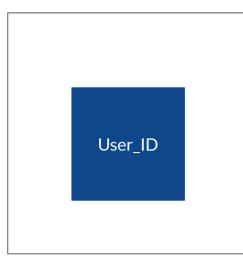


2NF

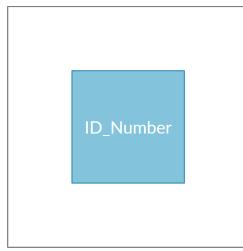
R = Users (User\_ID, password, name, DOB, Sexual\_Orientation, Province, City, Photo\_ID)



Description: Table is in 1NF already, and 2NF, but does not satisfy the 3NF condition because there is a transitive dependency relationship with User\_ID, Photo\_ID, and the rest of the attributes. To solve this issue, we separate the diagram with two parts: one where the User\_ID determines Photo\_ID relationship, and another where the Photo\_ID determines all other attributes. The final 3NF diagram can be found to the right of this diagram.

2NF

R.1 = OutsideCompanies (ID\_Number, Company\_Name, Location\_ID, Rating)



Description: Table is in 1NF and 2NF already, but not 3NF because there is a transitive relationship between ID\_Number and Location\_ID, and Location\_ID and Rating. To fix this issue, we separate the diagram into two parts: one shows the transitive dependency relationship between ID\_Number, Company\_Name and Location\_ID, while the other shows the dependency of rating on Company\_Name and Location\_ID. The final 3NF diagram can be found to the right of this diagram.

3NF

R = Adminstration/Admin\_ID(password)



Table is in 3NF

3NF

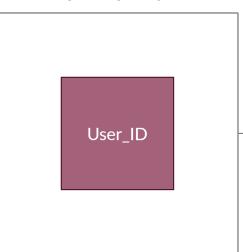
R = Messages (Message\_ID, Month, Day, Year, Time)



Table is in 3NF

2NF

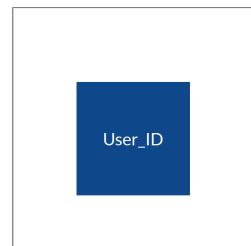
R (User\_ID, Cardholder\_Name, Card\_Number, CVV)



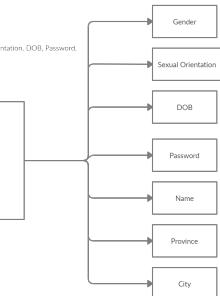
Description: This table is already in 1NF and 2NF, but not 3NF. There is a transitive dependency between User\_ID, Cardholder\_Name & CVV, and Card\_Number. To solve for this, the diagram is split into two parts, one with the dependency relationship between User\_ID and Card\_Number, and the other with the dependency relationship between Card\_Number and CVV. The final 3NF diagram can be found to the right of this diagram.

3NF

R = Users (User\_ID, Photo\_ID)

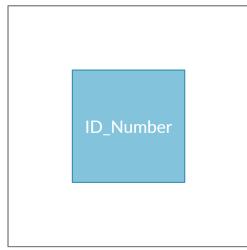


Final 3NF Diagram.



3NF

R.2 = OutsideCompanies (ID\_Number, Company\_Name, Location\_ID)



R.3 (Company\_Name, Location\_ID, Rating)



Final 3NF Diagram.

3NF

R = Adminstration/Admin\_ID(password)



Table is in 3NF

3NF

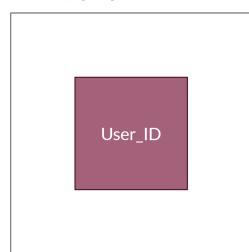
R = Messages (Message\_ID, Month, Day, Year, Time)



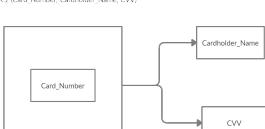
Table is in 3NF

3NF

R (User\_ID, Card\_Number)



R.2 (Card\_Number, Cardholder\_Name, CVV)



Final 3NF Diagram.

### 3NF

R = Date (Date\_ID, Date Number, Street Number, street name, hour, minute, month, day, Year)

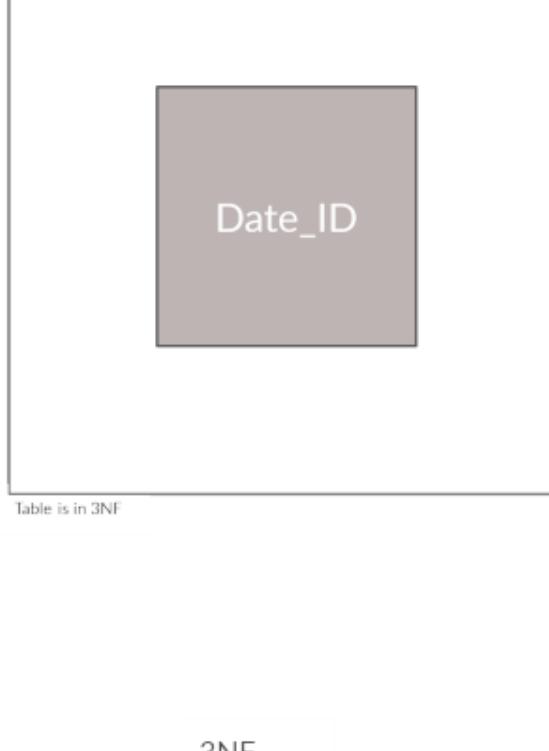


Table is in 3NF

### 3NF

R = Monitors(User\_ID, Admin\_ID)

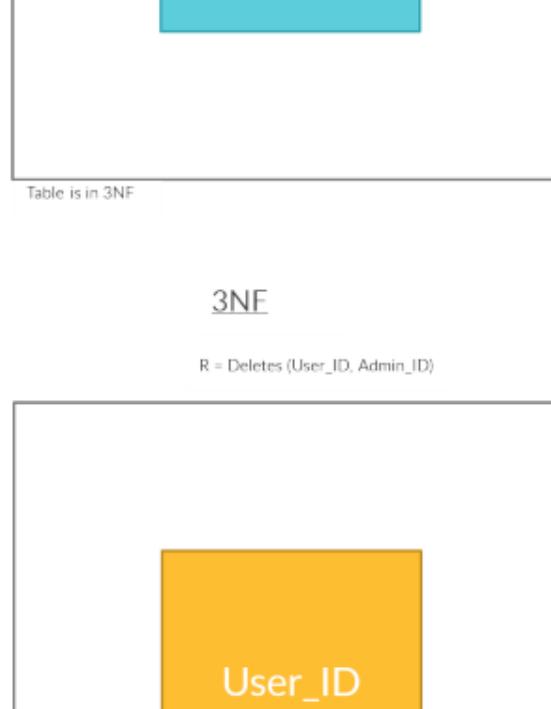


Table is in 3NF

### 3NF

R = Deletes (User\_ID, Admin\_ID)



Table is in 3NF

### 3NF

R = Send (Message\_ID, Match\_ID)

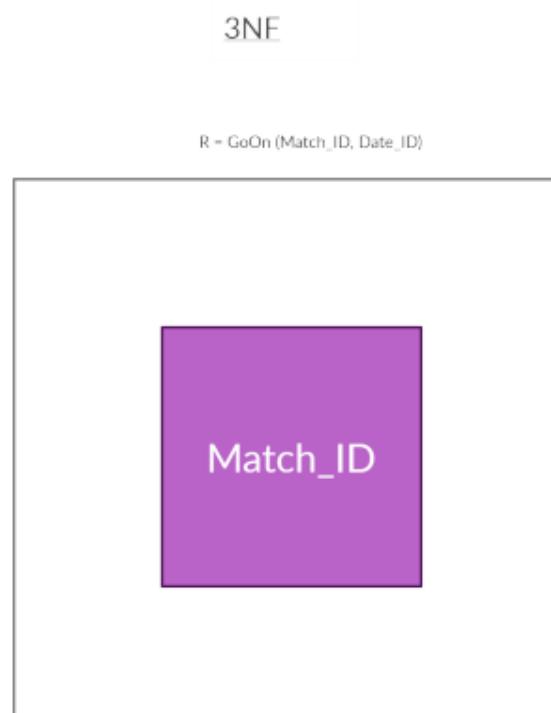


Table is in 3NF

### 3NF

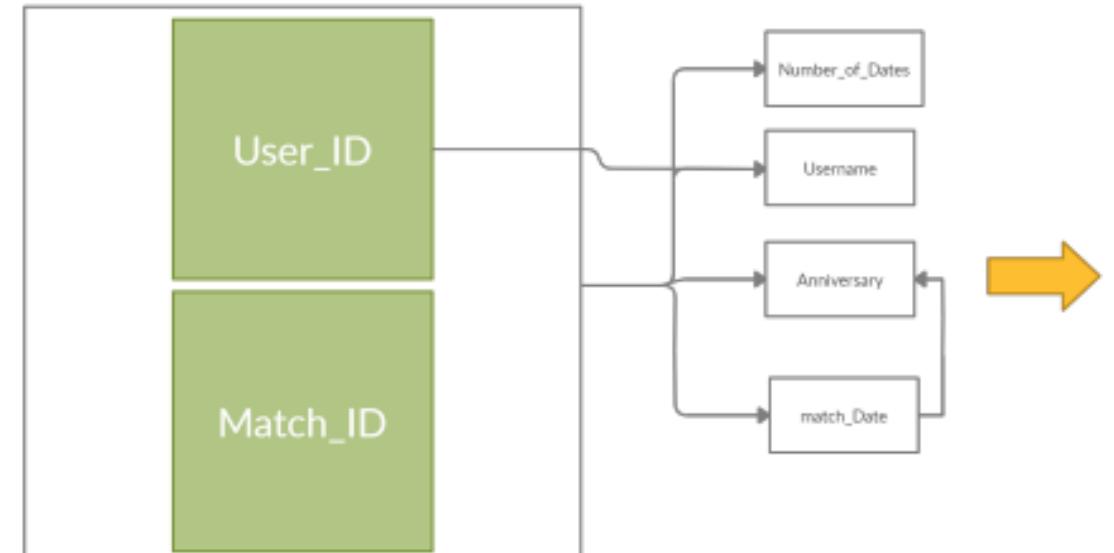
R = GoOn (Match\_ID, Date\_ID)



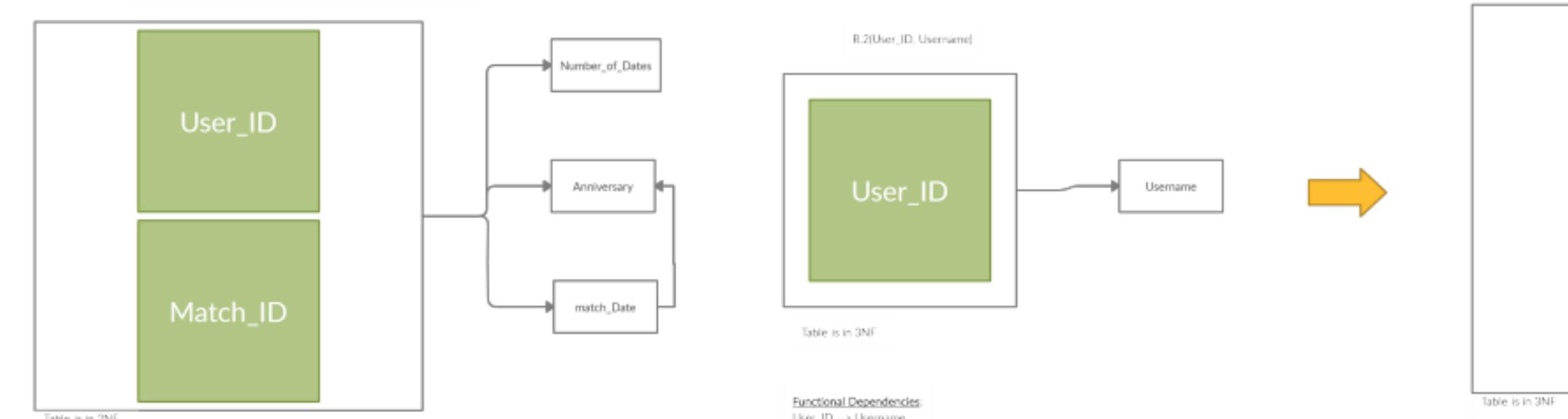
Table is in 3NF

Since most of our tables are already in the 3NF format, we have added an extra 'made-up' table to illustrate that we understand the normalization concepts.  
This table will NOT be added to our actual database; it is just used as a demonstration of our understanding.

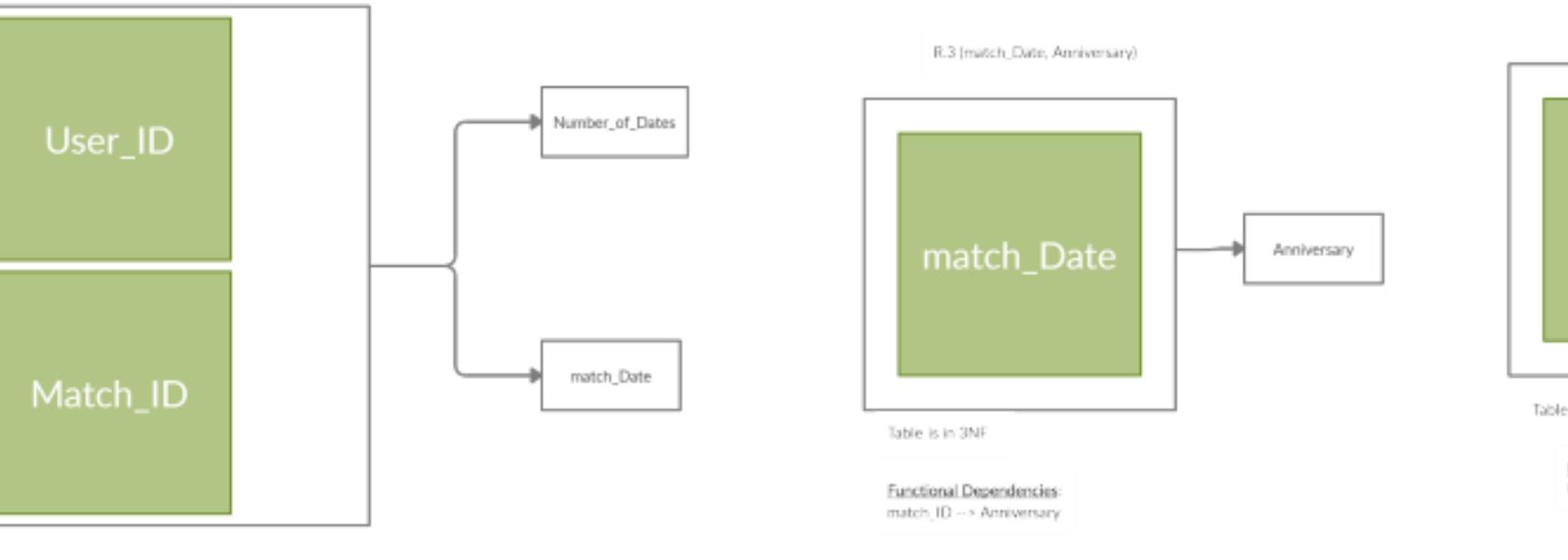
R.1 (User\_ID, match\_ID, Number\_of\_Dates, match\_Date, anniversary, username)



R.1 (User\_ID, match\_ID, Number\_of\_Dates, match\_Date, anniversary)



R.1 (User\_ID, match\_ID, Number\_of\_Dates, match\_Date, anniversary)



R.1 (User\_ID, match\_ID, Number\_of\_Dates, match\_Date, anniversary)

