager** (Sub) {Salary, Password}

   Payment {TransactionID, PaymentMethod, Amount}



3) List of relationships between entities, with a brief description of their meaning/purpose.

CAN_RENT(between CUSTOMER and RENT)

***Customer can rent and video

CAN_BUY (between CUSTOMER and VIDEO)

***Customer can buy video

PAY(between PAY and CUSTOMER)

***Customer can pays for video/rental

UPDATE(between RENT and VIDEO)

***Product can be rented, returned, and bought

CHECKED_OUT(between VIDEO and EMPLOYEE)

***Employee can check out a vid

MANAGES(between MANAGER and WORKER)

***Manager can manage worker

RECEIVE(between PAYMENT and EMPLOYEE)

***Employee can receive payment

4) EER model of all entities and relationships. Use the appropriate notation to specify participation and cardinality of relationships, classes specializations, etc...