StockQuest

Stock Market Investment Platform

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Abstract

- **Project Statement**:
This project aims to create a user-friendly web application providing comprehensive tools to help users manage their investment portfolios. It offers real-time market data, portfolio tracking, market analysis, and educational resources, making the investment process streamlined for both novice and experienced investors.

- **Outcomes**:
  - Enable users to create and manage investment portfolios.
  - Provide real-time stock market data for tracking performance.
  - Facilitate informed investment decisions with market analysis tools.
  - Enhance engagement with educational resources and news.
  - Deliver a seamless, intuitive user interface for market and portfolio management.

System Analysis

Why It's Needed:

- **Accessibility**: Limited access to easy-to-use, reliable market tools for beginner investors.
- **Data Complexity**: Investors often struggle to track and analyze vast amounts of market data efficiently.
- **Educational Gap**: Many platforms focus on experienced investors, leaving beginners without guidance or resources.

Problems Faced:

- **Real-time Data Integration**: Managing data delays and ensuring live updates.
- **Efficient Data Storage**: Handling high volumes of market data efficiently in MongoDB.
- **User Retention**: Attracting and retaining users through engaging features and reliable services.

Drawbacks of Current Systems

- **Complexity for Beginners**: Advanced market platforms often overwhelm new investors with jargon and complex interfaces.

- **High Costs**: Many platforms charge fees, making it difficult for budget-conscious users to participate.

- **Lack of Educational Tools**: Few platforms focus on educating users on basic to advanced investment strategies.

- **Limited Customization**: Users are often unable to personalize the platform based on their unique investment needs.

Proposed System

Features:

- User-friendly design catering to both new and experienced investors.
- Secure authentication with login and registration.
- Real-time data integration and portfolio tracking.
- Budget management tools.
- Educational resources to keep users engaged.

Advantages:

- **Accessible**: Focused on user ease of use, especially for beginners.
- **Cost-effective**: Affordable access to features typically behind paywalls.
- **Personalized**: Dashboard and notification systems for a tailored experience.

System Requirements

- **Software Requirements**:
    - **Frontend**: React (for UI), CSS, HTML, JavaScript.
    - **Backend**: Spring Boot, Java
    - **Database:** MySQL
- **Hardware Requirements**:
    - Development machine with at least 8 GB RAM, Core i5 or equivalent processor, and 20 GB of free storage.

Modules Description

1. User Authentication and Registration:

- Features: User sign-up, login

2. Portfolio Management Interface:

- Users can create and manage their portfolios with stock holdings, profit/loss calculations, and performance analysis.

3. Stock Market Data and Visualization:

- Real-time data retrieval and visualization of stock performance with interactive charts.

4. Budget Management:

- Track budgets and expenses for investments, including portfolio allocation.

Modules Description

5. Notification System:

- (Future Scope): Allows users to set alerts based on market movements, price changes, and other customizable metrics.
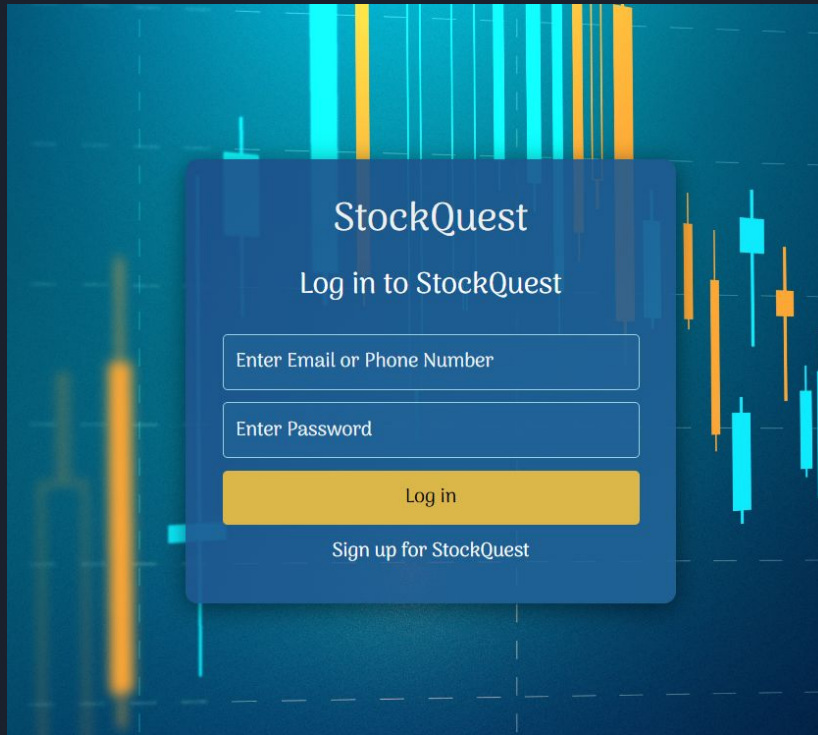
6. Learning Resources:

- Provides educational content, market news, and insights for users at all experience levels.

7. Dashboard:

- Central hub displaying real-time data and market page for displaying trends in a concise format.

Login Page

Signup Page

StockQuest

Log in to StockQuest
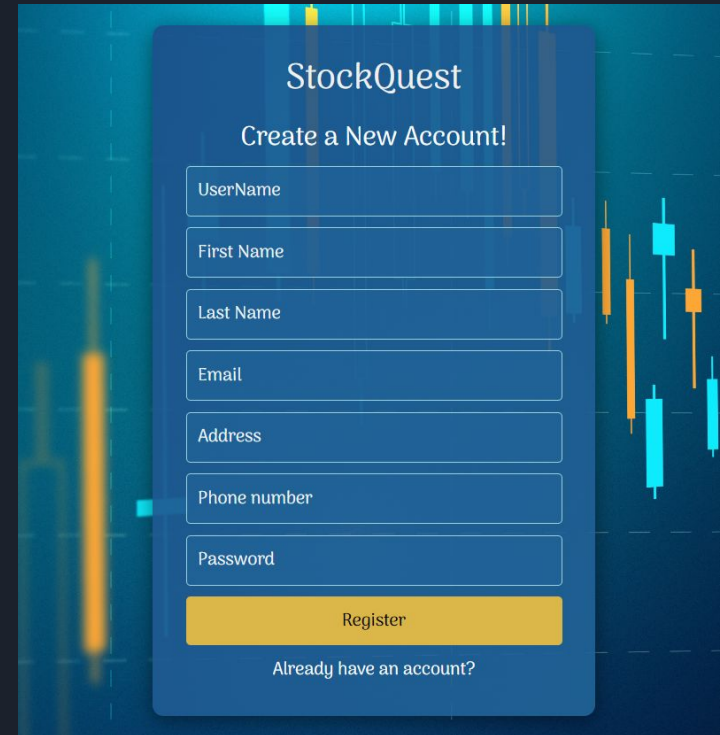
Enter Email or Phone Number

Enter Password

Log in

Sign up for StockQuest

StockQuest

Create a New Account!

UserName

First Name

Last Name

Email

Address

Phone number

Password
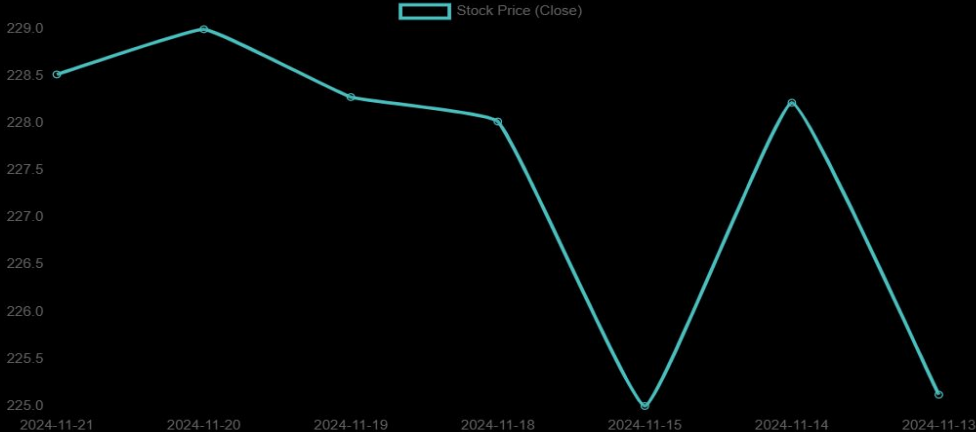
Register

Already have an account?

Dashboard Page

Dashboard   **Portfolio**   **Market**   **Chat**   **Learn**

Welcome back!
Here's a quick overview of your stock portfolio performance today.
The stock market is seeing positive growth today. Keep an eye on key stocks.

AAPL Stock Price (Close)

─── Stock Price (Close)

	229.0
	228.5
	228.0
	227.5
	227.0
	226.5
	226.0
	225.5
	225.0

2024-11-21   2024-11-20   2024-11-19   2024-11-18   2024-11-15   2024-11-14   2024-11-13

Watchlist

AAPL   [Add]

Symbol	Open	High	Low	Close	Volume
AAPL	228.88000	230.16000	225.71001	228.52000	42071900

Portfolio Page

Dashboard Portfolio Market Chat Learn

My Portfolios

Stocks
Recent Purchases

+

Expense History

Bought 5 of aapl - $1100.00

Current Balance
$900

Invest Stocks   Add Budget

Your Assets

Name	Purchase Price	Quantity	Current Price	Gain %	Value	Actions
aapl	220.00	5.00	228.52	3.87%	1142.60	X

Market Page

Top Stocks

| Stock Symbol	Current Price	High Price of the Day	Low Price of the Day	Open Price of the Day	Previous Close Price
AAPL	$228.52	$230.155	$225.7103	$228.88	$229
MSFT	$412.87	$419.78	$410.2887	$419.5	$415.49
GOOGL	$167.63	$174.13	$163.7	$173.9	$175.98
AMZN	$198.38	$203.49	$195.75	$203.49	$202.88
TSLA	$339.64	$347.9899	$335.28	$343.81	$342.03
BRK.B	$472.06	$474.66	$467	$469.445	$468.83
NVDA	$146.67	$152.89	$140.7	$149.35	$145.89
JPM	$244.76	$245.49	$242.105	$243.23	$240.78
JNJ	$155.5	$156.06	$152.81	$153.62	$153.11
UNH	$597.49	$604	$596.73	$600	$600.5

Top Trending News

Semler Scientific Stock Is Surging Thursday: What's Going On?

Online Business Coaching Market Driven by Demand for Immersive Technologies Across Industries
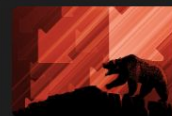
Trump admin could be harder on short-sellers, Carson Block says
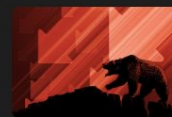
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Chat Page

Dashboard   Portfolio   Market   Chat   Learn

Welcome to Stock Bot! 👋

I'm here to help you with anything you'd like to know. You can ask me about:

📈 Stock Prices

📊 Market Trends

📰 Financial News

💰 Investment Tips

Just type your question below and press Enter or click Send!

Type your question here...

Send

Learn Page

Conclusion

- **Summary**: This Stock Market Investment Platform enables users to manage portfolios, analyze market trends, and access educational resources in a user-friendly interface.

- **Future Enhancements**: Adding predictive analytics, advanced notification systems, and integration with more market data sources.

Thank You!!