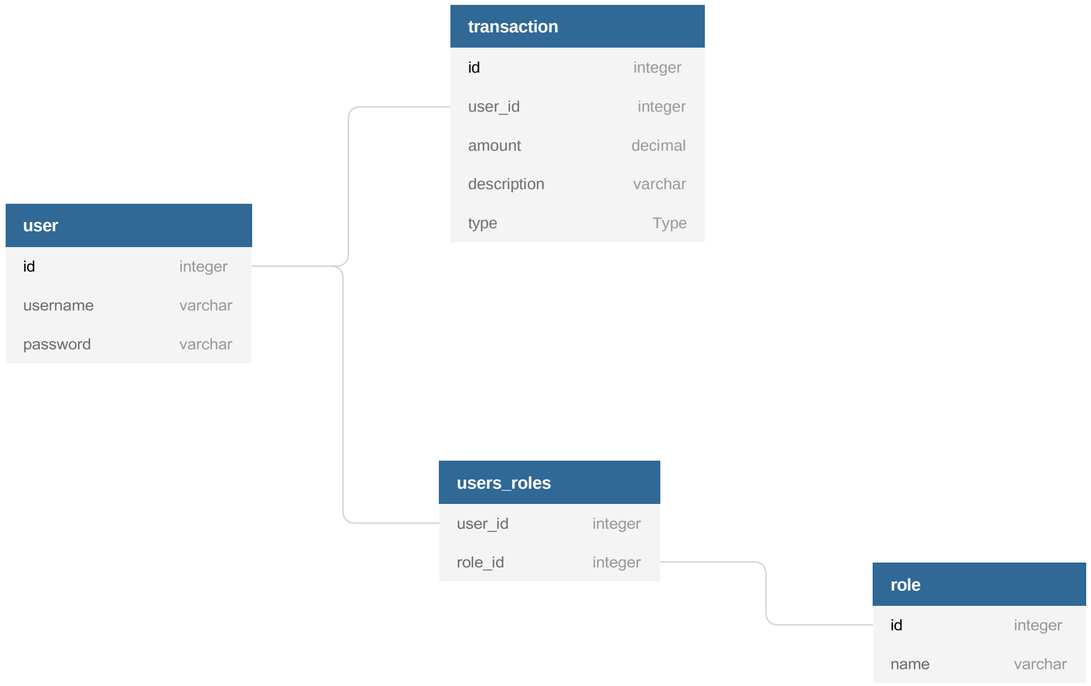
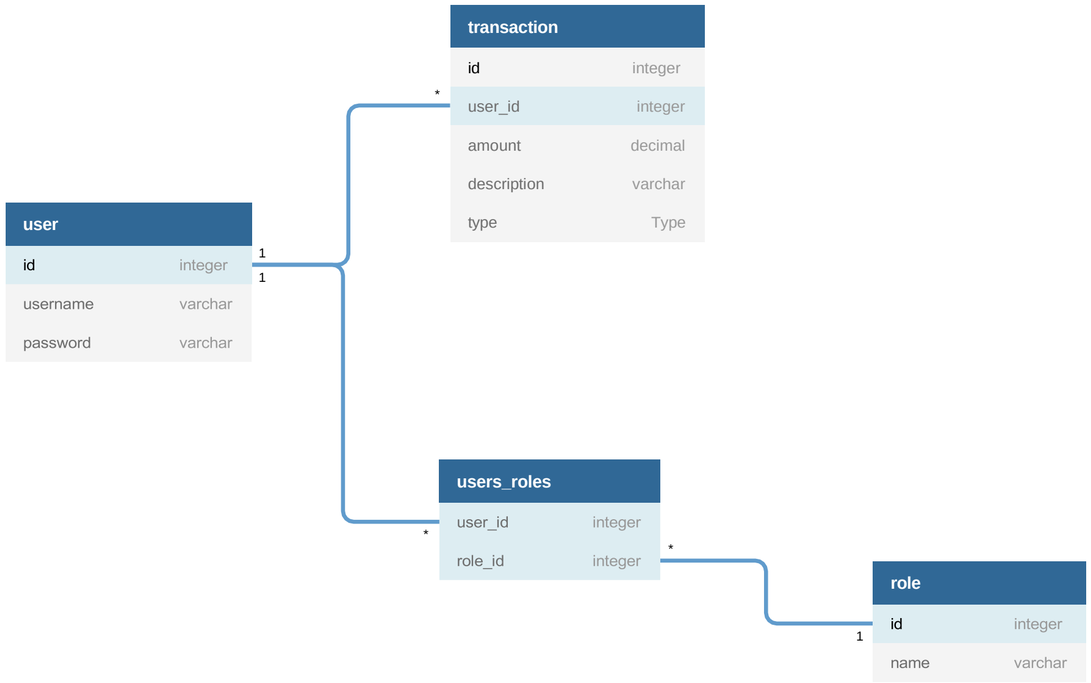
Expanse tracker project





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```
Enum Type {

  Income

  Outcome

}
```

Database Design

Users:

UserID (Primary Key)
Username
Password (encrypted)
Email
Other relevant user information (e.g., name, profile picture, etc.)
Expenses:

ExpenseID (Primary Key)
UserID (Foreign Key referencing Users table)
Amount
Date
Description

CategoryID (Foreign Key referencing Categories table)
Payment Method (e.g., cash, credit card, etc.)
Receipt Image (optional)
Categories:

CategoryID (Primary Key)
CategoryName
Payment Methods (if you want to track these separately):

PaymentMethodID (Primary Key)
PaymentMethodName
Budgets (if you want to incorporate budgeting features):

BudgetID (Primary Key)
UserID (Foreign Key referencing Users table)
CategoryID (Foreign Key referencing Categories table)
BudgetAmount
Time Period (e.g., monthly, weekly)
Tags (if you want to tag expenses for better organization/search):

TagID (Primary Key)

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TagName
Expense_Tag (a many-to-many relationship table between Expenses and Tags):

ExpenseTagID (Primary Key)
ExpenseID (Foreign Key referencing Expenses table)
TagID (Foreign Key referencing Tags table)
Recurring Expenses (if you want to track recurring expenses):

CategoryID (Foreign Key referencing Categories table)
Frequency (e.g., monthly, weekly)
Start Date
End Date (optional, for recurring expenses with a finite duration)

id	date
1	2014-12-01
2	2014-12-02
3	2014-12-03
4	2014-12-04

Rent:

id	date_fk	amount
1	1	1000

Restaurant:

id	date_fk	amount
1	2	12

Restaurant_desc:

id	restaurant_fk	description
1	1	Dinner at Arby's

2) Create a date table and one general expense table and one expense description table:

Date:

id	date
1	2014-12-01
2	2014-12-02
3	2014-12-03
4	2014-12-04

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Expense:

id	date_fk	amount	category
1	1	1000	rent
2	1	120	parking
3	2	12	restaurant
4	2	10	entertainment

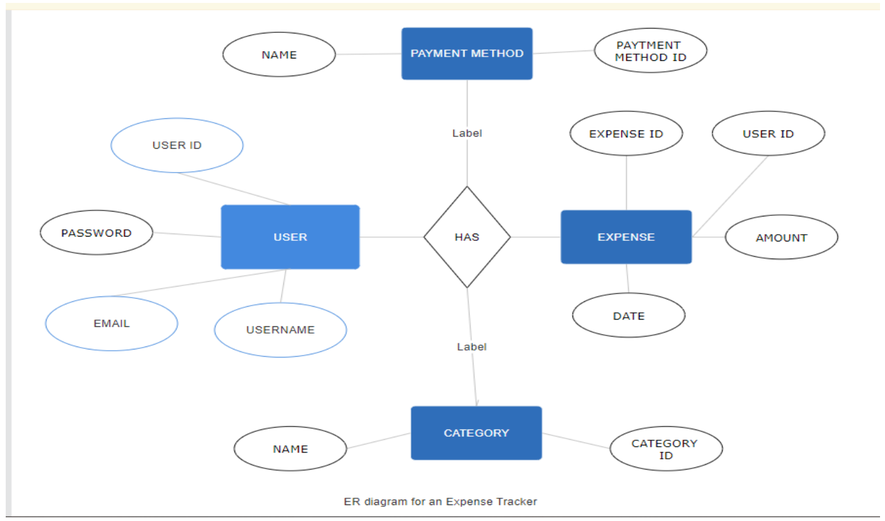
****Expense_description:****

id	expense_fk	description
1	3	Dinner at Arby's

Expense_Categories:

expense_fk	category_fk
1	1
2	2
3	3
3	4
4	4

ER Diagram



ER diagram for an Expense Tracker

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