

Here is the general idea for this ER diagram. Our application is centered around making groups, adding group members, and each member eithe recieving a payment or making a payment.

debts

PK |debt_id

debt_name

debt_amount

- 1. A group that is created is made up of a unique group ID. Each group has a group name.
- 2. A group is made up of members. A member can belong to one and only one group but a group may contain many members. Each member has a unique ID, first name, last name, field for what they payed for (if anything), how much a member needs to pay, how much a member needs to receive, and the difference between owed amount and recieved amount, and a bank account number (for making payments)
- 3. each member who pays will send a notification to other group members. each notification has a unique id and message
- 4. each member can have zero or many debts. each debt has a unique id, debt name, and debt amount.
- 5. debts can be owed by multiple group members
- 6. Each member can **send** multiple payments. Each payment sent has a unique payment ID, payment name, and a payment type (venmo, cash app, etc). A payment can also be sent by multiple group members.
- 7. Each member can **recieve** multiple payments. Each payment recieved has a unique payment ID, payment name, and a payment type (venmo, cash app, etc). A payment can also be recieved from multiple group members
- 8. Each payment sent has a unique ID and a notification message
- 9. Each payment received has a unique ID and a notification message