

# UCS310 - DATABASE MANAGEMENT SYSTEM PROJECT



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# Virtual Trading Platform

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## Made By :-

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# Introduction

- ❖ A trading platform is a software or online interface that enables traders to buy and sell financial instruments such as stocks, bonds, commodities, currencies, and derivatives. These platforms provide access to various financial markets and facilitate trading activities for individual investors, institutional investors, and traders.
- ❖ Our project aims to simulate a part of the above complex tasks using Python 3.0 and MySQL as our programming languages.
- ❖ We randomize our stock data to simulate the random nature of the stock which generally occurs due to other traders, supply & demand, etc.



# Project Overview

- Our project focuses on the development of a virtual trading platform, providing users with a simulated environment to trade stocks without real financial risk.
- The platform aims to educate users about trading strategies, market dynamics, and investment principles in a risk-free manner.

# Technologies Used

- SQL: Utilized for managing the database, storing user information, transaction history, and stock data.
- Python: Implemented for backend logic, including data processing, transaction handling, and interaction with the database.

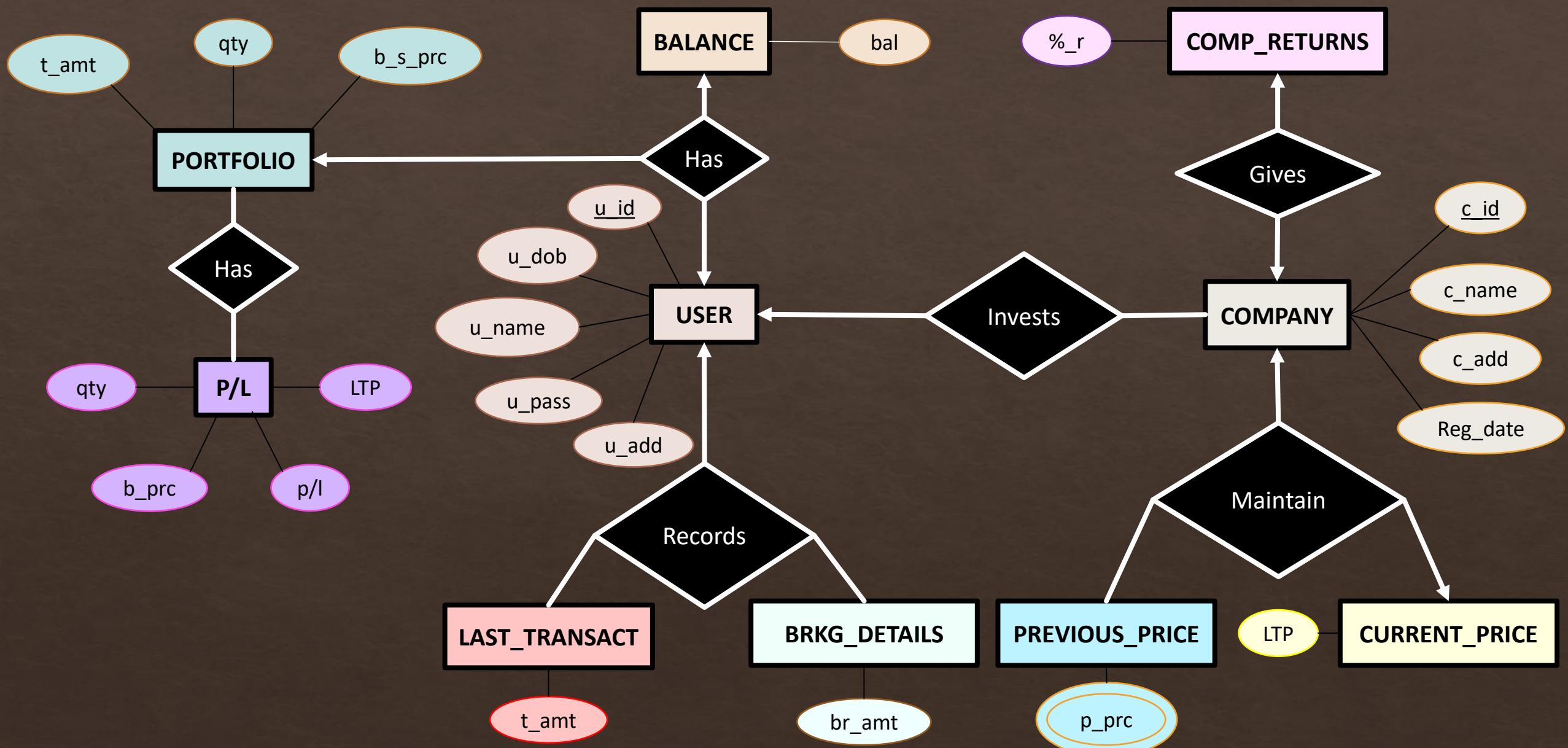
# Key Features

- Virtual Trading: Users can trade stocks using virtual currency, allowing them to practice trading strategies without financial risk.
- Portfolio Management: Users can track their investments, view portfolio performance, and analyze trading history.
- Real-time Stock Data: Access to real-time or delayed stock quotes, charts, and market news to make informed trading decisions.

# Future Enhancements

- Social Features: Introduce social networking elements, such as user forums, leaderboards, and collaboration tools.
- Advanced Analytics: Implement advanced analytics and visualization tools to help users analyze market trends, identify patterns, and improve trading strategies.
- Mobile App: Develop a mobile application to extend platform accessibility and provide on-the-go trading capabilities.

# ER Diagram



# ER TO Tables

User Related Tables:

USER				
u_id	u_name	u_dob	u_add	u_pass

BALANCE	
u_id	bal

BRKG_DETAILS	
br_amt	u_id

LAST_TRANSACT	
lt_amt	u_id

# ER TO Tables

Company Related Tables:

COMPANY				
c_id	c_name	c_add	Reg_date	
PREVIOUS_PRICE				
p_prc	c_id		P_prc	c_id
COMP_RETURNS				
%_r	c_id		ltp	c_id
CURRENT_PRICE				
COMPANY-INVESTS				
c_id	c_name	c_add	Reg_date	u_id

# ER TO Tables

Portfolio Related Tables:

PORTFOLIO				
u_id	t_amt	c_id	qty	b_s_prc

P/L					
u_id	pyl	c_id	qty	B_prc	ltp

# Functions and it's uses

- ❖ add\_user() : To add new user
- ❖ mod\_user() : To modify existing user
- ❖ add\_company() : To add company's stock available for trading
- ❖ mod\_company() : To modify company's details
- ❖ add\_balance() : To add balance available for trading
- ❖ withdraw\_bal() : To withdraw balance available for trading
- ❖ update\_ltp() : To update the live trading price
- ❖ chart() : To display a chart of previous prices of a stock
- ❖ buy\_share() : To buy a available stock
- ❖ sell\_share() : To sell a purchased stock
- ❖ comp\_return() : To view profit/losses due to a specified company
- ❖ disp\_pr\_price() : To display all previous prices the stock had
- ❖ login() : To login to an account

THANK YOU