





**NANYANG
TECHNOLOGICAL
UNIVERSITY**
SINGAPORE

SC2207 Lab1

Lab index	SCMB	
Group number	3	
Team Members	Guo Yichen	U2320626C
	Mahi Pandey	U2321382F
	Mehta Rishika	U2323133H
	Zhao Qixian	U2321752L

APPENDIX C: INDIVIDUAL CONTRIBUTION FORM

Full Name	Individual Contribution to Lab 1 Submission	Percentage Contribution	of	Signature
Guo Yichen	Entity refinements and ERD drawing	25		
Mahi Pandey	Created Entities and Attributes in the ERD	25		
Mehta Rishika	Entity attribute, and ERD plotting	25		
Zhao Qixian	Entity attribute tables and ERD plotting	25		

Full Name	Individual Contribution to Lab 3 Submission	Percentage Contribution	of	Signature





Full Name	Individual Contribution to Lab 5 Submission	Percentage Contribution	of	Signature

APPENDIX D: USE OF AI TOOL(S) IN LAB WORK

Each team member should indicate either A or B:

A. I affirm that my contribution(s) to the lab work is my own, produced without help from any AI tool(s).

B. I affirm that my contribution(s) to the lab work has been produced with the use of AI tool(s).

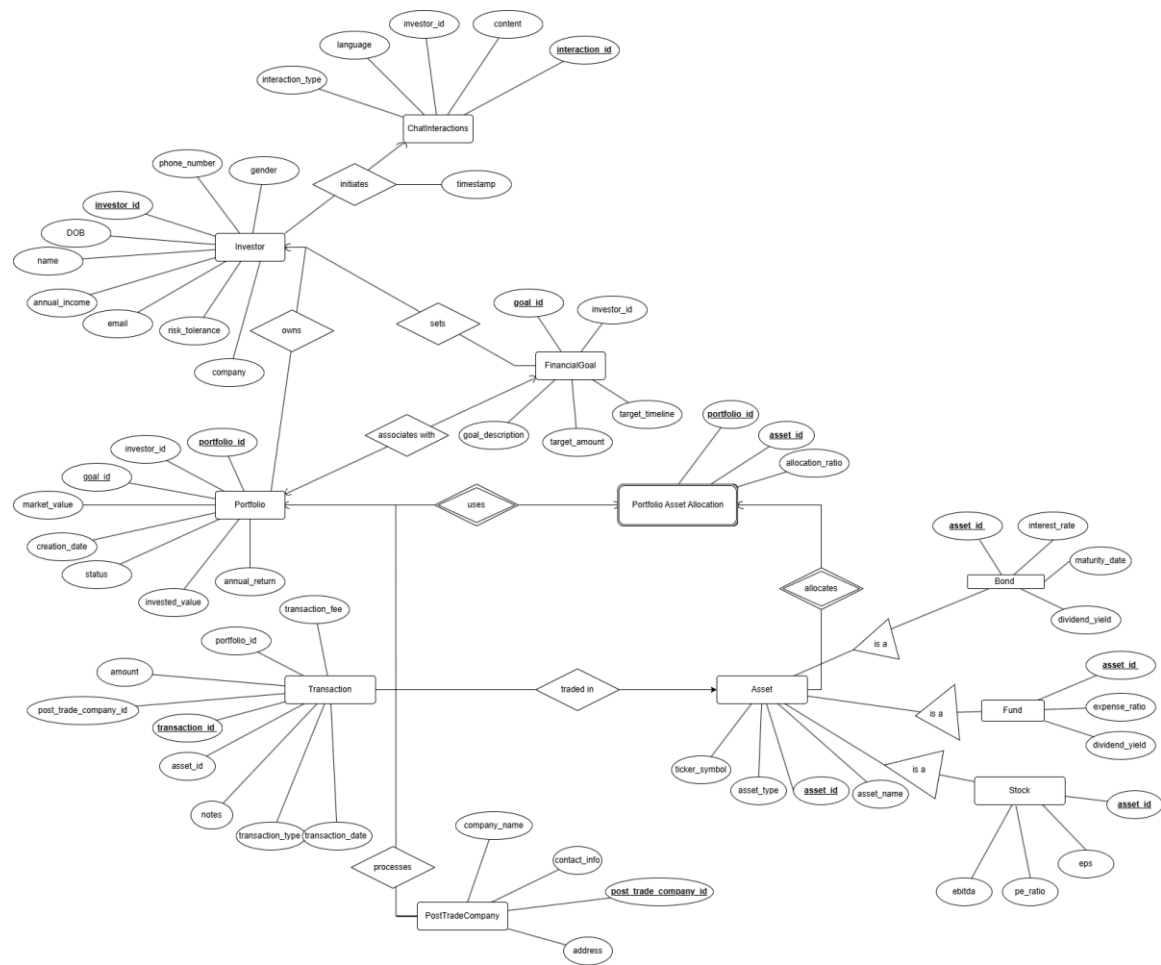
Team member	Signature	Date	A or B
Guo Yichen		4/2/2025	A
Mahi Pandey		4/2/2025	A
Mehta Rishika		4/2/2025	A
Zhao Qixian		4/2/2025	A

By signing this form, you declare that the above affirmation made is true and that you have read and understood NTU's policy on the use of AI tools.

If any team member answered B, the team member(s) must indicate and replicate the table below for every instance that AI tool(s) is used:

Name of AI tool	< For example, ChatGPT >
Input prompt	< Insert the question that you asked ChatGPT >
Date generated	< Insert the date when the response was generated >
Output generated	< Insert the response verbatim from ChatGPT >
Output screenshots	< Attach or reference screenshots of the response if applicable >
Impact on submission	< Briefly explain which part of your submitted work was ChatGPT's response applied >

ER Diagram



Assumptions

1. **Risk Tolerance** is stored as an attribute in **Investor** instead of being a separate entity.
2. Each **Portfolio** is linked to one **Investor**, but an **Investor** can have multiple **Portfolios**.
3. **Financial Goals** are independent of specific portfolios, meaning an investor can set goals before creating portfolios.
4. **Asset Allocation** is enforced by ensuring the sum of allocation percentages in **Portfolio Asset Allocation** equals 100%.
5. **Portfolio Asset Allocation** is a weak entity as it lacks a unique identifier and depends on **PortfolioID** and **AssetID** as its composite primary key.
6. **Transactions** involve only one asset at a time and are executed by one **post-trade company** per transaction.
7. **Market Value** and **Annualized Return** are computed dynamically based on historical transactions.
8. The **chat interaction** system stores investor interactions in multiple languages.