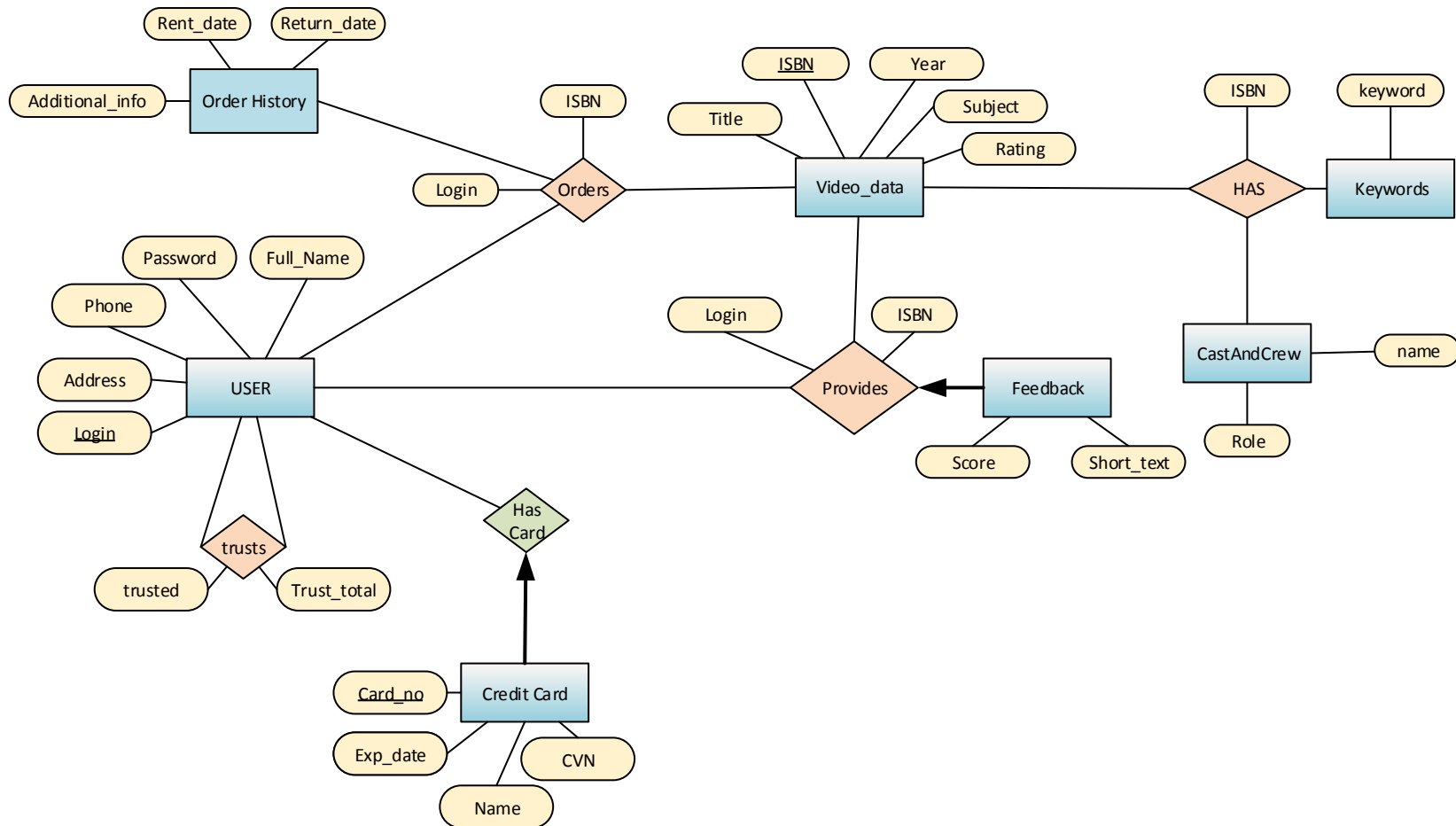


CS 5530 – Project Milestone 1

John Wells

1 ER DIAGRAM



2 RELATIONAL SCHEMA

User(Login, address, phone, password, full_name)

Video_Data(ISBN, title, year, subject, rating)

Keywords(key_id, ISBN)

KeywordLookup(key_id, keyword)

Cast-Crew(id, ISBN, name, role)

Feedback(Login, ISBN, Score, short_text)

Trusts(login, login, trusted, trust_total) // two unique logins from User.

Credit_Card(Card_number, Login, Exp_date, Name, CVN)

Order_History(Login, ISBN, Rent_date, return_date)

3 SQL STATEMENTS

```
CREATE TABLE User(  
Login VARCHAR(20) PRIMARY KEY,  
Address VARCHAR(255),  
Phone INTEGER,  
Password CHAR(32) NOT NULL,  
Full_name VARCHAR(255) NOT NULL,  
Card_id INTEGER  
FOREIGN KEY (Card_id) REFERENCES  
CreditCard(Card_no)  
ON DELETE CASCADE)
```

```
CREATE TABLE VideoData(  
ISBN INTEGER PRIMARY KEY,  
Title VARCHAR(255) NOT NULL,  
Year INTEGER,  
Subject VARCHAR(255),  
Rating VARCHAR(5),  
ON DELETE NO ACTION)
```

```
CREATE TABLE Keywords(  
key_id INTEGER,  
ISBN INTEGER,  
FOREIGN KEY (key_id) REFERENCES  
KeywordLookup(key_id),  
FOREIGN KEY (ISBN) REFERENCES  
VideoData(ISBN),
```

```
CREATE TABLE KeywordLookup(  
key_id INTEGER PRIMARY KEY,  
Keyword VARCHAR(20))
```

```
CREATE TABLE CastCrew(  
id INTEGER PRIMARY KEY,  
name VARCHAR(255),  
Role VARCHAR(20),  
ISBN INTEGER,  
FOREIGN KEY (ISBN) REFERENCES  
VideoData(ISBN))
```

```
CREATE TABLE Trusts(  
Truster VARCHAR(20),  
Trustee VARCHAR(20),  
isTrusted BOOLEAN,  
trust_total INTEGER,  
CHECK(Truster <> Trustee)  
FOREIGN KEY (Truster) REFERENCES User(Login),  
FOREIGN KEY (Trustee) REFERENCES User(Login)
```

```
CREATE TABLE CreditCard(  
Card_no INTEGER,  
Exp_date DATE,  
Name VARCHAR(255),  
cvn INTEGER,  
cardOwner VARCHAR(20)  
PRIMARY KEY (Card_no),  
FOREIGN KEY (cardOwner) REFERENCES  
User(Login))
```

```
CREATE TABLE Feedback(  
commenterLogin VARCHAR(255),  
ISBN INTEGER,  
Score INTEGER,  
Short_Text STRING,  
FOREIGN KEY (ISBN) REFERENCES  
VideoData(ISBN),  
FOREIGN KEY (commenterLogin)  
REFERENCES User(Login))
```

```
CREATE TABLE OrderHistory(  
userLogin VARCHAR(255),  
ISBN INTEGER,  
Rent_date DATE,  
Return_date DATE,  
Additional_info STRING,  
CHECK (Rent_date <= Return_date)  
FOREIGN KEY (userLogin) REFERENCES  
User(Login),  
FOREIGN KEY (ISBN) REFERENCES  
VideoData(ISBN))
```