**Paw Bytes Normalization**

**Customer**

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

**Candidate Keys**

CID & zipCode 🡪 street, city, & state

CID 🡪 firstName, lastName, email, phoneNumber, isMember

Customer(CID, 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(orderID, orderDate\*, [orderTotal]\*, CID\*, PID\*, quantity\*, [lineTotal]\*)

CID references Customer.CID , PID references Product.PID

**Candidate Keys**

OID, CID, & PID 🡪 quantity, lineTotal

OID 🡪 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)

EID references employee.EID , sessionID references TrainingSession.sessionID

***1NF – Address multivalued attributes and composite attributes***

*There are no MVAs or composite attributes*

***2NF – 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)

***1NF – Address multivalued attributes and composite attributes***

*There are no MVAs or composite attributes*

***2NF – 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)

***1NF – Address multivalued attributes and composite attributes***

*There are no MVAs or composite attributes*

***2NF – Remove partial dependencies***

*There are no partial dependencies*

***3NF – Remove transitive dependencies***

*There are no transitive dependencies*