



INVETKER

The Best Way to Track Your Stock Portfolio

Group 6

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Introduction

INVETKER is a beginner-friendly application designed to make stock tracking simple and accessible through an intuitive, user-friendly interface. It enables users to manually add, update, and delete transactions, monitor real-time portfolio performance, and track favorite tickers with ease. Users can also access essential market data and financial news—all in one place—while interacting with other users by sharing comments and insights.

Beyond its core tracking features, INVETKER enhances the user experience with:

- Customizable UI themes for light and dark modes
- Multi-language support, including English, Traditional Chinese, Simplified Chinese, and Hindi
- Real-time market news and stock-specific updates
- Favorite stock tracking for quick access to watched tickers
- Interactive comment walls for each stock, allowing users to share opinions and engage in discussions

By offering both macro-level portfolio overviews and detailed, per-stock insights, INVETKER empowers users to stay informed, make better decisions, and take control of their investment journey.

Problem & Goal

Problem

Individual investors find it difficult to track multiple portfolios and stay updated with real-time stock data, resulting in inefficient investment management.

Goal

Develop an intuitive mobile platform that allows users to manage multiple portfolios, access real-time market data, and interact with a community for shared insights.



Alex is a 30-year-old office worker with basic knowledge of U.S. stock investing. While working full-time, he is passionate about improving his personal financial management skills and uses technology tools to manage his investment portfolio. Alex focuses on data analysis and likes to combine market trends with risk assessment to pursue steady and long-term financial growth.



CHALLENGES

- Managing multiple investment portfolios with diverse strategies can be complex and time-consuming.
- Users currently need to browse multiple websites to gather comprehensive stock information.
- Most brokerage platforms are complex and difficult for beginners to use.

GOALS

- Simplify multi-portfolio management with an intuitive UI and clear portfolio differentiation.
- Integrate real-time market data and news to keep users informed and enable timely decision-making.
- Develop a user-friendly application that helps beginners start their investment journey.

Alex Miller 30, Office Worker

Features

- **Multiple Portfolio Management**

Users can create and manage multiple portfolios to independently track different investment strategies or accounts.

- **Stock and Market Data**

Provides real-time stock prices, including current price, daily highs and lows, historical performance data, and relevant market news.

- **Detailed Stock Profiles**

Displays comprehensive information about each ticker, such as company details, market capitalization, industry, currency, listing date, and description.

- **Customizable User Interface**

Supports light and dark themes, allowing users to personalize the app's appearance according to their preferences.

- **Multi-Language Support**

Users can select their preferred language from options including English, Traditional Chinese, Simplified Chinese, and Hindi.

- **Favorites Tracking**

Enables users to mark stocks as favorites for quick access and easy monitoring of preferred assets.

- **Interactive Comment System**

Allows users to share insights and opinions on individual stocks, fostering a community-driven discussion platform.

- **Transaction Recording**

Lets users log buy and sell transactions to maintain accurate portfolio tracking and gain/loss analysis.

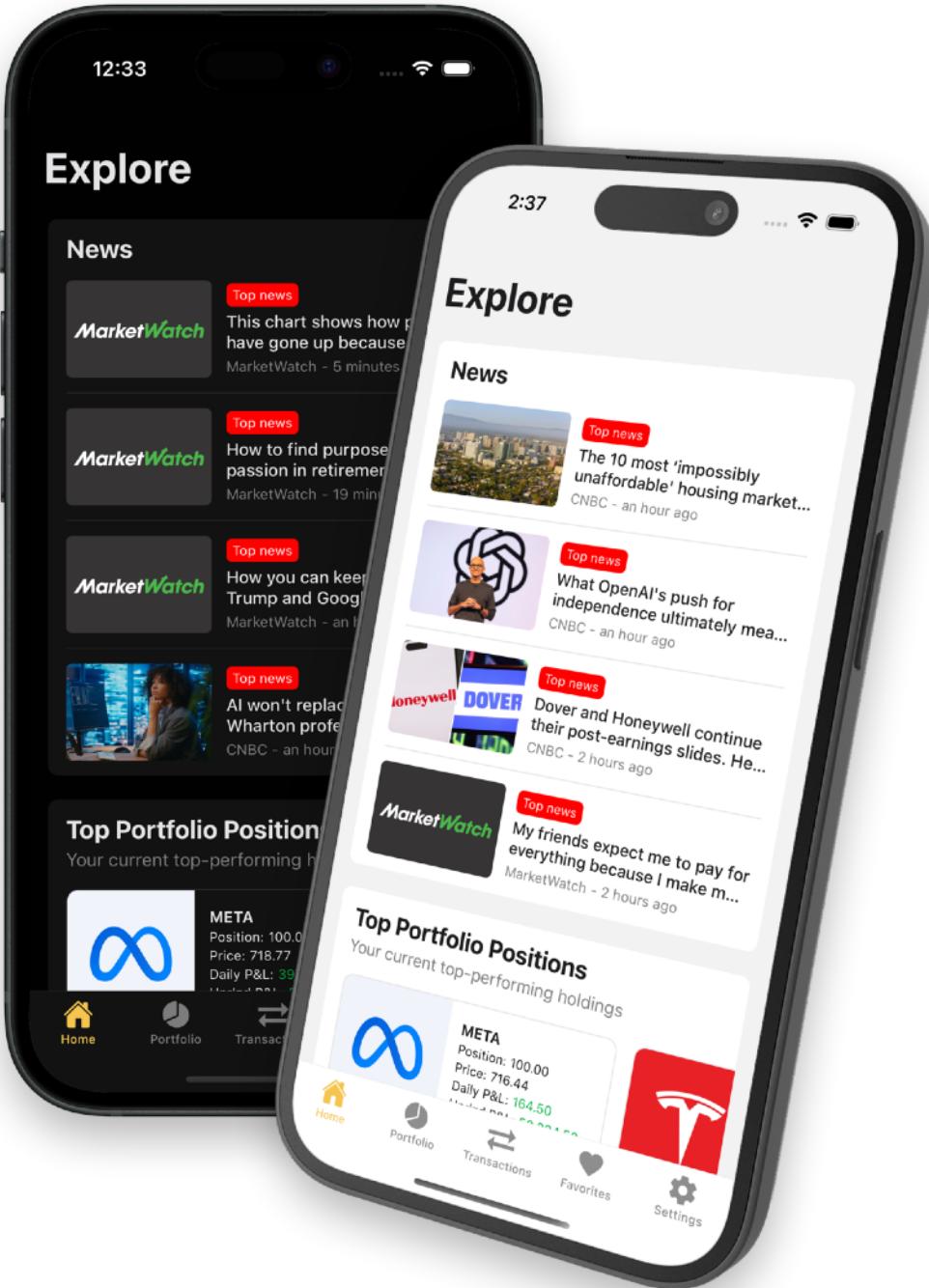
- **User Profile Management**

Users can update personal information such as display name, avatar, language preference, and theme settings.

- **Secure Authentication**

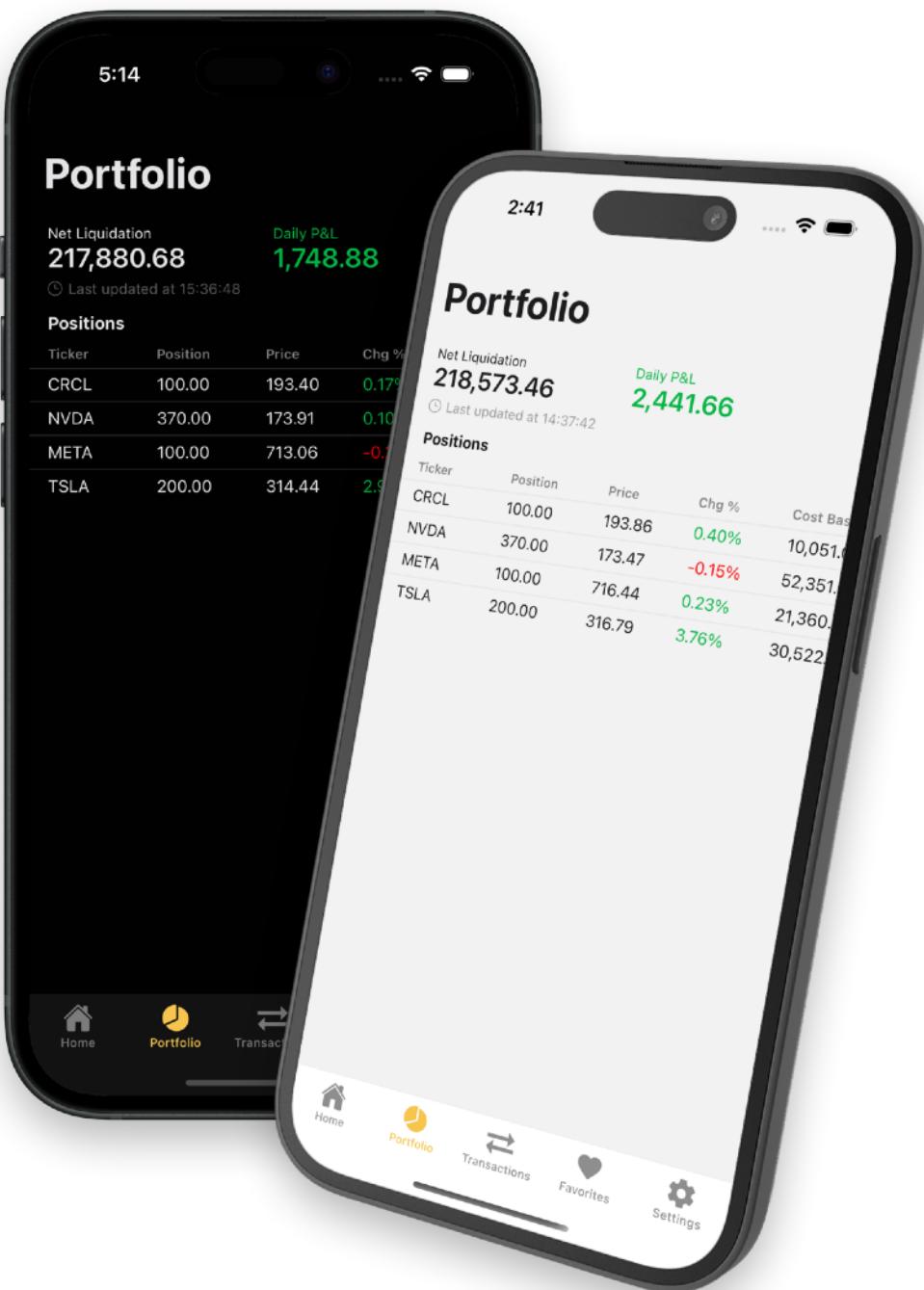
Utilizes Firebase Authentication to ensure secure user login and session management.

Interface Design (Screenshots)



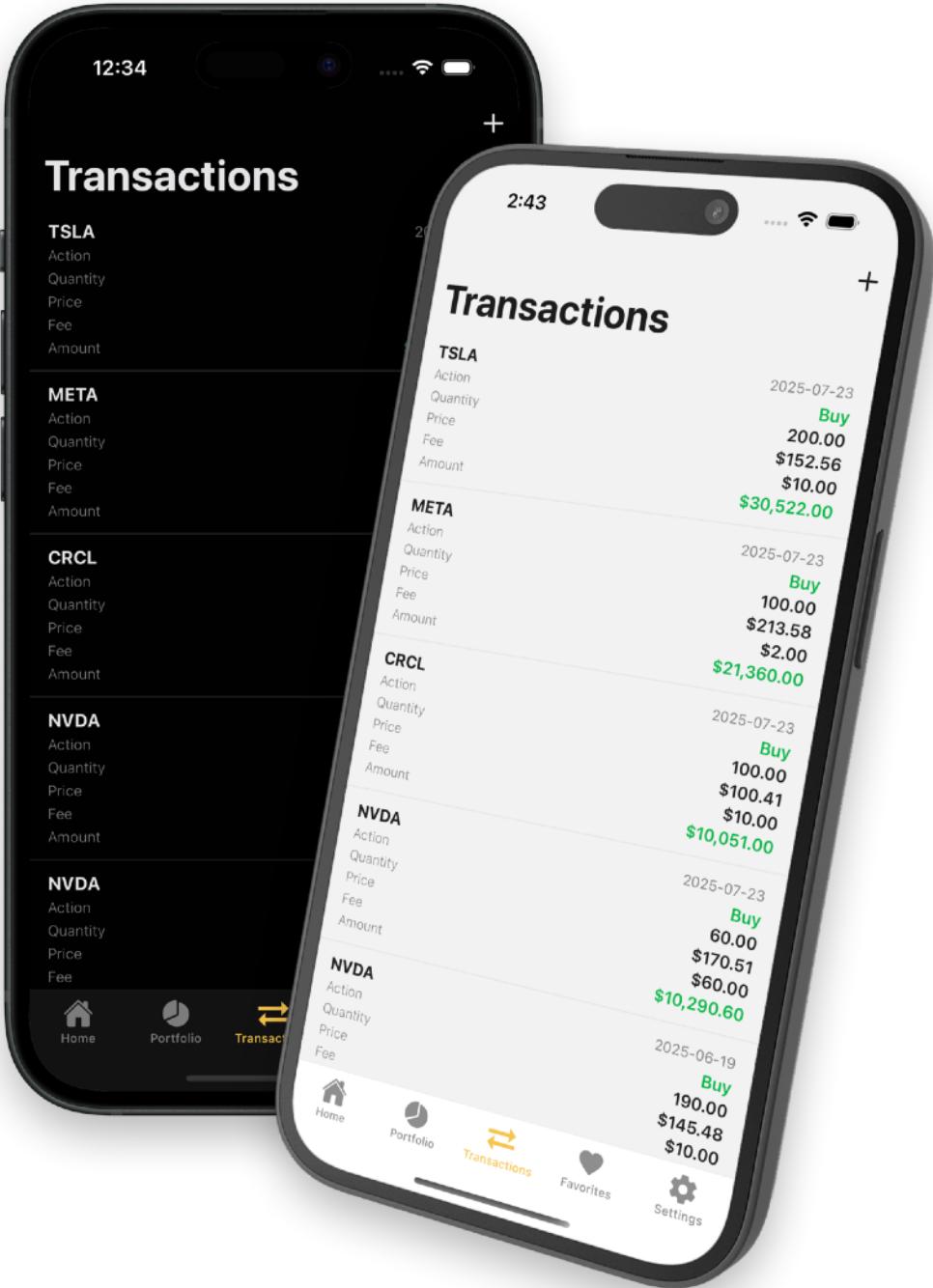
Home Screen

The screen includes market news and the user's top portfolio positions, which help users better understand market trends and their own investments.



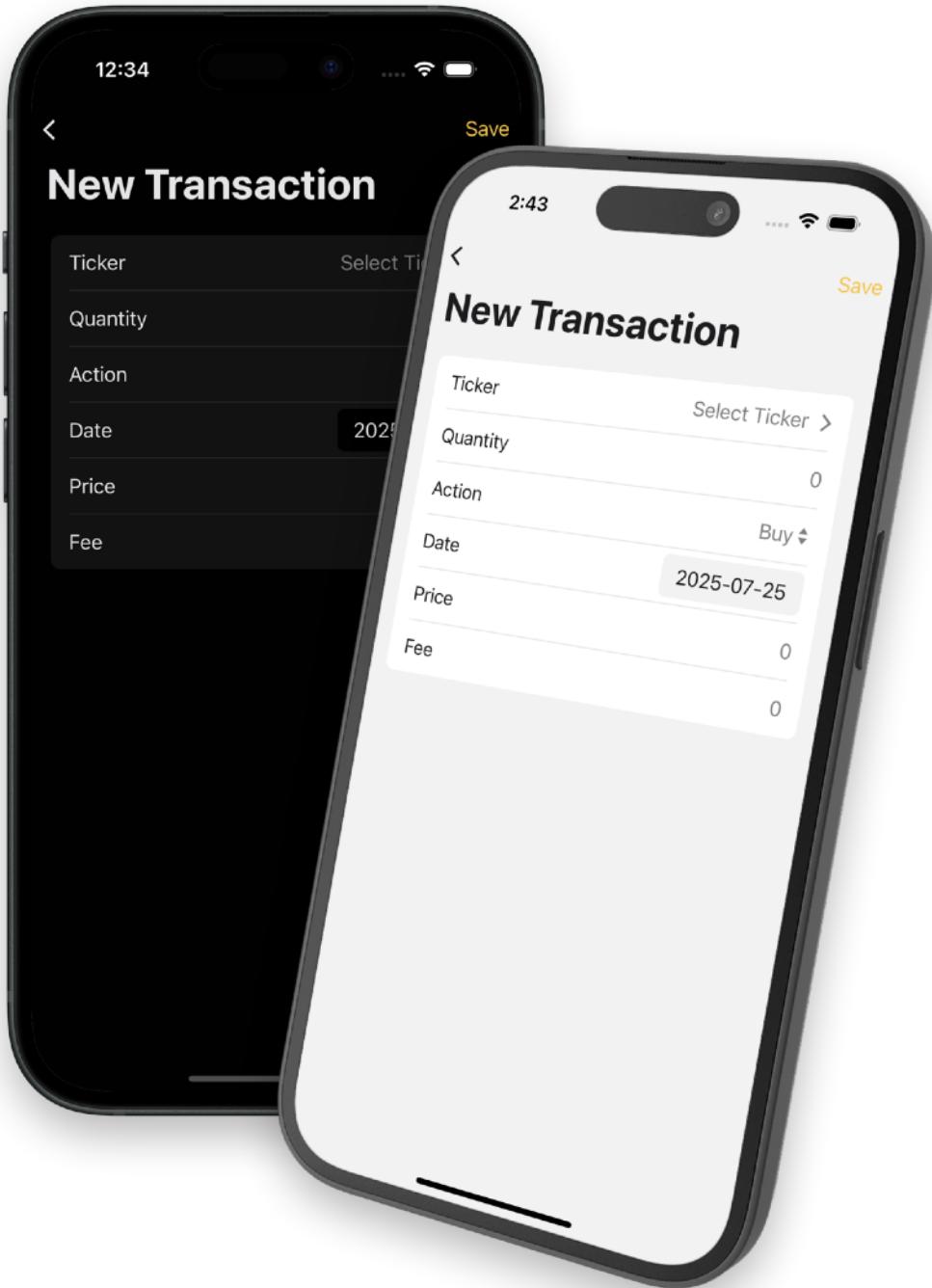
Portfolio Screen

The screen displays detailed information about the user's current holdings, including current price, today's high and low, cost basis, prior close, daily change and percentage, market value, as well as today's and unrealized profit or loss.



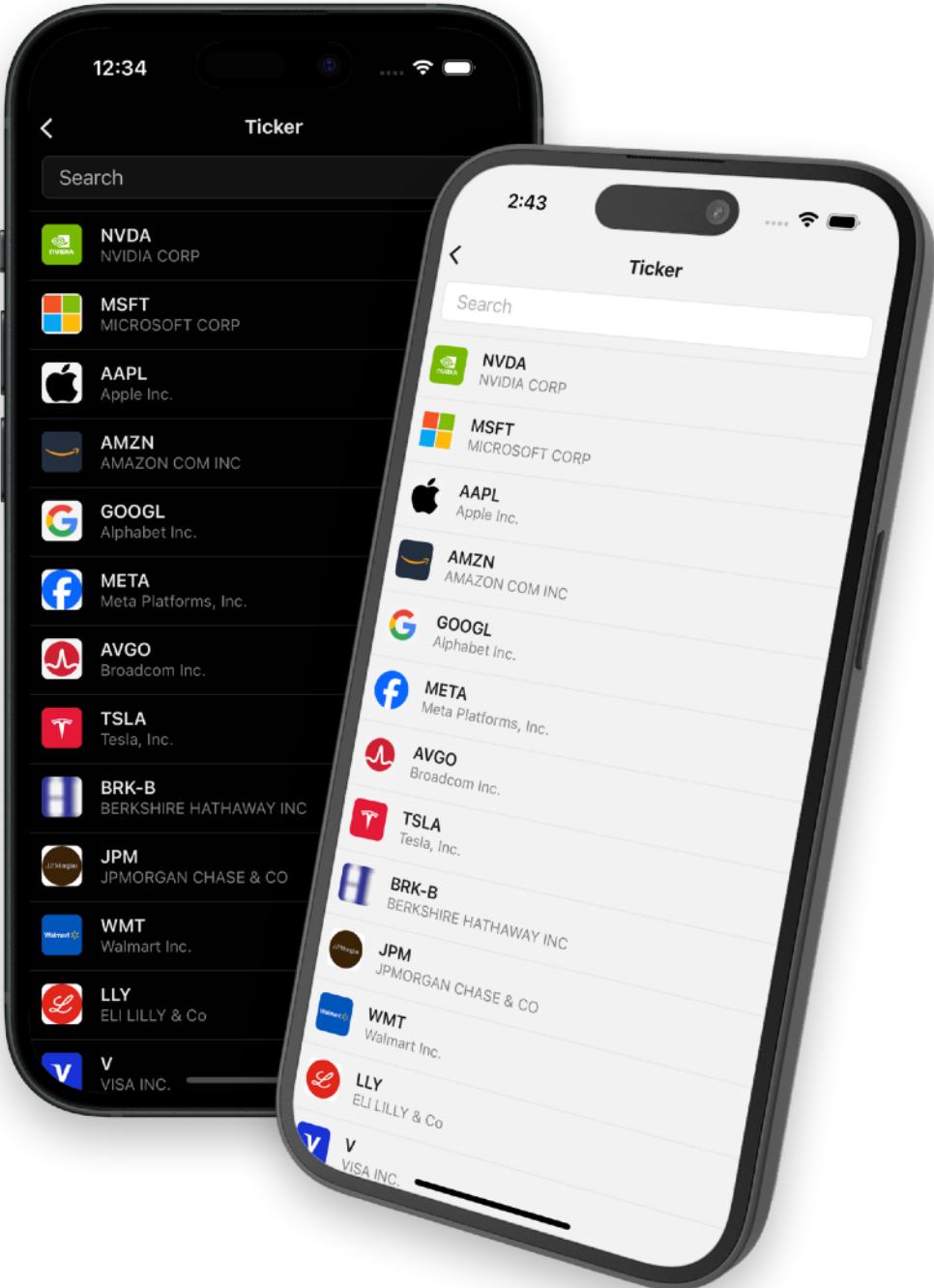
Transaction Screen

The screen shows all transactions for the current user, including transaction details such as action, quantity, price, fee, amount, and date.



Add Transaction Screen

The screen allows users to manually add transactions through our intuitive UI.



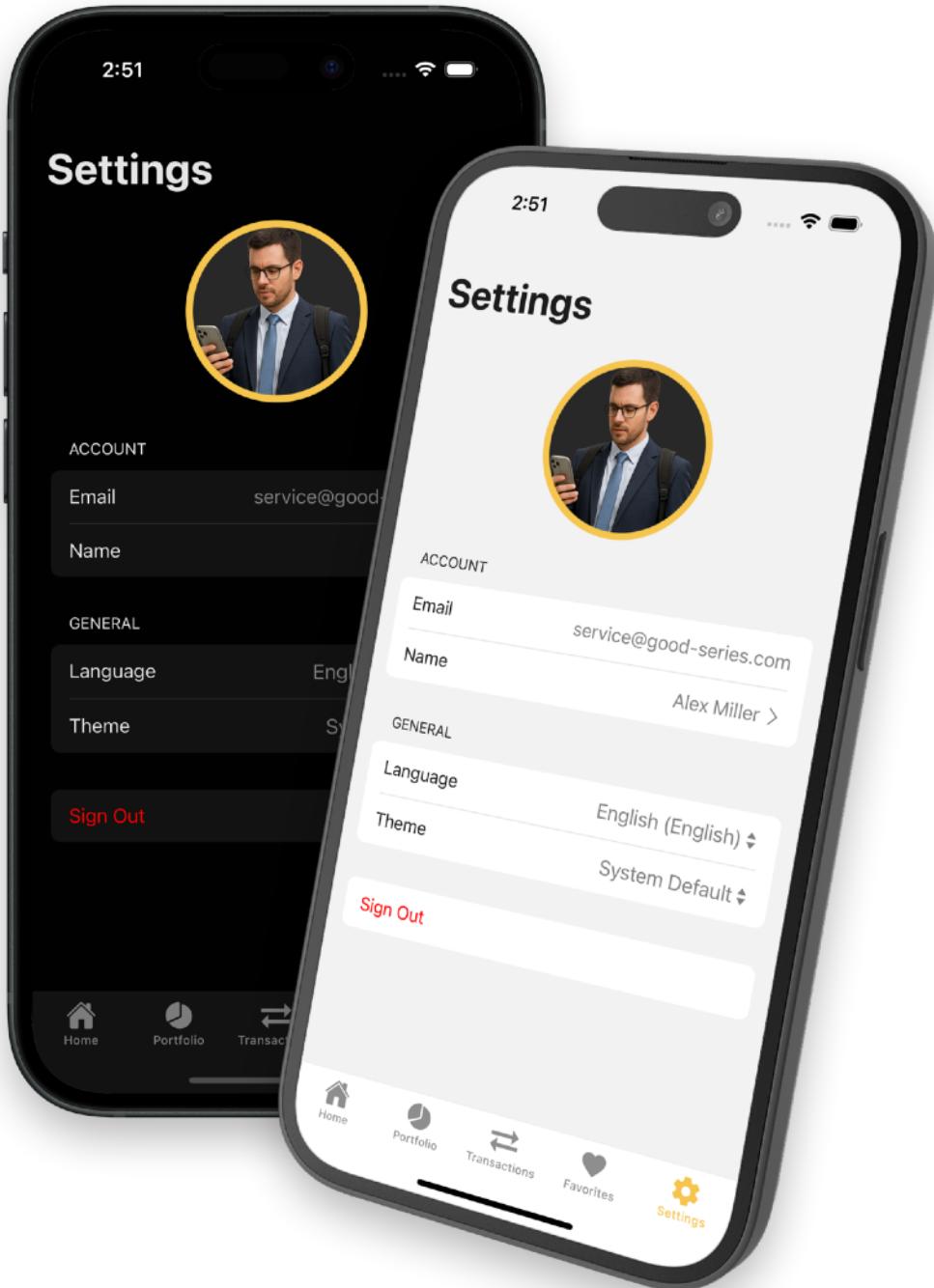
Ticker List Screen

The screen displays all supported tickers with their logos and includes a search bar at the top to help users find tickers quickly.



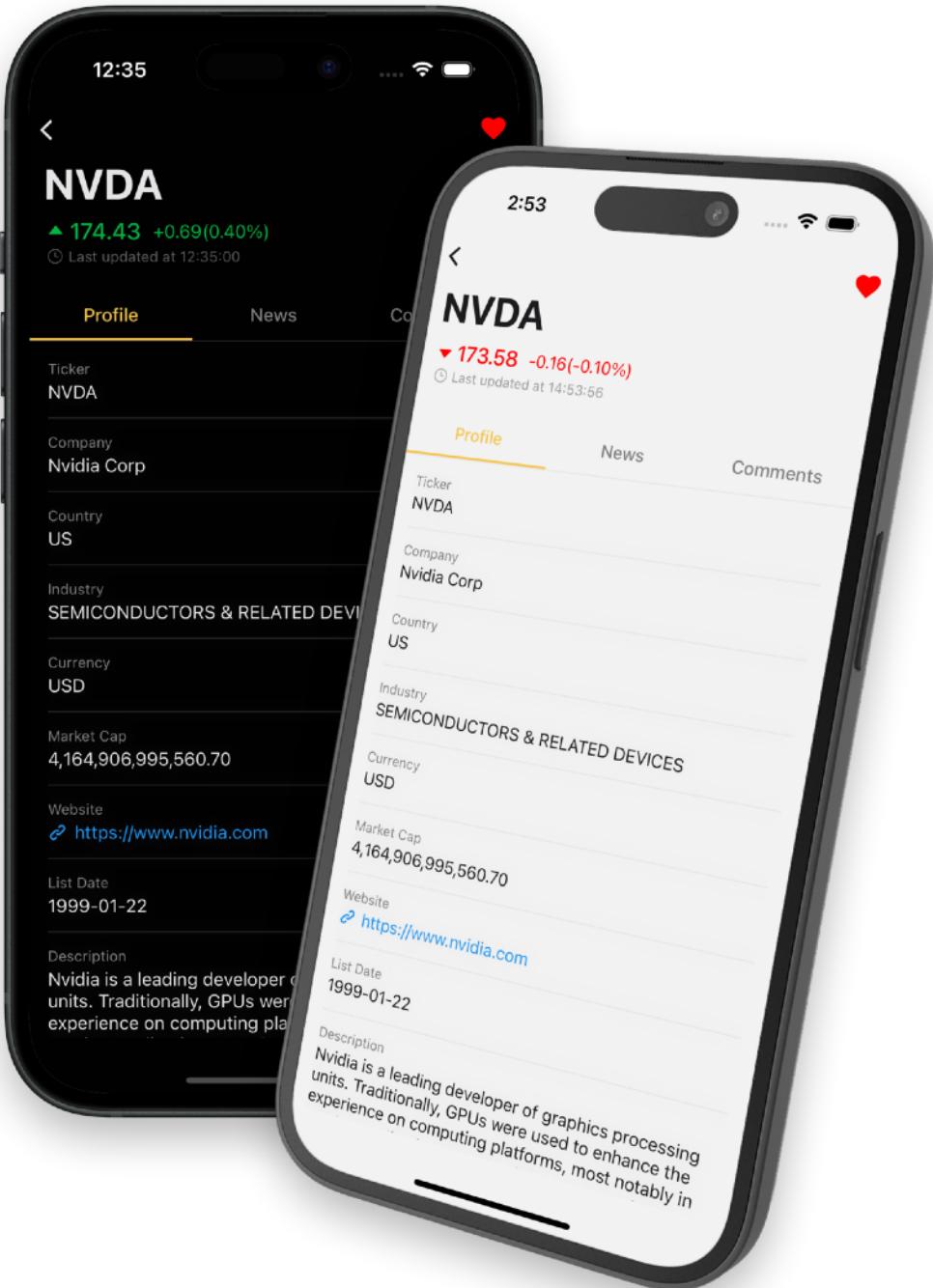
Favorites Screen

The screen provides quick access to stocks that the user has marked as favorites for easier monitoring, including current price, change, today's high and low, and prior price.



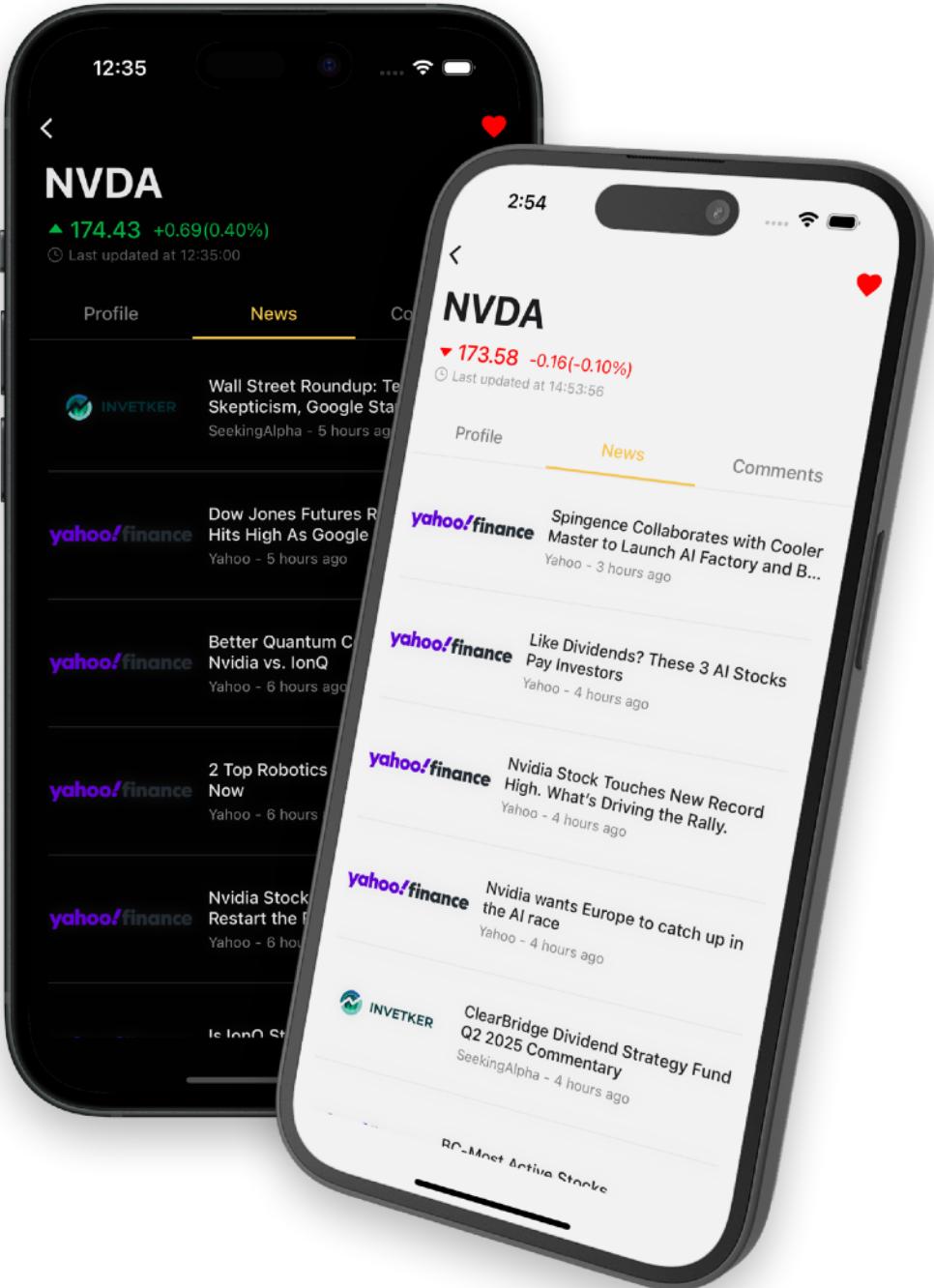
Settings Screen

The screen displays user information including email, allows the user to update their display name and avatar, choose language preference (e.g., English, Traditional Chinese, Simplified Chinese, Hindi) and theme settings (e.g., light/dark), and provides a log out button.



Ticker Profile Screen

The screen displays information about the ticker, such as company name, country, industry, currency, market capitalization, website, listing date, and description.



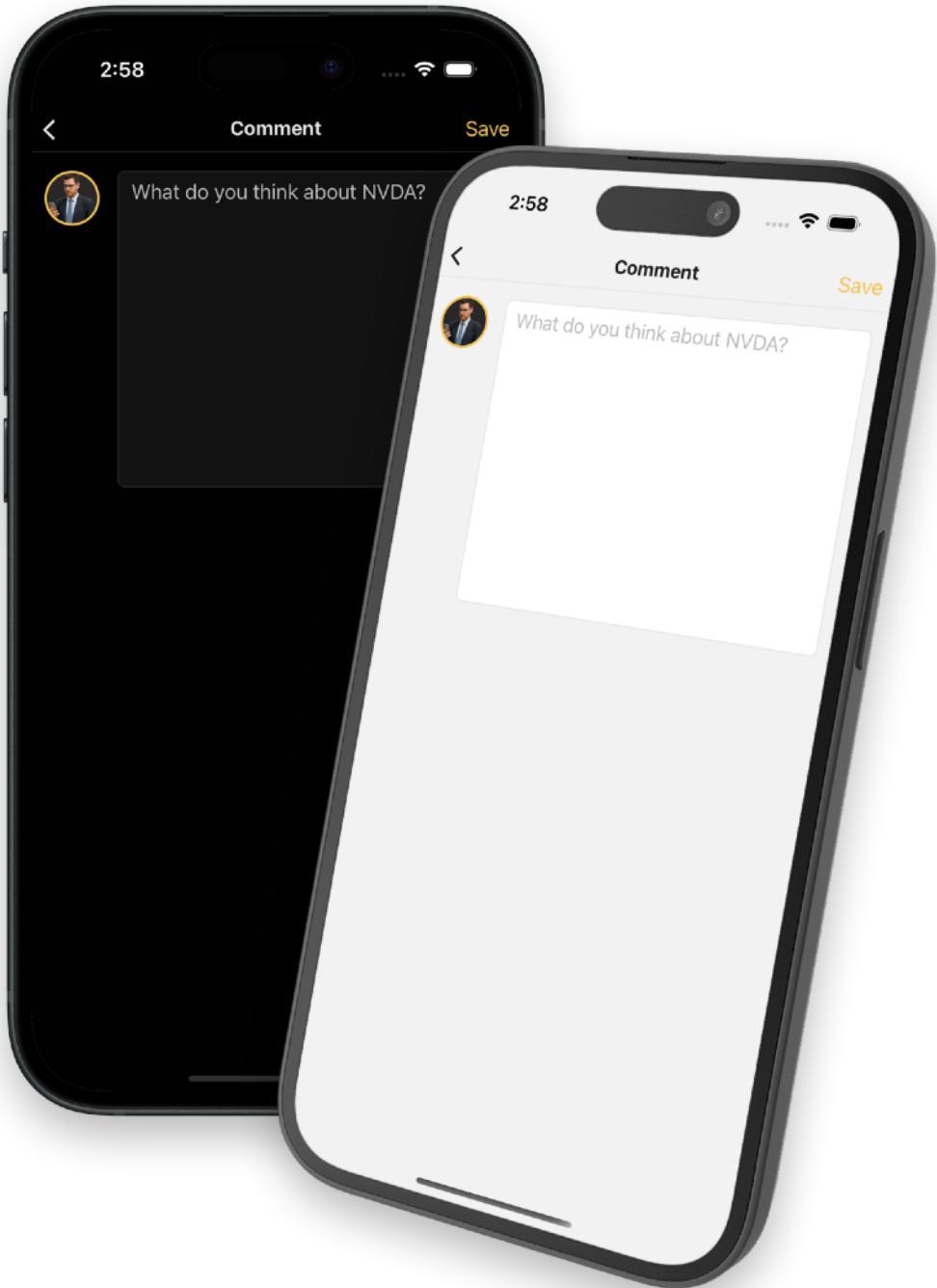
Ticker News Screen

The screen displays news about the ticker, allowing users to quickly analyze its trend.



Ticker Comments Screen

The screen showcases all comments related to the ticker, allowing users to gain new insights and helping them to better understand market sentiment.



Add Ticker Comment Screen

The screen allows users to share their thoughts on the ticker, such as its trend and performance, which can be helpful for others.

Tech Stack

Frontend

- React Native - Cross-platform mobile development
- Expo - Simplifies development and deployment for Android & iOS
- TypeScript - Adds static typing for better code quality and maintainability

Backend Services

- Firebase Authentication - Secure user login and session management
- Firebase Firestore - Cloud-based NoSQL database for storing:
 - Transactions
 - Comments
 - User Profiles
 - Favorites

API Integrations

- Finnhub API - Real-time stock quotes, financial news, and company data
- Polygon.io - Real-time stock quotes, financial news, and company data
- Logo.dev - Logo retrieval service for company branding
- Gravatar - User avatar service

DevOps

- GitHub – Version control and collaborative development
- CI/CD Pipelines – Automated build and deployment via GitHub Actions

Platform Support

- iOS & Android – Deployed and tested via Expo for streamlined publishing

Database Schema

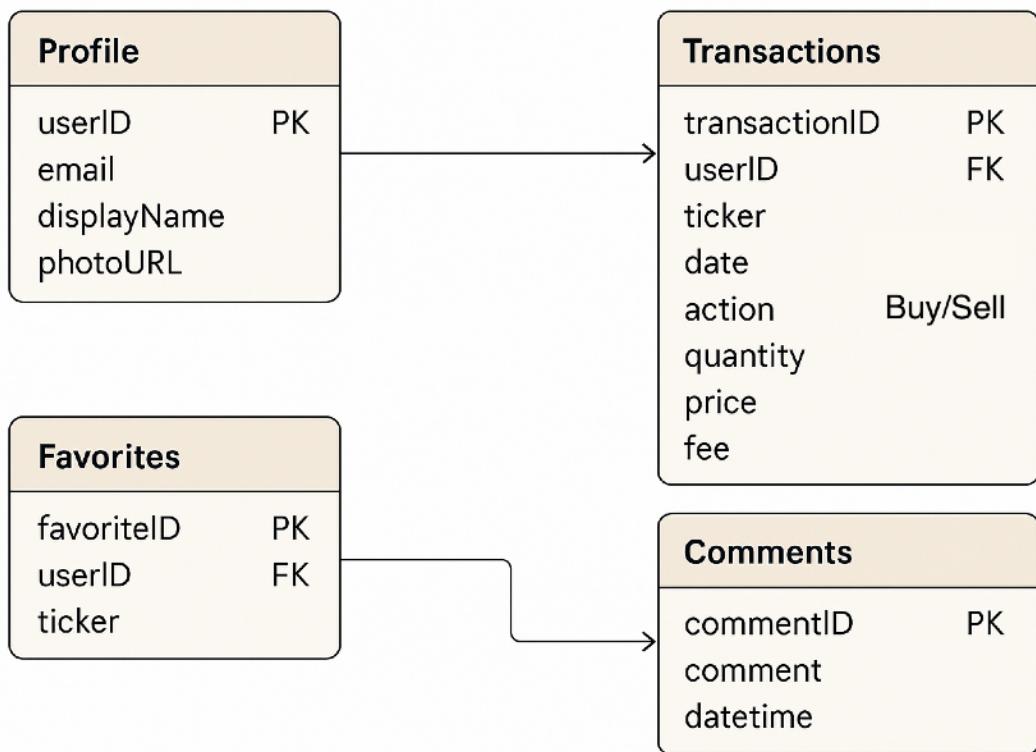


Table: Profile	Type	Table: Transactions	Type
userID (PK)	String	transactionID (PK)	String
email	String	userID(FK)	String
displayName	String	ticker	String
photoURL	String (URL)	date	Timestamp
		action (buy, sell)	String
		quantity	Number
		price	Number
		fee	Number

Table: Favorites	Type	Table: Comments	Type
favoriteID (PK)	String	commentID (PK)	String
userID (FK)	String	userID (FK)	String
ticker	String	comment	String
		datetime	Timestamp
		ticker	String

Future Improvements

As the platform matures, INVETKER aims to expand its ecosystem with features such as:

- Automated portfolio sync with brokerage accounts through APIs
- Push notifications for price alerts, earnings reports, and portfolio events
- AI-driven investment insights and personalized portfolio suggestions
- Multi-asset support (e.g., ETFs, crypto, global markets)
- Community features like user profiles, public portfolios, and following other investors

These future developments will further enhance the platform's value and attract a wider audience of retail investors.



Projects Links & References

References

- Finnhub API Documentation:
<https://finnhub.io/docs/api>
- Polygon.io API Documentation:
<https://polygon.io/docs>
- Gravatar Documentation:
<https://gravatar.com>
- Logo.dev Documentation:
<https://logo.dev>
- Firebase Documentation:
<https://firebase.google.com/docs>
- React Native Documentation:
<https://reactnative.dev/docs/getting-started>
- Expo Documentation:
<https://docs.expo.dev>
- TypeScript Documentation:
<https://www.typescriptlang.org/docs>
- SCRUM Methodology:
<https://www.scrum.org/resources/what-is-scrum>

Project Links

- GitHub Repository:
https://github.com/joeyin/INVETKER-React_Native
- Jira Board:
<https://invetker-team.atlassian.net/jira/software/projects/OPS/boards/1>
- Google Document:
<https://docs.google.com/document/d/183Bo7gEl30ryW2sQgFUfLRsXt04X2rMfTSqqirONfQ/edit?usp=sharing>
- Figma Design:
<https://www.figma.com/design/9KWYbwF1FMnBry58EdXhuc/INVETKER?node-id=56-31&t=UF4HVS1iAslnW8B6-1>