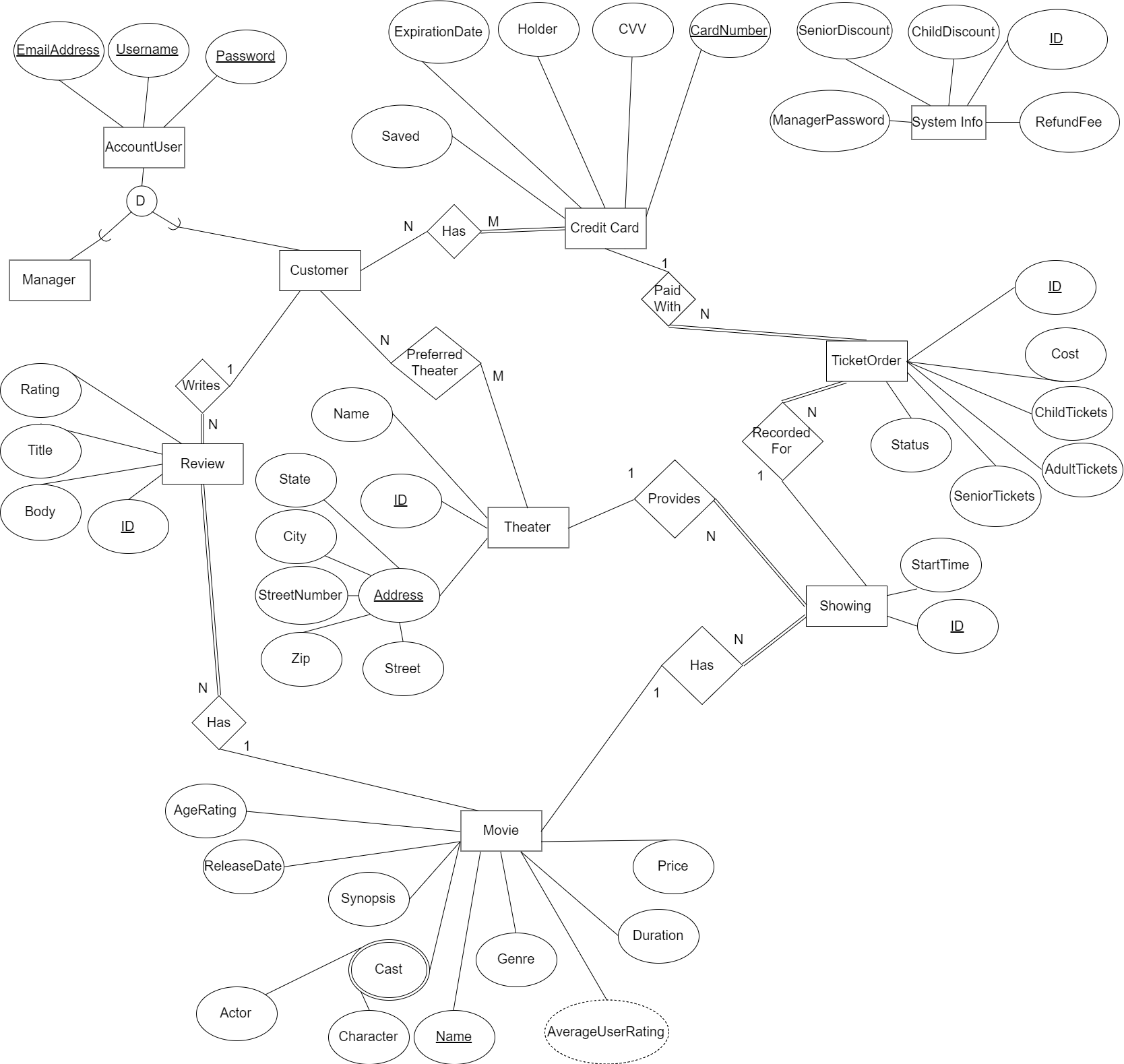
**UAMovie.com Phase II**

CS301—001

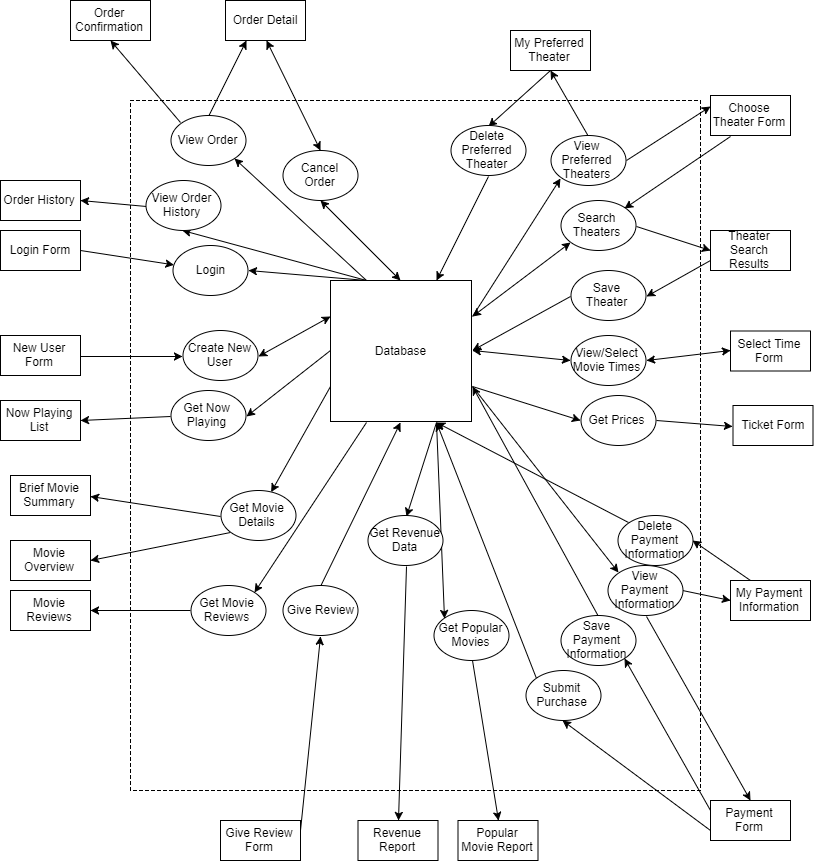
Benjamin Jones, Parker Jones, Ethan Mines, Abigail Payne

{bdjones13, pajones3, elmines, aepayne3}@crimson.ua.edu

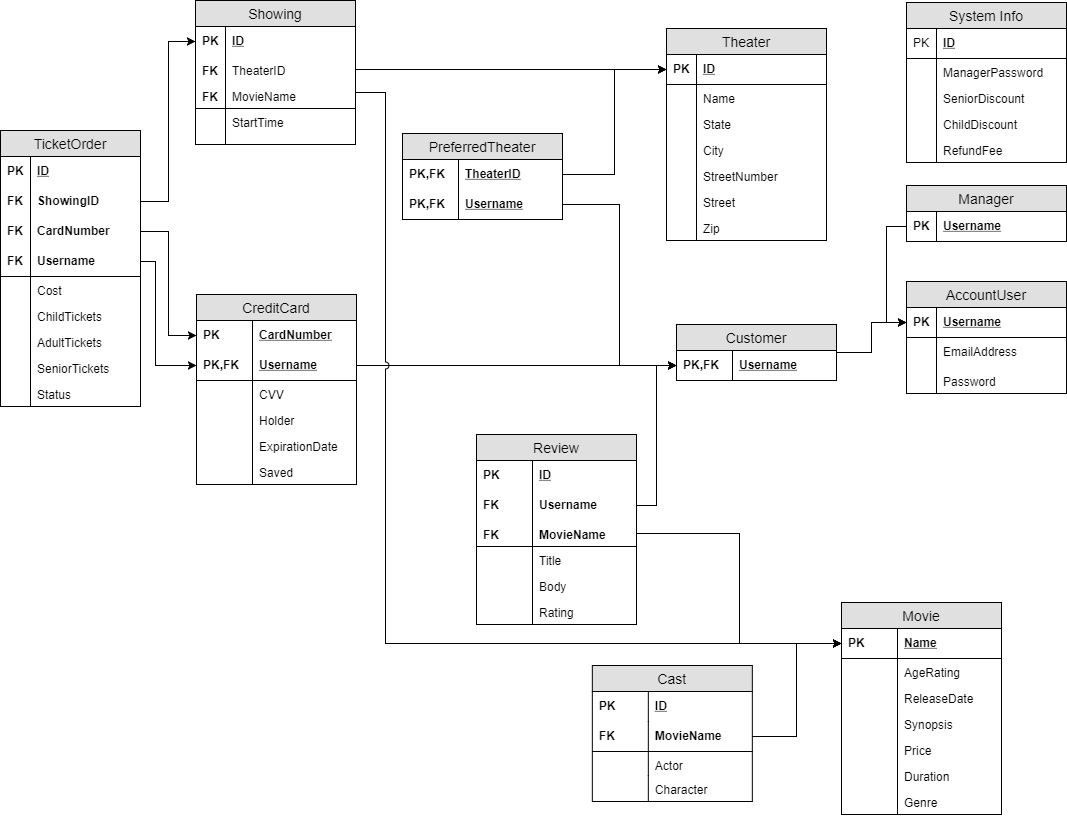
# Enhanced Entity Relationship (EER) Diagram



# Information Data Flow Diagram



# Relational Schema Diagram



# Create Table Statements

create table Theater (

ID varchar(255) primary key,

Name varchar(255),

State varchar(255),

City varchar(255),

StreetNumber varchar(255),

Street varchar(255),

Zip char(5),

constraint Address unique (State, City, StreetNumber, Zip, Street)

);

create table AccountUser (

Username varchar(255) primary key,

EmailAddress varchar(255) not null unique,

Password varchar(255) not null

);

create table Manager (

Username varchar(255) primary key references AccountUser(Username)

);

create table Customer (

Username varchar(255) primary key references AccountUser(Username)

);

create table PreferredTheater (

TheaterID varchar(255) references Theater(ID),

Username varchar(255) references Customer(Username),

primary key (TheaterID, Username)

);

create table CreditCard (

CardNumber char(16) not null,

Username varchar(255) references Customer(Username),

CVV char(3) not null,

Holder varchar(255) not null,

ExpirationDate varchar(255) not null,

Saved int not null, --0, everything else is true

primary key (CardNumber, UserName)

);

create table Movie (

Name varchar(255) primary key,

AgeRating varchar(255),

ReleaseDate varchar(255),

Synopsis varchar(255),

Price float not null check(Price >= 0),

Duration int not null check(Duration > 0),

Genre varchar(255)

);

create table Showing (

ID varchar(255) primary key,

MovieName varchar(255) references Movie(Name),

TheaterID varchar(255) references Theater(ID),

StartTime timestamp

);

create table Review (

ID varchar(255) primary key,

MovieName varchar(255) references Movie(Name),

Username varchar(255) references Customer(Username),

Title varchar(255),

Body varchar(2047),

Rating int not null check(Rating >= 0 AND Rating <= 5)

);

create table Cast (

ID varchar(255) primary key,

MovieName varchar(255) references Movie(Name),

Actor varchar(255),

Character varchar(255)

);

create table TicketOrder (

ID varchar(255) primary key,

ShowingID varchar(255) references Showing(ID),

Username varchar(255),

CardNumber char(16),

Cost float not null check(Cost >= 0),

ChildTickets int not null check(ChildTickets >= 0),

AdultTickets int not null check(AdultTickets >= 0),

SeniorTickets int not null check(SeniorTickets >= 0),

Status varchar(255),

foreign key (CardNumber, Username) references CreditCard(CardNumber, UserName)

);

create table SystemInfo (

ID varchar(255) primary key,

ManagerPassword varchar(255) not null,

SeniorDiscount float not null check(0.0 <= SeniorDiscount and SeniorDiscount <= 1.0),

ChildDiscount float not null check(0.0 <= ChildDiscount and ChildDiscount <= 1.0),

RefundFee float not null check(RefundFee >= 0.0)

);