About Company

▷ Targeting the lucrative logistics sector, company is dedicated to enhancing technology use in the supply chain management industry.

▷ Develop cutting-edge products designed to streamline and optimize logistics operations, including leading Logistics ERP, LMS, and advanced GPS Management Systems.

▷ The company has a very open atmosphere for learning and growth.

Introduction

▷ The purpose of this presentation is to provide an overview of the Software TradeBot developed for the company.

▷ The module utilizes TypeScript, React as the frontend framework, NodeJs, JavaScript for the backend, MongoDB Atlas as the database, and using web-socket concept for live data tradeing.

▷ This presentation will delve into the architecture, implementation details, and the benefits of using these technologies.

Objective

▷ The objective of the TradeBot module is to develop a robustand efficient Automated Trading management system.

▷ By using Indicators and algorithms in the backend, and MongoDB Atlas as the database, the module aims to provide a seamless and responsive Trading experience to users.

▷ By using WebSocket Concept we track live market condition and finds the best moment for trade, we can optimize the results and improve user experience.
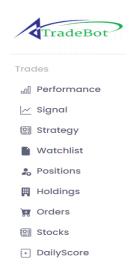
Technologies Used

▷ Node.js (Backend): Node.js is an open-source, cross-platform runtime environment that allows developers to build scalable and efficient network applications. It simplifies development by using non-blocking, event-driven architecture, making it ideal for building fast and lightweight server-side applications.

▷ MONGODB ATLAS (DATABASE SOLUTION) : MongoDB Atlas is a fully managed cloud database service provided by MongoDB. It allows developers to easily deploy, scale, and manage their MongoDB databases without the need for manual infrastructure setup and management.
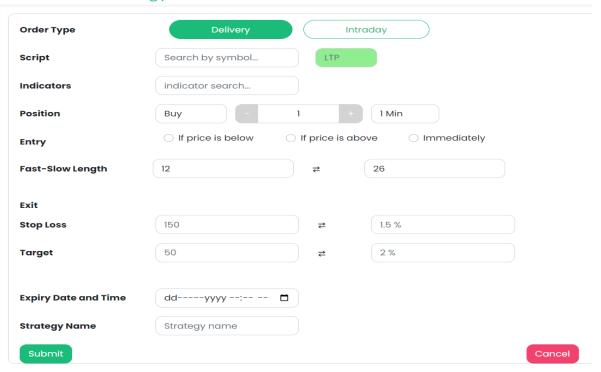
Tools Used

▷ Visual Studio Code: Visual Studio Code, a highly versatile and lightweight code editor, served as an efficient tool for developing and debugging the backend application.

▷ Git And Github : The project source code was stored in a Git repository hosted on GitLab, a widely used web-based hosting service for Git repositories.

▷ Postman: Postman, a popular API testing and development tool, played a crucial role in testing the backend APIs of the Search Optimization module.

Implementation

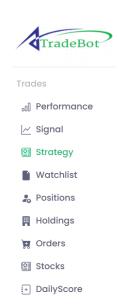➢ Integrate with stock exchange APIs to fetch real-time market data (prices, volumes, order books, etc.)

➢ Implement a strategy builder interface for users to create custom trading rules and strategies.

➢ Support both simple Technical indicator-based strategies (MACD, RSI, etc.)

➢ Support Implement risk management features like stop-loss, target, exit and position sizing.

Implementation

Indicator Strategy

Order Type	Delivery	Intraday

Script — Search by symbol... | LTP

Indicators — indicator search...

Position — Buy | − 1 + | 1 Min

Entry — ○ If price is below   ○ If price is above   ○ Immediately

Fast-Slow Length — 12 ⇄ 26

Exit

Stop Loss — 150 ⇄ 1.5 %

Target — 50 ⇄ 2 %

Expiry Date and Time — dd-----yyyy --:-- --

Strategy Name — Strategy name

Submit   Cancel

TradeBot

Trades
- Performance
- Signal
- Strategy
- Watchlist
- Positions
- Holdings
- Orders
- Stocks
- DailyScore

9

Implementation
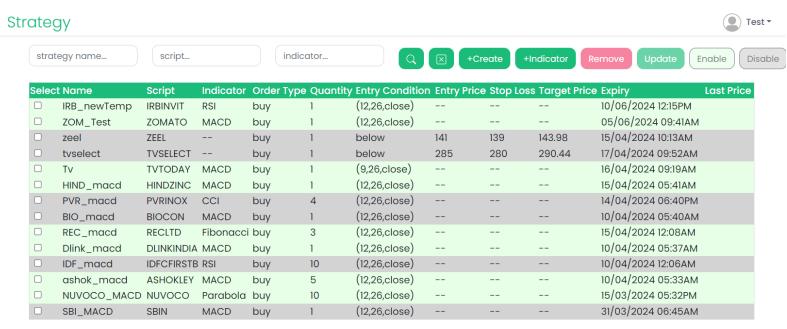
➢ Maintain a detailed account of the user's trading portfolio, including positions, profit/loss, and overall performance

➢ Generate comprehensive reports and visualizations to help users analyze their trading activities

➢ Continuously monitor the performance of trading strategies and make adjustments as needed like any updation needed in between the execution.

Implementation

Implementation

Test

| | | script... | | strategyname... | | | |

Trades

- Performance
- Signal
- Strategy
- Watchlist
- Positions
- Holdings
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- Stocks
- DailyScore

Symbol	Name	Entry	Exit	Amount	Position	Quantity	Entry Time	Exit Time	Profit/Loss	Duration	Profit Percentage
DLINKINDIA	Dlink_macd	220.25	696.4	696.4	Sell	1	03/06/2024 11:40AM	03/06/2024 12:09PM	476.15	29 m	216.19 %
BIOCON	BIO_macd	220.25	315.25	315.25	Sell	1	03/06/2024 11:35AM	03/06/2024 12:09PM	95.00	34 m	43.13 %
HINDZINC	HIND_macd	220.25	696.4	696.4	Sell	1	03/06/2024 11:35AM	03/06/2024 12:09PM	476.15	34 m	216.19 %
TVTODAY	Tv	220.25	315.25	315.25	Sell	1	03/06/2024 11:12AM	03/06/2024 11:35AM	95.00	23 m	43.13 %
ZOMATO	ZOM_Test	175.45	220.25	220.25	Sell	1	03/06/2024 11:12AM	03/06/2024 11:35AM	44.80	23 m	25.53 %
BIOCON	BIO_macd	220.25	696.4	696.4	Sell	1	03/06/2024 10:41AM	03/06/2024 11:12AM	476.15	31 m	216.19 %
HINDZINC	HIND_macd	220.25	696.4	696.4	Sell	1	03/06/2024 10:41AM	03/06/2024 11:12AM	476.15	31 m	216.19 %
IRBINVIT	IRB_Temp	13.45	1328.4	1328.4	Sell	1	03/06/2024 11:12AM	03/06/2024 11:12AM	1314.95	-1 m	9776.58 %
DLINKINDIA	Dlink_macd	175.45	696.4	696.4	Sell	1	03/06/2024 10:20AM	03/06/2024 10:41AM	520.95	21 m	296.92 %
TVTODAY	Tv	175.45	696.4	696.4	Sell	1	03/06/2024 10:20AM	03/06/2024 10:41AM	520.95	21 m	296.92 %
ZOMATO	ZOM_Test	175.45	220.25	220.25	Sell	1	03/06/2024 10:20AM	03/06/2024 10:41AM	44.80	21 m	25.53 %
ZOTA	ZOTA_temp	309.65	1145	1145	Sell	1	03/06/2024 10:34AM	03/06/2024 10:34AM	835.35	-1 m	269.77 %
ZOTA	ZOTA_temp	175.45	1328.4	1328.4	Sell	1	03/06/2024 10:34AM	03/06/2024 10:34AM	1152.95	-1 m	657.14 %
ZOTA	ZOTA_temp	220.25	696.4	696.4	Sell	1	03/06/2024 10:34AM	03/06/2024 10:34AM	476.15	-1 m	216.19 %
ZODIAC	ZODIAC_Temp	309.65	1145	1145	Sell	1	03/06/2024 10:32AM	03/06/2024 10:32AM	835.35	-1 m	269.77 %
ZODIAC	ZODIAC_Temp	175.45	1328.4	1328.4	Sell	1	03/06/2024 10:32AM	03/06/2024 10:32AM	1152.95	-1 m	657.14 %

Implementation
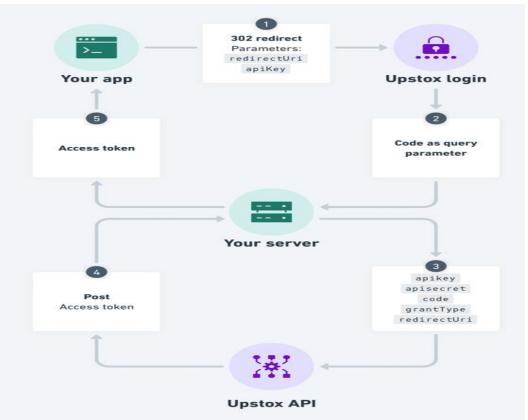
Conclusion

▷ Throughout the project, various features and optimizations have been implemented to enhance the accuracy, performance.

▷ TradeBot automates trading decisions, reducing the time and emotional effort required for manual trading.

▷ TradeBot's architecture is designed to handle large volumes of data and high-frequency trading, making it suitable for both individual and institutional traders.

Future Scope

▷ TradeBot will continue to evolve by incorporating new data sources and market analysis methods to enhance its performance and adaptability.

▷ The user interface will be refined to provide a more intuitive and user-friendly experience for traders.

▷ TradeBot will expand its support to additional stock exchanges and trading platforms, increasing its global reach and versatility.

References

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Thank You!