CPSC 471 Database Management Systems

Extended EER Diagram

Group Number: *21*

Laura Timm

30064647

Abhay Khosla

30085789
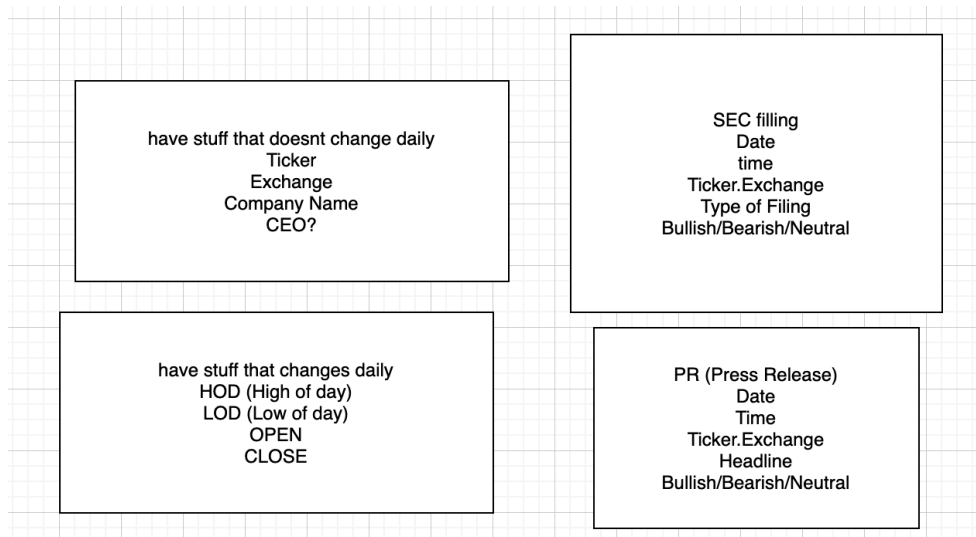
Hassan Khan

3006680

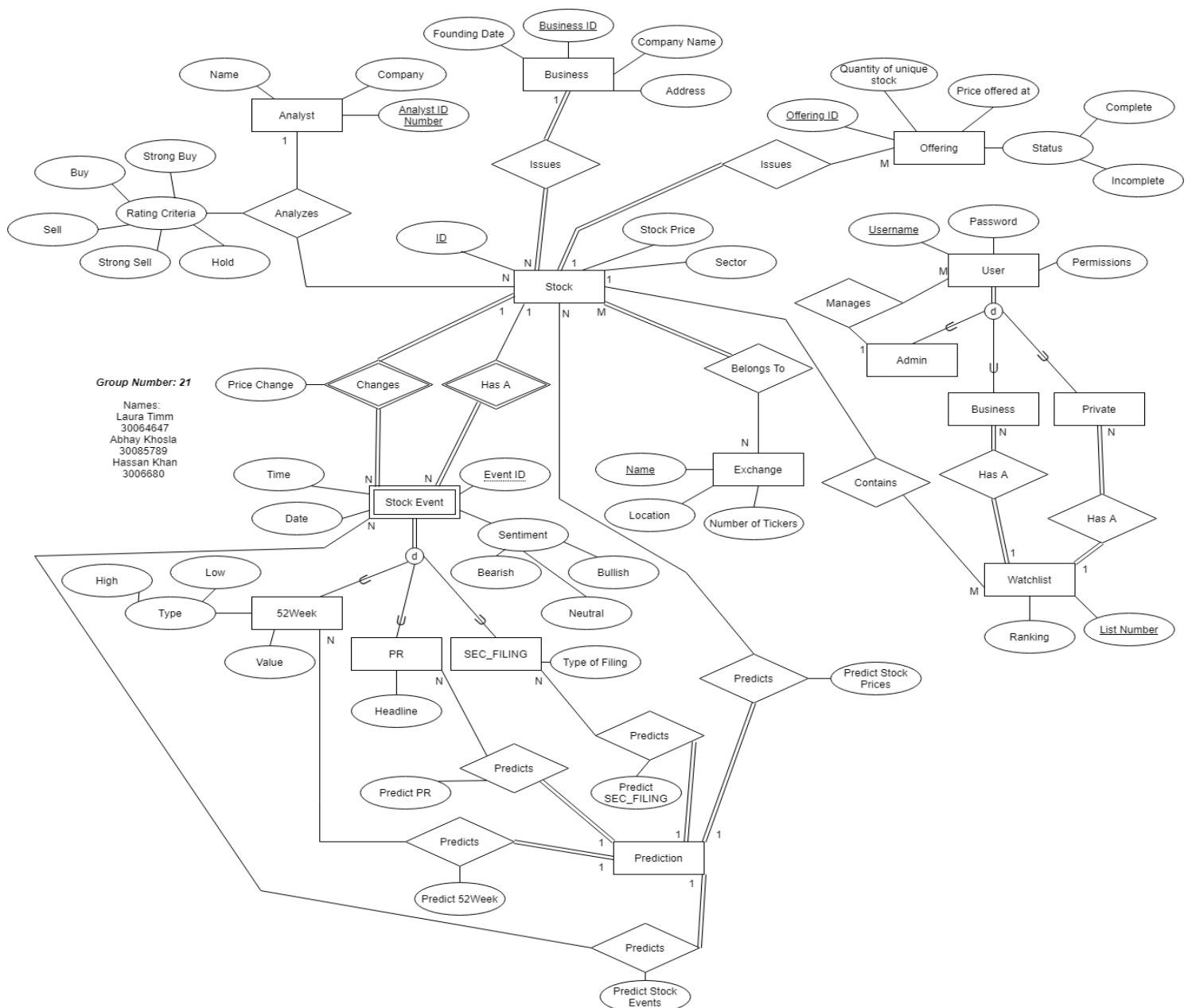TABLE OF CONTENTS

Initial Planning:

Entities:
- Stock Information (<u>ID</u>, Frequency, Stock price, quantity, changes, description)
- Stock Event (? <u>ID</u>, change, time) -- maybe
- Stock type (crypo, day trades, etc)
- User(<u>ID</u>, name, phone number, investments (portfolio), etc)
- Type of user (private, business, admin) -overlap -- (for **d.** *how do those differ for relationships?*)
- Rating (<u>ID</u>, score, comments, financially safe) -*Weak*
- Account (<u>username</u>, password, permissions)
- Estimate of a stock order(<u>Est Number</u>, cost, total number of stocks)
- Wishlist for Stocks(Ranking order, wishlist name)
- User Portfolio(Preference, Types of Markets Interested(Multivalued attribute), Level of knowledge about the stock market)

Relationships:
1. User STORES(Quantity of stored stock,) stock to watch for
2. User VIEWS stocks in the database(designed as a HTML/CSS table)
3. User RATES/Provides(Score, Time of rating) rating on specific stocks
4. User CREATES/OWNS(HAS A) an account
5. Stock Event EFFECTS rating
6. Wishlist CONTAINS stock
7. User CREATES wishlist for stocks that they would purchase(from another platform)
8. User REQUESTS estimate of a stock order
9. User HAS A user portfolio
10. Stock HAS A type of stock it belongs to
11. Admin MANAGES Accounts
12. Private
13. Business

have stuff that doesnt change daily
Ticker
Exchange
Company Name
CEO?

SEC filling
Date
time
Ticker.Exchange
Type of Filing
Bullish/Bearish/Neutral

have stuff that changes daily
HOD (High of day)
LOD (Low of day)
OPEN
CLOSE

PR (Press Release)
Date
Time
Ticker.Exchange
Headline
Bullish/Bearish/Neutral

Final EER Diagram:

Group Number: 21

Names:
Laura Timm
30064647
Abhay Khosla
30085789
Hassan Khan
3006680

Legend:

Symbol	Meaning
52Week	New high or low of the stock price in the past 52weeks.
PR	Public relations of the stock.
Bearish	Expecting a depreciation of stock price.
Bullish	Expecting an appreciation of stock price.
SEC_FILING	Required filing with the SEC for publicly traded companies.
Strong Buy	Strong recommendation to buy stock at current price.
Hold	If already purchased assets hold position.
Strong sell	Strong recommendation to sell or short stock at current price.

Assumptions:

The first assumption is we made that every stock event changes the stock price in the stock entity. The second assumption is that the watchlist is generated for every user. The watchlist also can range from zero to many unique stocks. The Business entity must include a stock since it is included in a stock trading database, thus it is total participation. Every stock must have an IPO (initial public offering) thus it is total participation on the stock side, and a stock can have 0 to many offerings after the initial IPO.