Paw Bytes Normalization

Customer

Customer(CID, firstName*, lastName, email, phoneNumber, isMember*, street, city, state, zipCode)

Candidate Keys

CID & zipCode → street, city, & state

 $CID \rightarrow firstName$, lastName, email, phoneNumber, isMember

Customer(<u>CID</u>, firstName*, lastName*, email, phoneNumber, isMember*)

Customer_Address(CID, zipCode, street, city, state)

Product

Product(PID, productName*, productType*, establishedDate*, amount*)

Candidate Keys

PID & establishedDate → amount

PID → productName, productType

Product(PID, productName*, productType*)

Product_Amount(PID, establishedDate, amount)

Employee

Employee(EID, firstName*, lastName*, email*, phoneNumber*, street*, city*, state*, zipCode*)

Candidate Keys

```
EID & zipCode → street, city, state

EID → firstName, lastName, email, phoneNumber

Employee(EID, firstName*, lastName*, email*, phoneNumber*)
```

Employee_Address(EID, zipCode*, street*, city*, state*)

Paw Pal

PawPal(pawID, name*, species*, tagName*, [lastDateGroomed], [totalHoursTrained])

Candidate Keys

```
pawID → everything else no change...
```

Order

```
Order(<u>orderID</u>, orderDate*, [orderTotal]*, CID*, PID*, quantity*, [lineTotal]*)
```

CID references Customer.CID , PID references Product.PID

Candidate Keys

```
OID, CID, & PID \rightarrow quantity, lineTotal OID \rightarrow orderDate, orderTotal
```

```
Order(orderID, orderDate*, [orderTotal]*)
```

Order Invoice(orderID,PID,CID, quantity*, [lineTotal]*)

Training Session

Training_Session(sessionID, sessionDate*, sessionDuration*)

CID references Customer.CID, productName references Product.name

Attend Session

Attend_Session(pawID, sessionID)

pawID references PawPal.pawID, sessionID references TrainingSession.sessionID

Conduct Session

ConductSession(EID, sessionID)

 ${\tt EID\ references\ employee.EID\ ,\ session ID\ references\ Training Session.session ID\ }$

<u>1NF</u> – Address multivalued attributes and composite attributes

There are no MVAs or composite attributes

<u>2NF</u> – Remove partial dependencies

There are no partial dependencies

3NF - Remove transitive dependencies

There are no transitive dependencies

Tweet Treat

Tweet_Treat(tweetID, tweetOwner, text, dateSaved)

<u>1NF</u> – Address multivalued attributes and composite attributes

There are no MVAs or composite attributes

<u>2NF</u> – Remove partial dependencies

There are no partial dependencies

3NF - Remove transitive dependencies

There are no transitive dependencies

Tweet Treat Ownership

Tweet_Treat_Ownership(tweetID, pawID)

<u>1NF</u> – Address multivalued attributes and composite attributes

There are no MVAs or composite attributes

<u>2NF</u> – Remove partial dependencies

There are no partial dependencies

<u>3NF</u> – Remove transitive dependencies

There are no transitive dependencies