

Phase 2

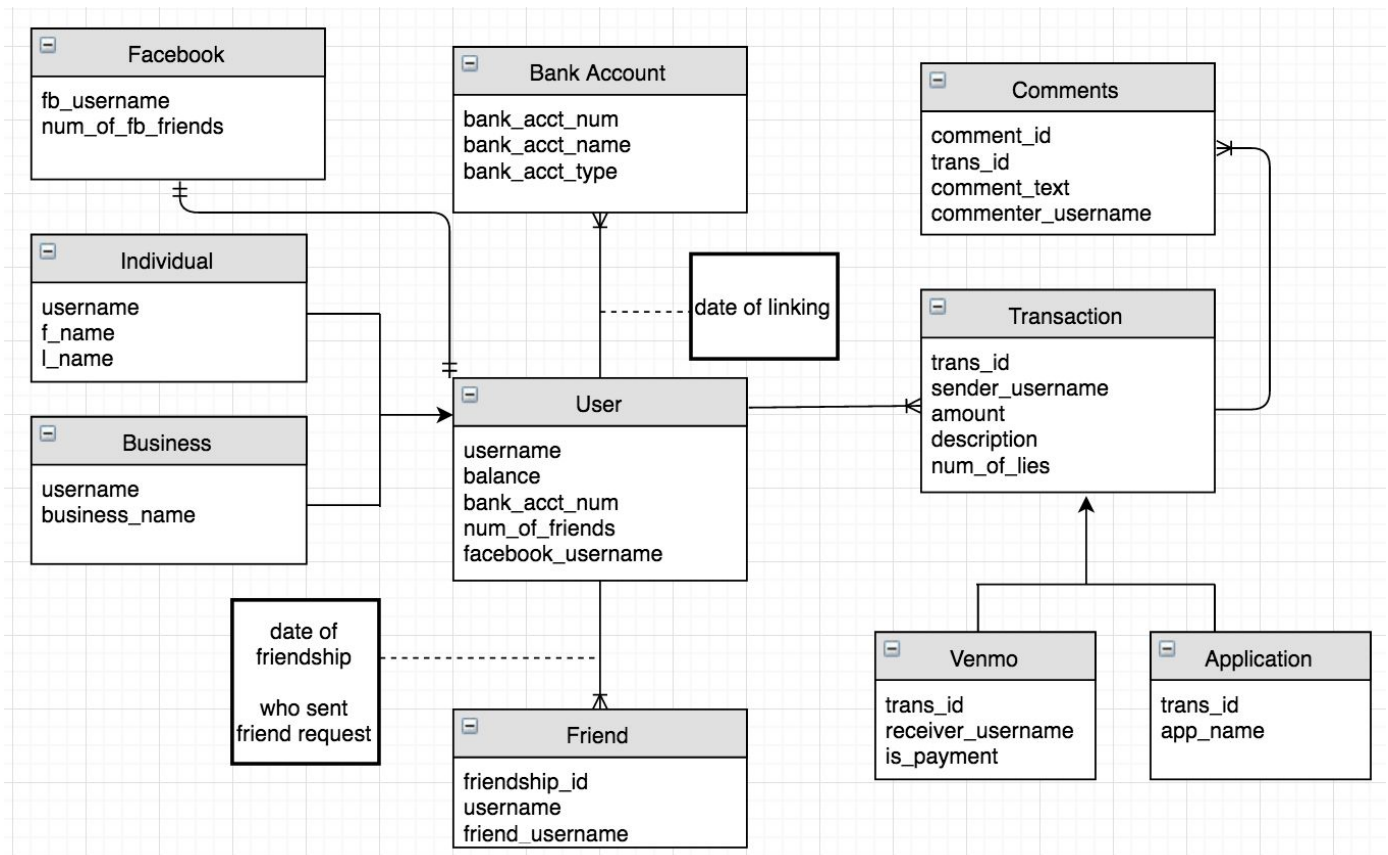
67-262 Database Project

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Team 19

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Revised Conceptual Model



Revised User Stories

As a <role>	I want to <goal>	So that <reason>
individual	pay my friends money	I can pay remotely and easily
individual	pay in the applications via venmo	buy what I want more conveniently
individual	see which bank cards are linked to my account	keep track of my banking status
individual	comment on my friends' transactions	interact with my friends
individual	see info about my friends	know my friends better
individual	see how many likes my transaction received	check out interesting transactions
business	charge users	the business can control spending
business	What app has the largest number of transactions	Improve my business model
business	See what user has the greatest number of friends	Develop more effective marketing strategy
business	See total amount of money exchanging on venmo	Decide whether to integrate to my business
business	look up the average transaction amount	decide whether to expand payment methods
app developer	see the total number of transactions	determine whether to integrate venmo in the app
app developer	see what transaction is most popular (likes/comments)	understand user behaviors better
app developer	See total venmo money requests	Understand users better
app developer	See info for all venmo users	Know user demographics and improve the app

Relational Model & Normalized Schema

User (username, balance, bank_account_num, num_of_friends, facebook_username)

Individual (username, f_name, l_name)

Business (username, business_id, business_name)

Friend (username, friend_username)

Friendship(username1, username2, date_of_friendship, friend_request_sender_username)

Bank_account(bank_account_num, bank_name, account_type)

Link_bank(username, bank_account_num, date_of_linking)

Facebook(facebook_username, num_of_facebook_friends)

Transaction(trans_id, sender_username, amount, description, num_of_likes)

Venmo_transaction(trans_id, receiver_username, is_payment)

App_transaction(trans_id, app_name)

Comment (comment_id, trans_id, comment_text, commentor_username)

Functional Dependencies

User, Individual, Business Entity:

Username -> balance, bank_account_num, num_of_venmo_friends, facebook_username

Username -> f_name, l_name

Username -> business_id, business_name

Friend Entity:

Username -> friend_username

Facebook Entity:

Facebook_username -> number_of_fb_friends

Bank Account Entity:

Bank_account_number -> bank_name, account_type

Transaction, Venmo Transaction, Application Transaction Entity:

Transaction_id -> sender_username, amount, description, num_of_likes

Transaction_id -> receiver_username, is_payment

Transaction_id -> app_name

Comments Entity:

Comment_id -> trans_id, comment_text, commentor_username