

PORTFOLIO MANAGEMENT

Query Squad

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1 Introduction

In this phase of the project on Portfolio Management system, we are going to make brief analysis on the current state of the DB schema and explain its advantages as well as use cases.

Further, we would go on explaining the scope of improvement of in this project and where can we add on more useful details to it.

At the end, we would be sharing an ER diagram for the same (or updated schema, if any changes made) which would be diagrammatically explaining the relations amongst the entities more clearly and with all the constraints and other relevant information.

2 Analysis

2.1 Overall purpose

- The DB as mentioned before in the previous doc, is trying to make connections between entities like various stocks and their users as well as each of their transactions etc.
- By doing this, we can try to get valuable info out of the data sets and make real life use cases from it, thus defining the purpose of the DB
- It also has its own functionalities that include some of them being used in real world in order to decide mathematically as to which particular equity would give better returns

2.2 Advantages

- The DB allows us to keep complete track of a portfolio including assets, holdings, transactions, taxes incurred etc.
- It can be integrated with other financial systems such as trading platforms & accounting systems
- The schema is quite simple yet meaningful making it easier to understand even for people with limited technical knowledge
- It is flexible enough to incorporate wide range of portfolio management needs & insights
- The DB is simply scalable enough to support folios of all kinds starting from individual level portfolios to large industry or institutional level folios
- Schema is relatively easy to maintain as it does not require us to make a lot of changes to underlying DB while doing any kind of modifications

3 Scope of Improvement

3.1 Better attributes

- We can always include better and even more relevant attributes which can further help in getting better insights on the investments and/or future investment plans, transaction details and other detailed information on each of the attributes
- Adding real world attributes can lead to more relevance of the overall project with the actual scenarios out in the market and helping us learn from it too
- More attributes also directly means more data to work and maintain. Thus, it gives hands-on experience with data management

3.2 Better functionalities

- With given better and more attributes, we could definitely get even better functionalities derived from the same
- Logical functionalities can be developed to embed them as part of logic of other algorithms
- Such algos help large scale investors in deciding on their future investments from the past records & their analysis
- These are also used by big tech, quant and consultancy companies in today's world, thus making the project highly linked with the real world

4 E-R Diagram

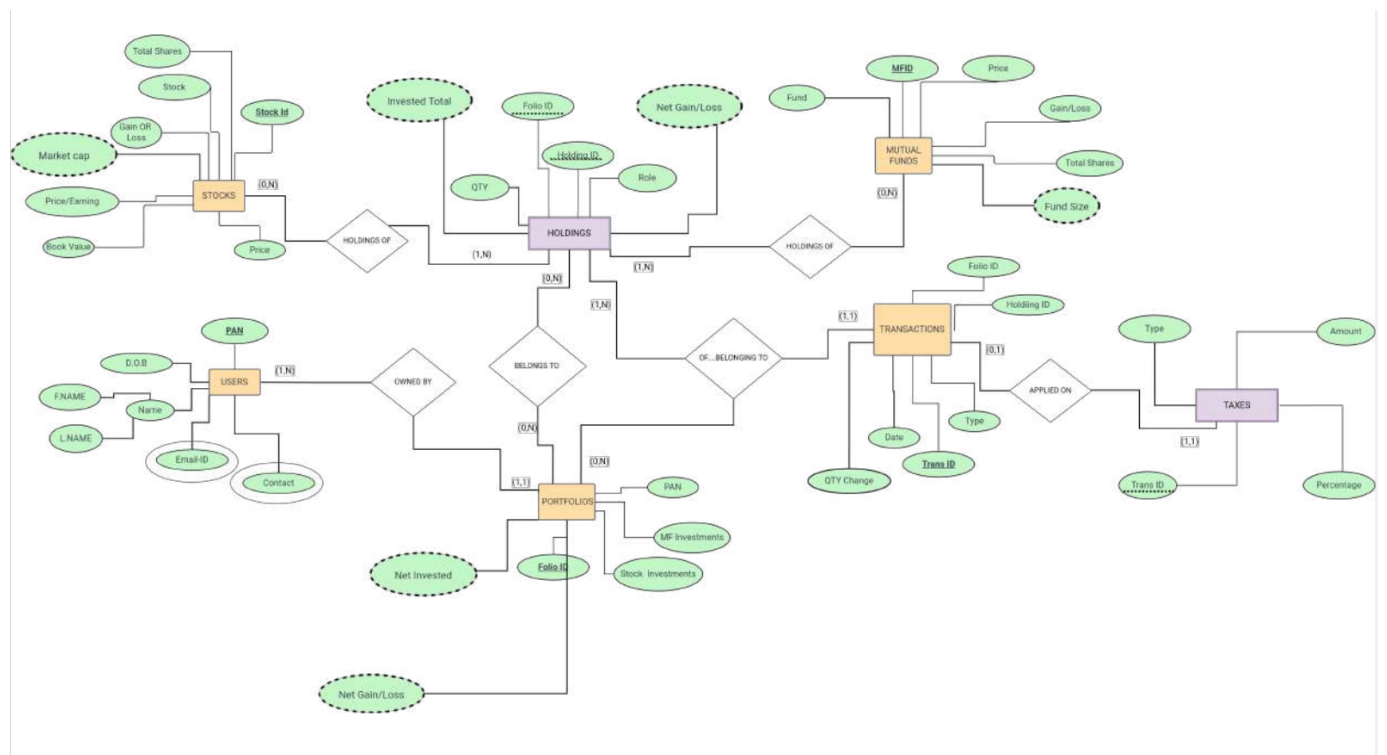


Figure 1: E-R diagram