Project Early Report
Databases
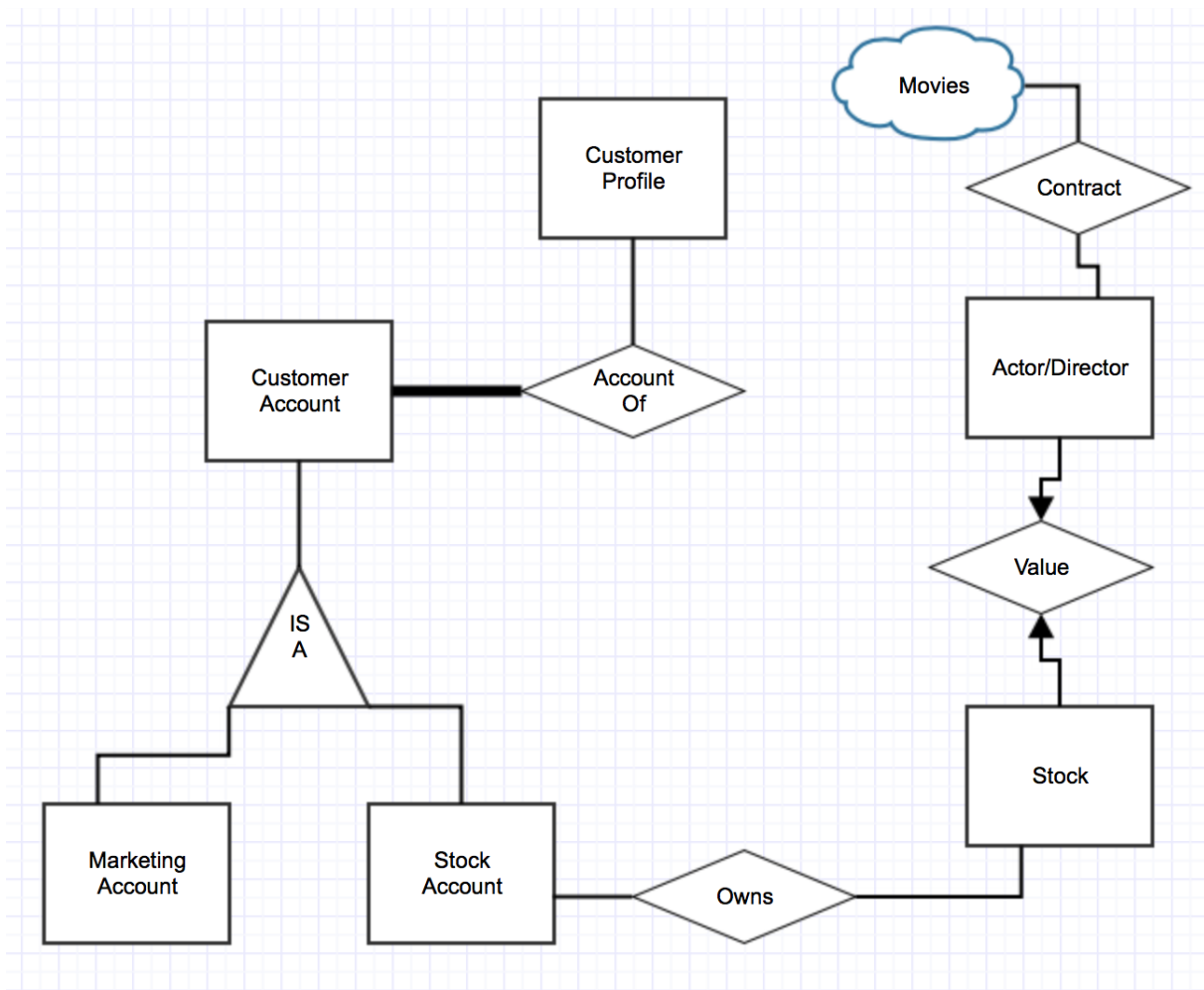
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ER Diagram

Note: Attributes not shown to make the diagram easier to see
For attributes see relational schema

Relational Schema

- CustomerProfile(name: string, state: string, phonenumber: string, email_add: string, tax_id: string, user_name: string, password: string)

- AccountOf(user_name: string, uid: integer)

- CustomerAccount(uid: integer, txns: string)

- MarketingAccount(balance: decimal)

- StockAccount(stock_id: string, stock_anmount: decimal)

- Owns(stock_id: string, id_sym: string)

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- Stock(<u>id_sym: string</u>, closing_price: decimal, current_price: decimal)

- Value(<u>id_sym: string</u>, <u>ad_id: string</u>)

- ActionDirector(name: string, stock_symbol: string, dob: datetime, contract_id: string)

- Contract(<u>movie_id: string</u>, <u>contract_id: string</u>)

Integrity Constraints(IC)

- A customer account has to be tied to a customer.
- A stock must be valued off of a single actor/director.
- An actor/director must only have one stock to represent their value.

IC Violation

The way we are planning on dealing with IC violation is to simply tell the user the command they are trying to run is invalid, and tell them why the issue is there. I.e., if an "ActorDirector" entity is given more than 1 stock associated with it, our program will complain "Actor/Director can only have 1 stock associated with them."

High Level Architecture
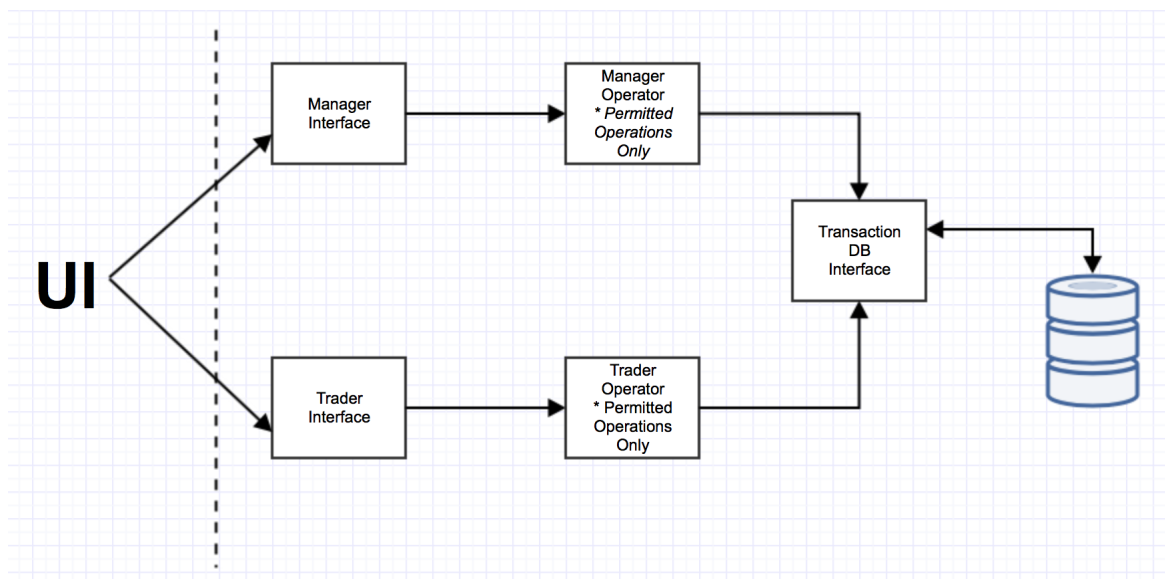
This is the UI flow we as a team are going to be implementing

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Task Division

Jake:

    - Manager Interface
    - Manager Operator

Danish:

    - Trader Interface
    - Trader Operator

Shared:

    - UI
    - Transaction DB Interface