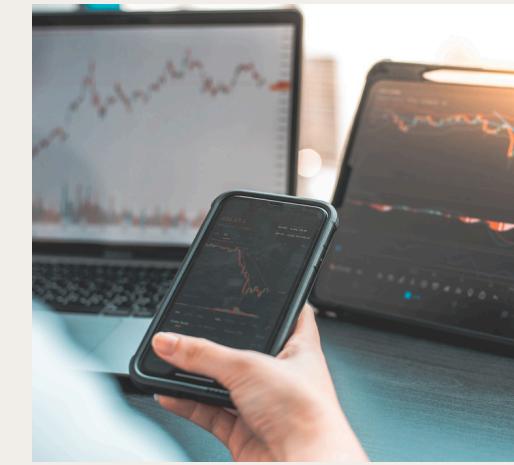


# ZERODHA : Stock Broker

Roll No	Team Members
03	Sahil Vilas Gavade
06	Prathamesh Sachin Pawar
08	Saurabh Laxman Karande
09	Aditya Raghunath Kakade

# Introduction :

## What is Zerodha ?



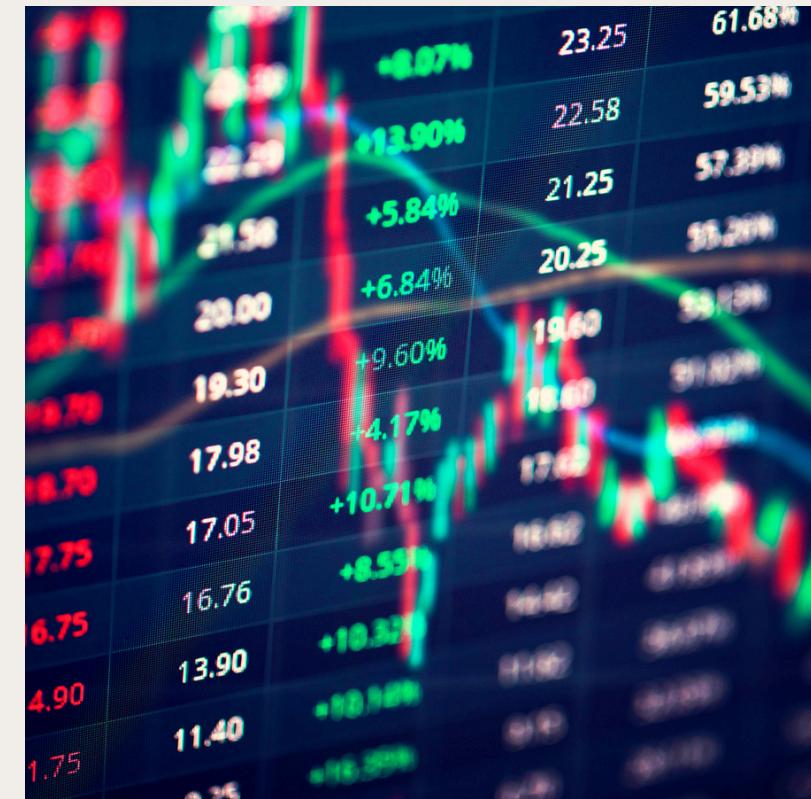
Zerodha is India's largest discount stockbroker, offering low-cost trading in stocks, commodities, currencies, and mutual funds.

## Key Features

- Stock Broking: Facilitates buying and selling of stocks, mutual funds, commodities, and currencies.
- Kite: A sleek, fast, and reliable trading platform (web and mobile).
- Console: Central dashboard for reports, P&L, tax reports, etc.
- Coin: Platform for direct mutual fund investments.

# Objectives :

- Implement secure user authentication using Firebase.
- Redirect users to a custom dashboard post-login.
- Fetch and display stock data from MongoDB.
- Allow users to buy and sell stocks on the dashboard.
- Build functional sections like:
  - Holdings (View and manage owned stocks)
  - Positions (Track active trades)
- Structure the layout to include future-ready sections:
  - Orders, Funds, and User Profile (UI present, backend pending)
- Deliver a seamless and responsive React-based UI.



# Techstack :

## Frontend:

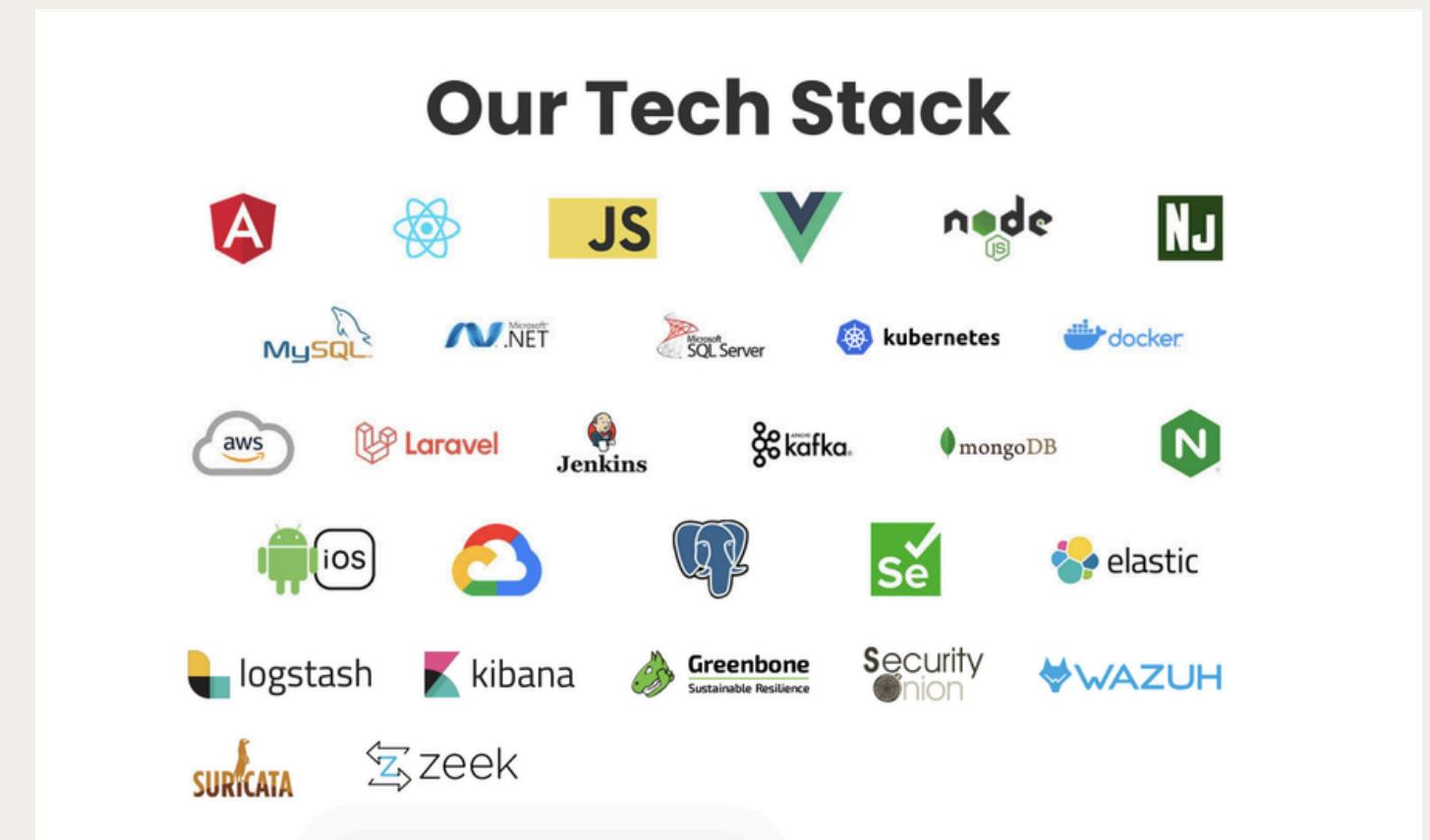
- React.js (Component-based UI)
- HTML, CSS (Styling & Layout)
- Bootstrap (Responsive Design)

## Backend:

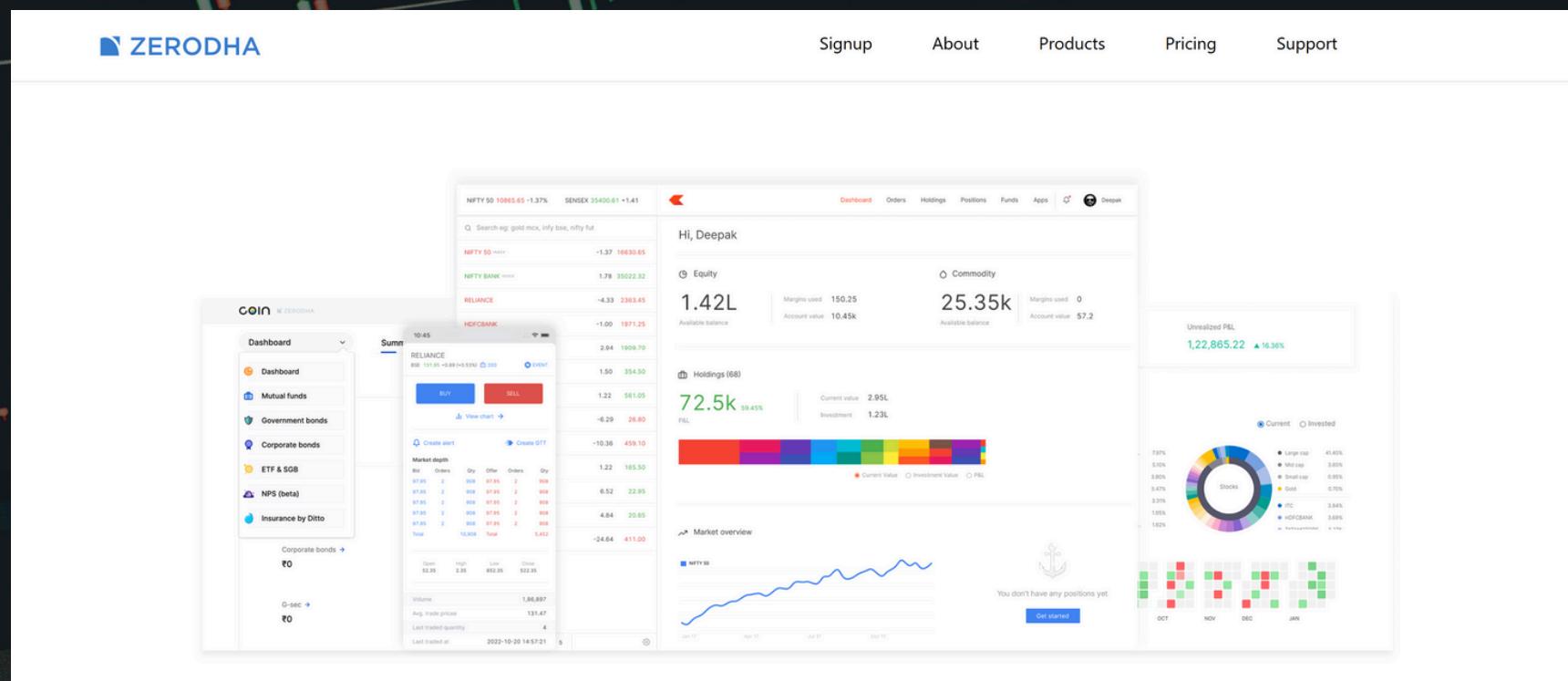
- Node.js (Server runtime)
- Express.js (Routing & API creation)
- Authentication:
- Firebase (Email/Password-based auth system)

## Database:

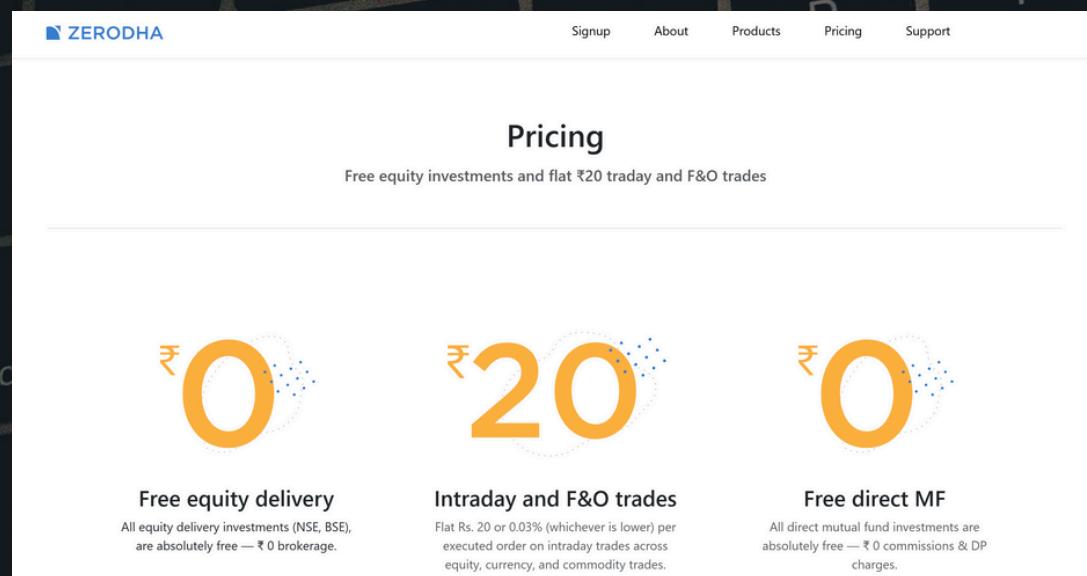
- MongoDB (NoSQL database for stock data & user info)



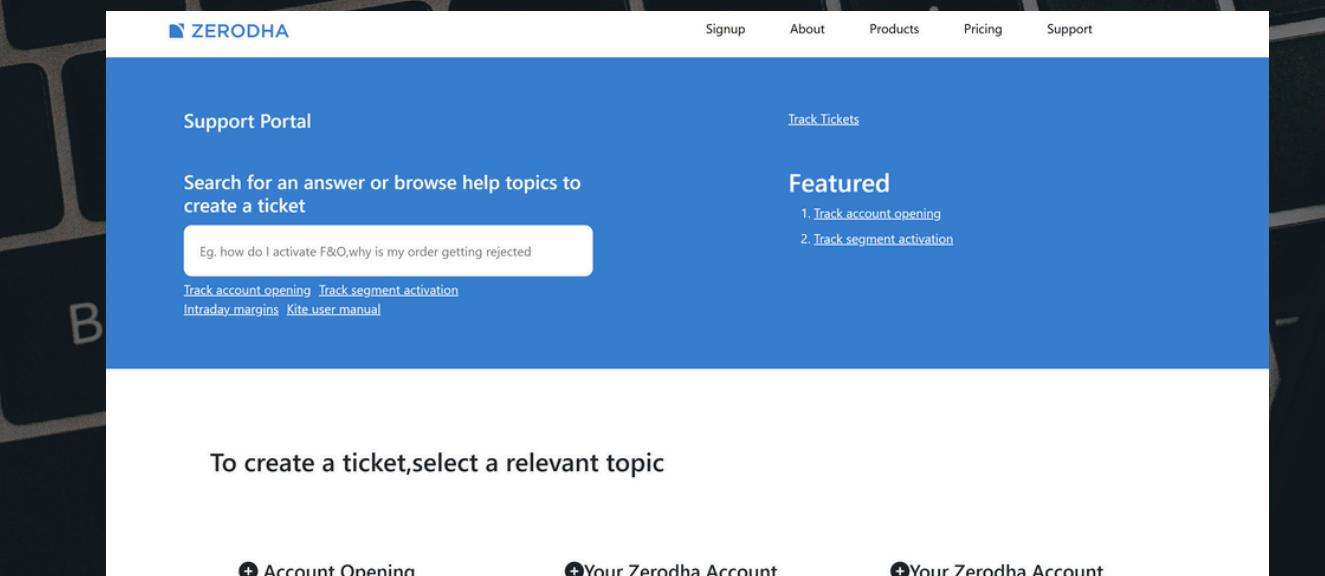
# How it Works ?



The screenshot shows the Zerodha Kite trading platform's dashboard. It features a top header with the Zerodha logo and navigation links for Signup, About, Products, Pricing, and Support. Below the header is a search bar and a date range selector. The main area displays a summary of market indices (NIFTY 50, SENSEX) and a list of held stocks (RELIANCE, HDFC BANK, etc.) with their current values and changes. To the left is a sidebar with a dashboard icon and links for COIN, Dashboard, Mutual funds, Government bonds, Corporate bonds, ETF & SGB, MPS (beta), and Insurance by Ditto. At the bottom, there's a section for Corporate bonds and a Market overview chart.



The screenshot shows the Zerodha Pricing page. It highlights three main services with flat fees: Free equity delivery (₹0), Intraday and F&O trades (₹20), and Free direct MF (₹0). Below these, there's a note about free equity delivery investments and flat ₹20 for traday and F&O trades. The page also includes links for Account Opening, Your Zerodha Account, and a Kite user manual.



The screenshot shows the Zerodha Support Portal. It includes a search bar for help topics and a section for creating a ticket. Below the search bar, there's a note about activating F&O services. The page also features a 'Featured' section with links for Track account opening and Track segment activation, and a 'To create a ticket, select a relevant topic' section with links for Account Opening and Your Zerodha Account.

## Register on Zerodha

[Register](#) [Login](#)

Full Name

Phone Number

Email address

Password

[Register](#)

Already have an account? [Login](#)

## Login to Zerodha

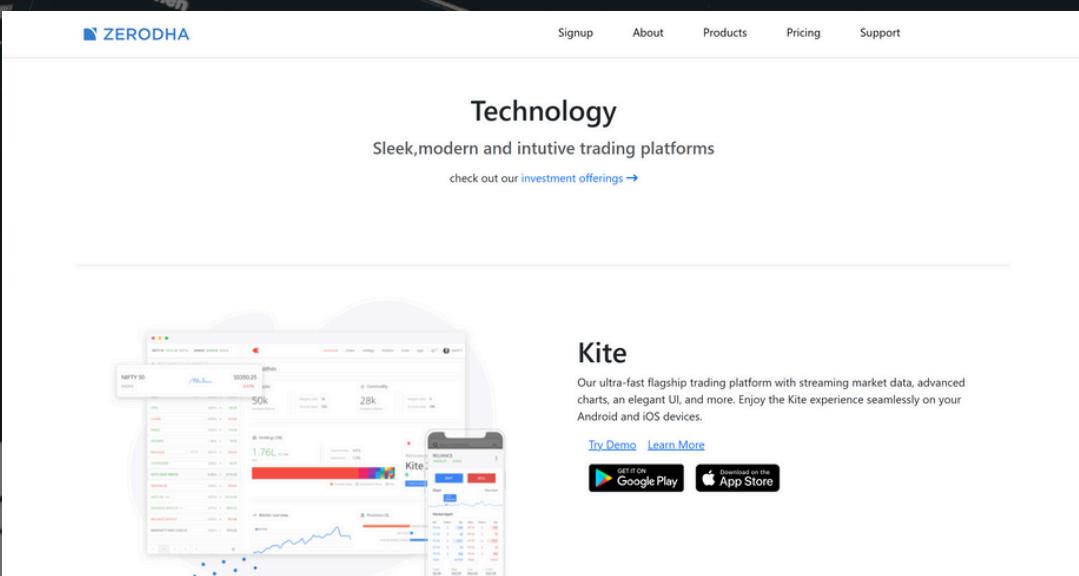
[Register](#) [Login](#)

Email address

Password

[Login](#)

Don't have an account? [Register](#)



The screenshot shows the Zerodha Technology page. It features a large image of the Kite trading platform's interface. The page includes a 'Technology' section with a note about sleek, modern, and intuitive trading platforms, and a 'Kite' section with a note about its ultra-fast performance and compatibility with various devices. It also includes links for Try Demo and Learn More, and download links for Google Play and the App Store.

# Dashboard

NIFTY 50 100.2 SENSEX 100.2

Search eg:infy, bse, nifty fut weekly, gold mcx 9 / 50

INFY	-1.60% <span style="color: red;">▼</span>	1555.45
ONGC	-0.09% <span style="color: red;">▼</span>	116.8
TCS	<span style="border: 1px solid black; padding: 2px;">Buy (B)</span>	<span style="border: 1px solid black; padding: 2px;">Buy</span> <span style="border: 1px solid black; padding: 2px;">Sell</span> <span style="border: 1px solid black; padding: 2px;">...</span>
KPITTECH	3.54% <span style="color: green;">▲</span>	266.45
QUICKHEAL	-0.15% <span style="color: red;">▼</span>	308.55
WIPRO	0.32% <span style="color: green;">▲</span>	577.75
M&M	-0.01% <span style="color: red;">▼</span>	779.8
RELIANCE	1.44% <span style="color: green;">▲</span>	2112.4
HUL	1.04% <span style="color: green;">▲</span>	512.4

1 Tag 3 Months 4 Jan. 21 Dez.



Dashboard Orders Holdings Positions Funds Apps ZU USERID

Hi, User!

Equity

3.74k

Margins used 0

Opening balance 3.74k

Margin available

Holdings (13)

# Conclusion :

We successfully built a Zerodha-like trading dashboard, implementing secure user authentication using Firebase and creating a fully functional trading interface with live buy/sell capabilities.

Leveraging the MERN stack (MongoDB, Express.js, React.js, and Node.js), we ensured dynamic data rendering and a seamless user experience. The dashboard features a modular and expandable layout, allowing for easy integration of future enhancements such as order history, fund management, and user profile functionalities. This project provided valuable hands-on experience in full-stack development, simulating a real-world financial platform while highlighting key aspects of API integration, real-time data handling, and responsive UI design. Moving forward, we aim to incorporate advanced features like WebSockets for live market updates, payment gateways for fund transfers, and mock trading for user practice.