

# *INVESTIQ*

BY TEAM 02 TECHNO STACK



# *AGENDA*

Team Member Roles and Responsibilities

Improvements from Professor Feedback

Project Description

Team Working Agreement

Personas

MVP

Technologies

Algorithms

Diagrams

Product Backlog

Sprint 1 Backlog

Metrics

Retrospective

Sprint 2

Project Demo - Sprint 1

GitHub Link

Live Application Demo

# *TEAM MEMBERS*



Ruchitha Reddy Kuthuru – Product Manager and Full Stack developer



Mahidhar Reddy Kandula – Machine learning Engineer

# *TEAM MEMBERS*



Afrida Mehanaz Shaik— Machine Learning Engineer



Sharan Jagini – Backend Engineer and Tester

# *TEAM MEMBERS*



Nadeem Hussain Shaik – Frontend Developer



Shrinidhi Daheechi – Frontend Developer

# *PROBLEM STATEMENT*

Investors often find it challenging to make informed decisions due to overwhelming market information, constant fluctuations, and a lack of personalized guidance. Many existing tools provide data but do not offer meaningful insights tailored to individual needs. This app aims to simplify investment decisions by analyzing market trends, tracking relevant news, and offering timely recommendations based on personal financial goals and life events. Combining real-time updates with user-specific insights helps investors stay informed and make smarter financial choices with confidence.



# PROJECT DESCRIPTION

<b>Project Name:</b>	<u>InvestIQ</u>
<b>Team:</b>	Techno Stack
<b>Project Description:</b>	<p>For investors who struggle with analyzing market trends and making informed financial decisions, the <u>InvestIQ</u> AI application is a smart investment assistant that analyzes stock market trends, processes real-time financial news, and provides personalized investment insights and risk alerts. Unlike traditional investment platforms that only offer raw data and generic analytics, our application leverages AI-driven time series analysis and natural language processing to deliver real-time, context-aware financial recommendations tailored to users' personal financial goals and life events.</p>
<b>Benefit Outcomes:</b>	<ul style="list-style-type: none"><li>• Better investment decisions with AI-driven insights and alerts</li><li>• Personalized financial recommendations based on user behavior and market trends</li><li>• Real-time market sentiment analysis for timely and informed trading</li><li>• Reduced research time by consolidating key financial insights into a single platform</li></ul>
<b><u>Github</u> Link:</b>	<a href="https://github.com/htmw/2025S-Techno-Stack/wiki">https://github.com/htmw/2025S-Techno-Stack/wiki</a>

# TEAM WORKING AGREEMENT

## Team Working Agreement

**Team Name:** Techno Stack

### 1. Communication & Meetings

- **Slack:** Our main channel for daily communication, quick questions, and status updates.
- **Virtual/In-Person Meetings:** We will conduct weekly meetings via Zoom or Google Meet. If in-person classes are held, we will transition to face-to-face meetings as needed. Team members are encouraged to raise doubts and support one another during these meetings.

### 2. Project Management

- **Jira:** We will use Jira to track tasks, set deadlines, and monitor progress. It's essential that all links in our documentation and code repositories are verified and kept up-to-date.
- **Timely Submissions:** Every team member must complete their assigned tasks on time to ensure the project stays on track schedule.

### 3. Documentation

- All documentation must include working links to code repositories, APIs, and other relevant resources. This ensures every team member can access the latest project updates and resources.

### 4. Roles & Responsibilities

- **Ruchitha Reddy Kuthuru (PM & Full Stack Developer):** Oversees the project, coordinates meetings, and contributes to frontend and backend development.
- **Mahidhar Reddy Kandula (ML Engineer):** Develops and integrates AI models for sentiment analysis and trend forecasting.
- **Afrida Mehanaz Shaik (ML Engineer):** Collaborates on developing and optimizing AI models and data processing workflows.
- **Sharan Jagini (Backend Developer & Tester):** Manages backend development, handles API integrations, and conducts thorough testing to ensure quality and functionality.
- **Nadeem Hussain Shaik (Frontend Developer):** Designs and develops a responsive user interface focusing on usability.
- **Shrinidhi Daheechi (Frontend Developer):** Supports frontend development and collaborates on UI/UX design improvements.

### 5. Collaboration & Support

- Team members are expected to help each other by promptly addressing doubts and challenges as they arise.
- Regular updates on Jira and other project management tools are required to inform everyone of progress.

- Ensuring that all documentation, code, and integrations (including working links) are thoroughly tested and maintained is a shared responsibility.

### Agreed by:

- Ruchitha Reddy Kuthuru
- Mahidhar Reddy Kandula
- Nadeem Hussain Shaik
- Sharan Jagini
- Afrida Mehanaz Shaik
- Shrinidhi Daheechi



# PERSONA

Aarav Sharma

- **Age:** 28
- **Occupation:** Software Engineer
- **Investment Experience:** Intermediate
- **Goals:** Simplify his investment decision-making process by utilizing clear, actionable insights from real-time news.
- **Pain Points:** Feels overwhelmed by the vast amount of market data and frustrated by platforms that fail to provide timely news analysis.
- **Description:** Aarav values technology and data-driven insights; he seeks a tool that aggregates real-time news, enabling him to quickly grasp market shifts without the distraction of raw stock data.
- **Challenges:**
  - Struggles with filtering relevant financial information from the overwhelming amount of market data.
  - Finds it time-consuming to track news manually and correlate it with market trends.





# *PERSONA*

Thomas Shelby

- **Age:** 40
- **Occupation:** Corporate Manager
- **Investment Experience:** Beginner to Intermediate
- **Goals:** Achieve steady portfolio growth by staying informed about key market developments through timely news updates.
- **Pain Points:** Finds traditional investment platforms cluttered with irrelevant data and lacking a focused approach to current financial news.
- **Description:** With a busy schedule, Thomas needs a user-friendly platform that provides curated real-time news and actionable insights, enabling him to make confident, long-term financial decisions without continuously monitoring fluctuating stock figures.
- **Challenges:**
  - Has limited time to stay updated on financial news and market changes.
  - Prefers risk-averse investments but struggles with identifying safe and promising opportunities.

# *PERSONA*

Sanjana Reddy

- **Age:** 35
- **Occupation:** Financial Analyst
- **Investment Experience:** Advanced
- **Goals:** Optimize her investment strategy with comprehensive market analysis based on the latest financial news.
- **Pain Points:** Frustrated with generic investment tools that do not integrate timely news, leaving her without the nuanced insights she needs.
- **Description:** Sanjana is analytical and detail-oriented, searching for a sophisticated platform emphasizing real-time news analysis to provide deep insights and tailored recommendations rather than just raw stock data.
- **Challenges:**
  - Struggles with quickly assessing the sentiment of large volumes of financial news.
  - It requires advanced analytics but finds that many tools lack deep AI-driven insights.



# *MVP*

- **User registration and profile setup** (to capture financial goals, risk tolerance, and preferences).
- **Historical market trend analysis** (using delayed or historical stock data from free APIs like Yahoo Finance or Alpha Vantage, which often provide historical data for free).
- **Personalized investment recommendations** (based on historical trends, user goals, and risk tolerance, using a simple rule-based algorithm instead of real-time data).
- **A dashboard** to view recommendations, historical trends, and market news.

# *TECHNOLOGIES - BACKEND*

- **Flask:** A lightweight Python framework ideal for building RESTful APIs, easily integrating with machine learning models, and simplifying backend logic.
- **Node.js:** Offers non-blocking, event-driven architecture, making it great for handling real-time operations and concurrent tasks.



# *TECHNOLOGIES - FRONTEND*

- **Next.js:** Offers server-side rendering and static site generation, resulting in fast, SEO-friendly pages and a strong user experience interface.
- **TypeScript:** Improves code quality and maintainability by providing static type checking, which reduces runtime errors.

**NEXT.js**





# *TECHNOLOGIES - DATABASE*

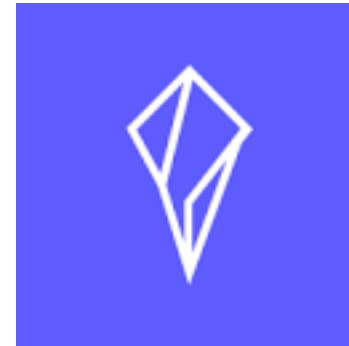
- PostgreSQL is a powerful, open-source relational database known for its reliability, scalability, and support for complex queries, ensuring secure and efficient data storage.



# *TECHNOLOGIES - APIS*

## Financial News API & Polygon API

- These APIs supply real-time financial news and market data, enabling the application to deliver timely and actionable insights without relying on raw stock data.



**polygon.io**

# *TECHNOLOGIES – MACHINE LEARNING*

PyTorch is selected for its dynamic computation graph and user-friendly interface, making it ideal for developing and training deep learning models used in sentiment analysis and trending forecasting.



# *TECHNOLOGIES – HOSTING & DEPLOYMENT*

- **Vercel**: Perfect for quickly deploying frontend applications with high performance and scalability.
- **DigitalOcean**: Offers dependable and scalable hosting for backend services and the entire application deployment.



# *TECHNOLOGIES – DEVELOPMENT TOOLS*

- **Visual Studio Code:** A versatile code editor featuring extensive extensions and integrated debugging that enhances the developer experience productivity.
- **Postman:** Essential for testing APIs, confirming our endpoints function as expected during development.
- **Git:** To enable version control, enhance collaborative development, and improve code management.
- **Docker:** Used for containerization, ensuring consistency across development, testing, and production environments.
- **Slack:** Facilitates effective team communication and project management.



Visual Studio Code



POSTMAN



git



docker



slack

The background of the slide is a collage of financial data visualizations. It includes a line chart with a grid, a bar chart with blue and orange bars, and a candlestick chart. There are also various numbers and text elements scattered throughout, such as '345771', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', and 'Sat'. The overall color scheme is dark with blue and orange accents.

# *ALGORITHMS - NLP*

Our NLP module harnesses cutting-edge technology. The phi model for natural language processing is specifically designed to analyze real-time financial news. This module extracts sentiment and identifies key topics from the latest updates, enabling the application to interpret market sentiment accurately. By processing large volumes of textual data, the phi model provides actionable insights that inform users about market trends and emerging financial narratives, transforming raw news into clear, meaningful investment opportunities guidance.

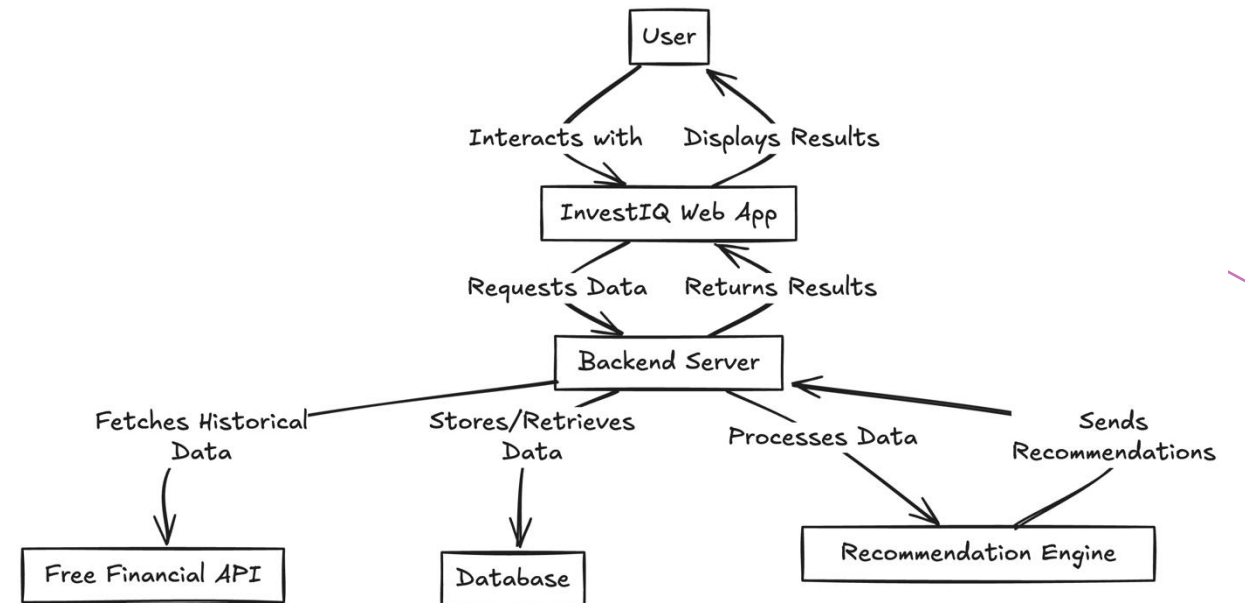


The background of the slide features a collage of financial data visualizations. It includes a line chart with a grid, a bar chart with blue and orange bars, and various numerical data points and text snippets in a blurred, high-tech font. The overall color scheme is dark with blue and orange highlights.

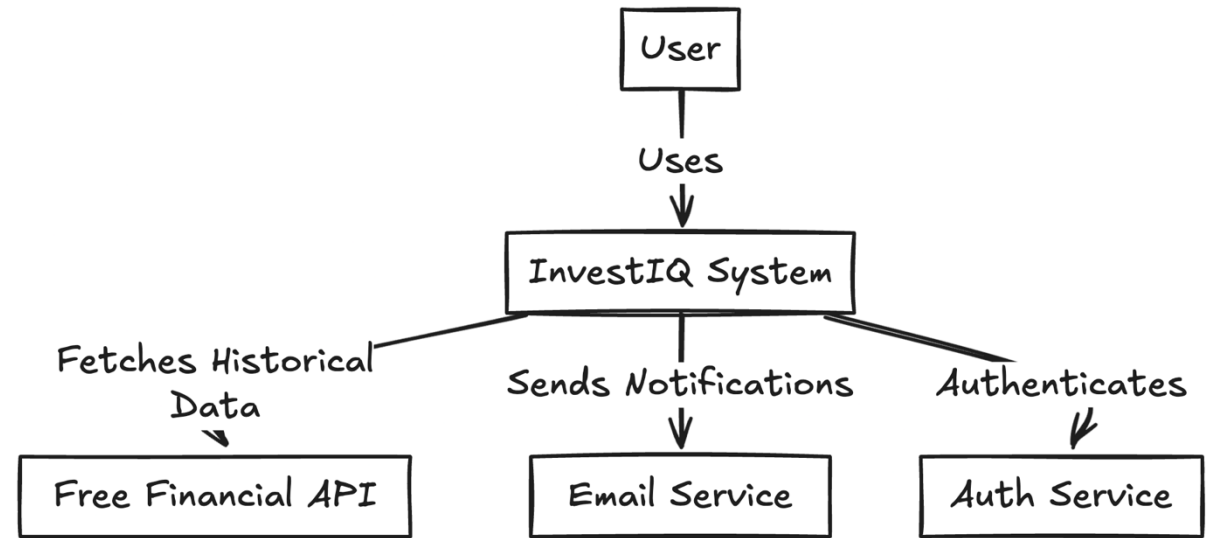
# *ALGORITHMS – TIME SERIES*

- Our Time Series Analysis module examines historical stock market data using advanced deep learning techniques like LSTM and Temporal Fusion Transformers to capture underlying trends and seasonal patterns. This analysis provides essential context that complements the real-time insights derived from our NLP module, ensuring users have a strong understanding of market dynamics. Together, these two modules generate a strong synergy that enables investors to make informed decisions based on current news sentiment and historical market performance.

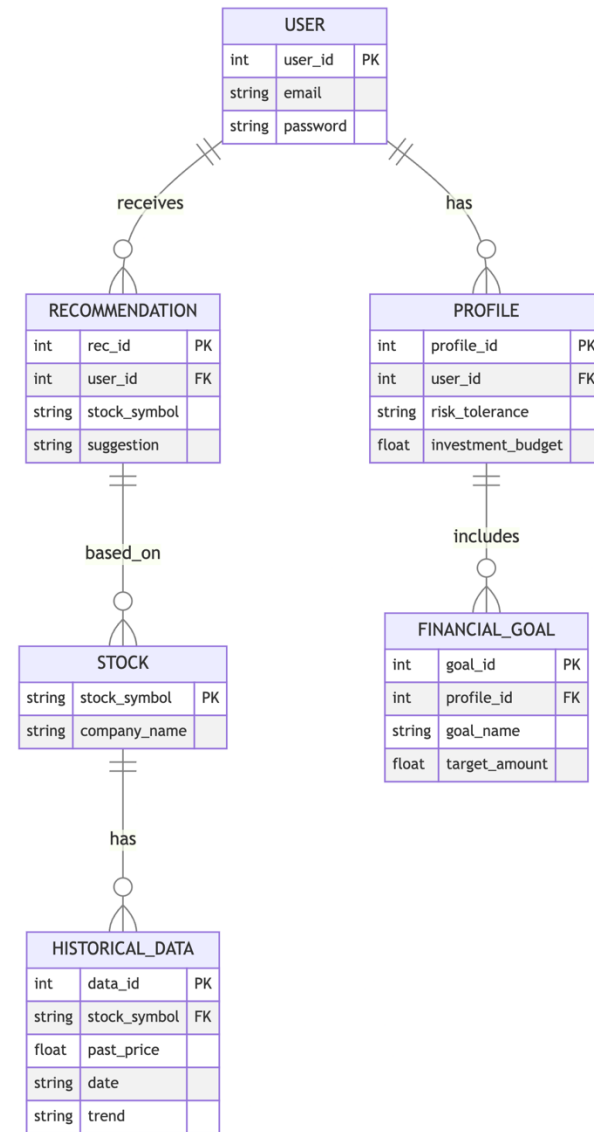
# ARCHITECTURE DIAGRAM



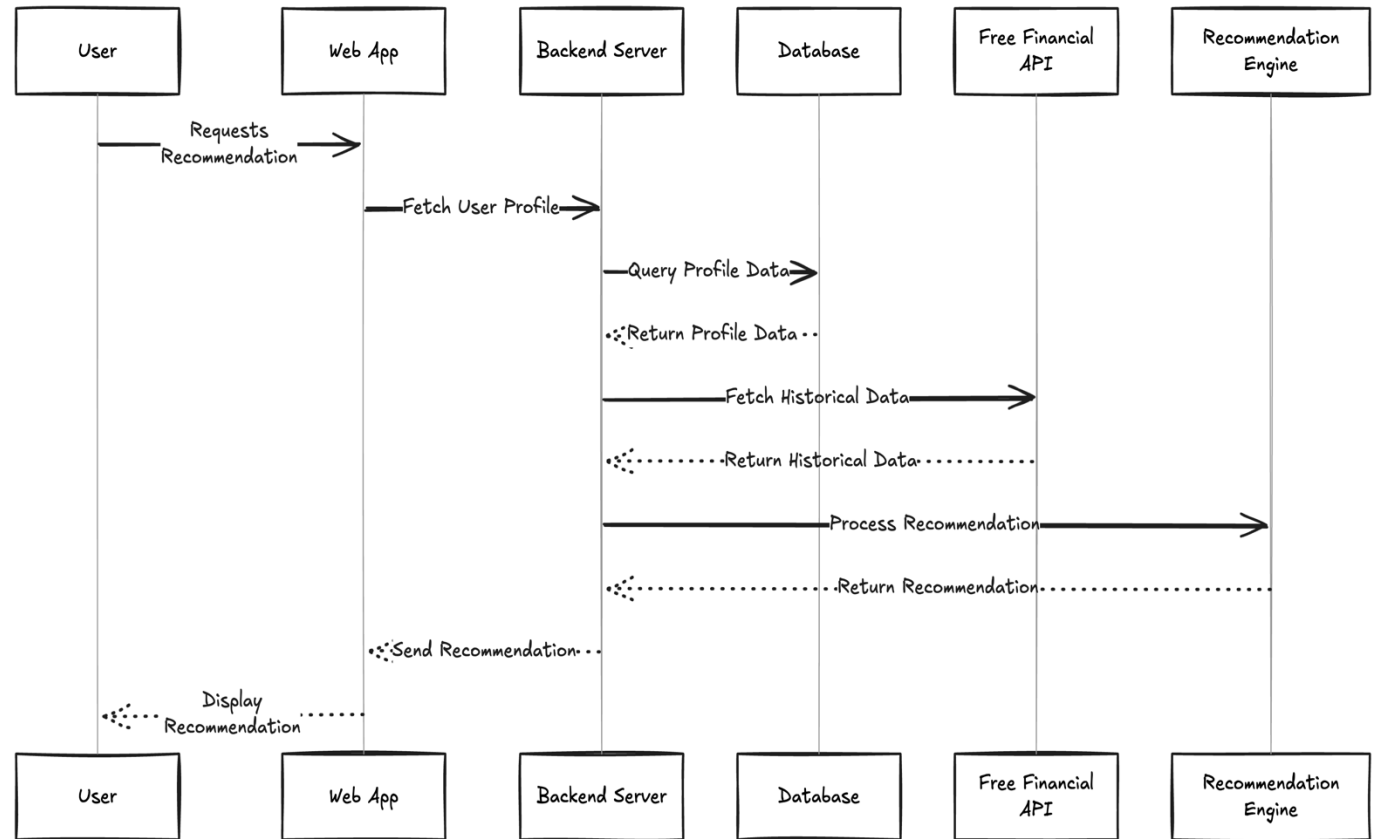
# CONTEXT DIAGRAM



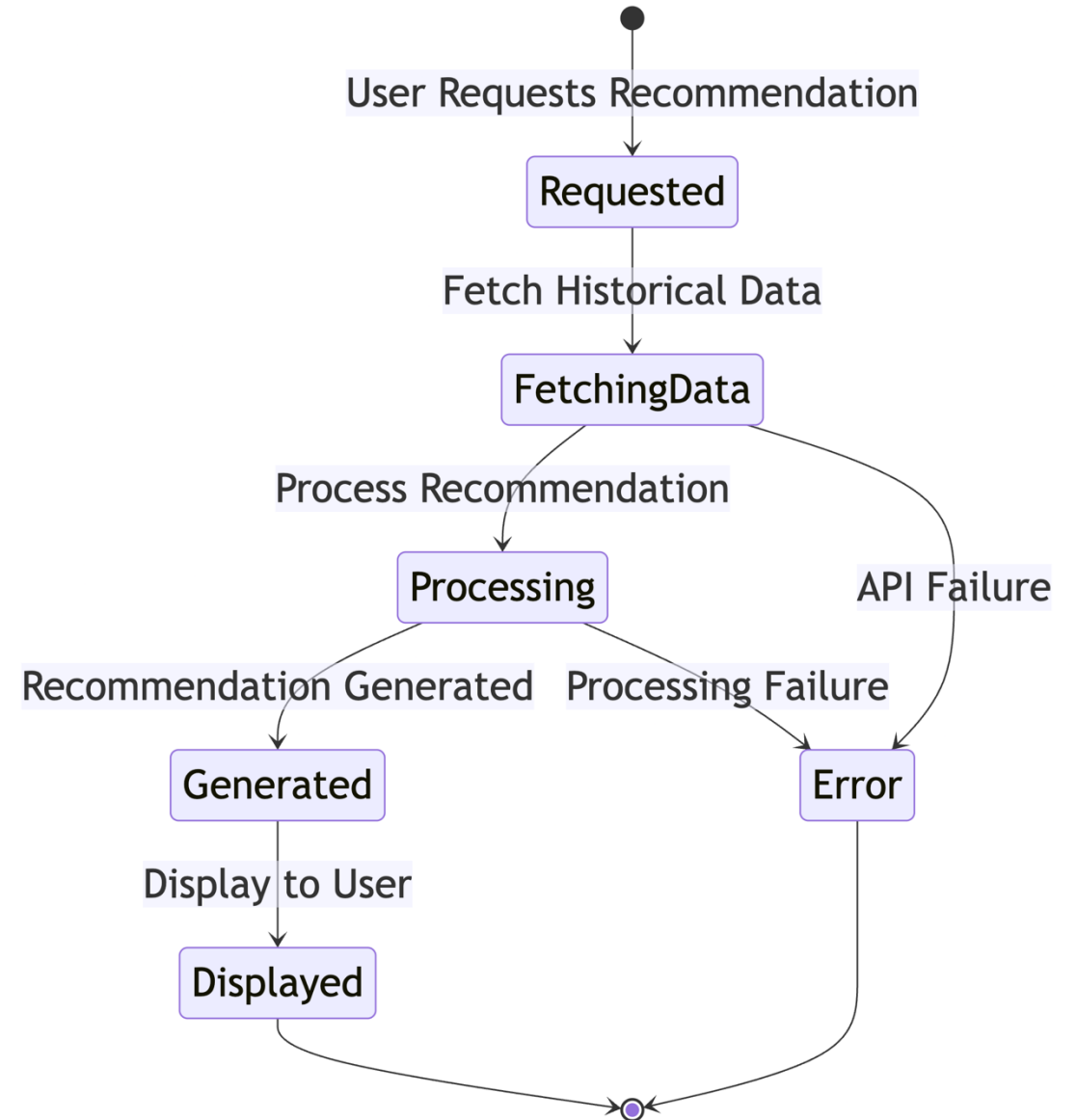
# ER DIAGRAM (ENTITY- RELATIONSHIP DIAGRAM)



# SEQUENCE DIAGRAM

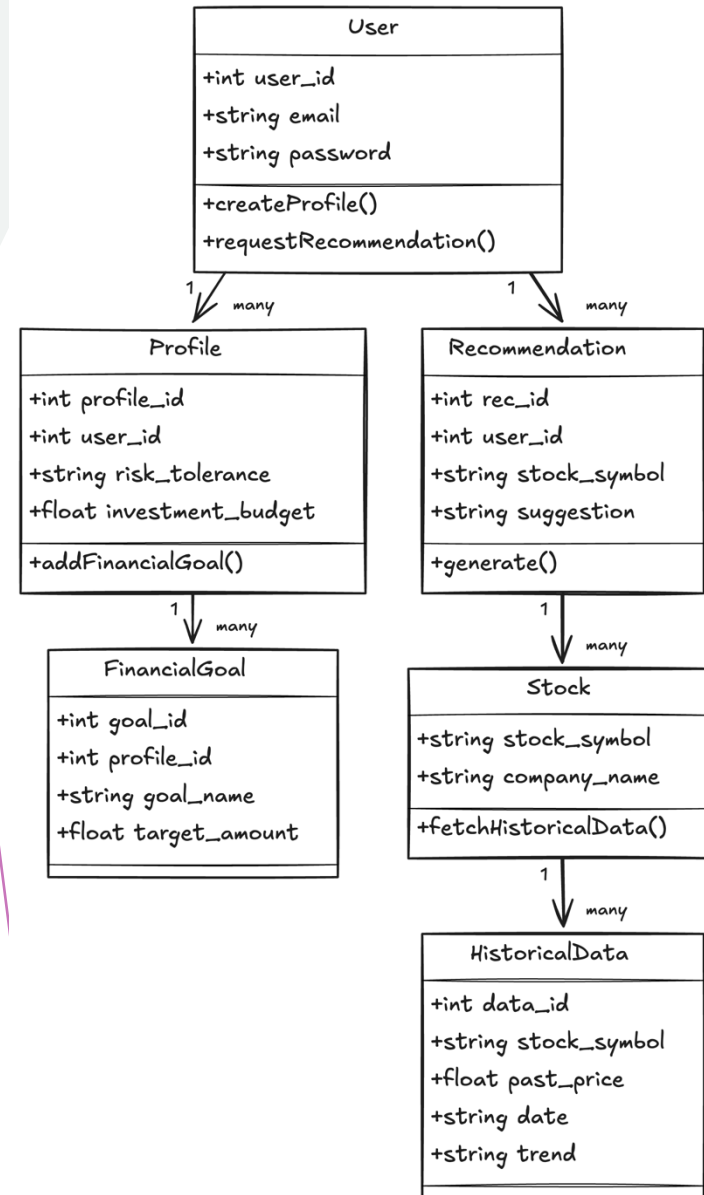


# STATE DIAGRAM





# CLASS DIAGRAM



# PRODUCT BACKLOG

Story ID	Feature	User Story	Acceptance Criteria	Story Points
US1	Basic Dashboard UI	Aarav Sharma wants to see a basic dashboard layout, So that he can understand the structure of the app.	<ol style="list-style-type: none"><li>1. Dashboard has sections for recommendations, trends, and news (placeholders).</li><li>2. Layout is clean with a header, sidebar, and main content area.</li><li>3. UI is responsive for desktop and mobile.</li></ol>	5
US2	Profile Setup UI	Aarav Sharma wants to input his risk tolerance and budget in a form, So that he can simulate setting up his profile.	<ol style="list-style-type: none"><li>1. Form includes dropdown for risk tolerance (Low, Medium, High) and input for budget.</li><li>2. Form has a "Save" button that shows a confirmation message (no backend saving yet).</li><li>3. Error message shown if budget is invalid (e.g., negative).</li></ol>	3
US3	Recommendation Placeholder UI	Thomas Shelby wants to see a placeholder for recommendations, So that he can visualize where his investment suggestions will appear.	<ol style="list-style-type: none"><li>1. Dashboard has a section titled "Recommendations".</li><li>2. Section shows 3 mock recommendations (e.g., "Stock: AAPL, Suggestion: Buy").</li><li>3. Each recommendation has a button labeled "View Details" (non-functional for now).</li></ol>	3
TS1	Front-End Framework Setup	As a developer needs to set up a front-end framework (e.g., React), So that the team can build the UI efficiently.	<ol style="list-style-type: none"><li>1. Project is initialized with React (or similar framework).</li><li>2. Basic routing is set up for dashboard and profile pages.</li><li>3. CSS framework (e.g., Tailwind or Bootstrap) is integrated for styling.</li></ol>	5

# PRODUCT BACKLOG

Story ID	Feature	User Story	Acceptance Criteria	Story Points
US4	User Registration	Aarav Sharma wants to register with his email and password, So that he can access the InvestIQ platform.	<ol style="list-style-type: none"><li>1. Aarav can enter email and password on a registration form.</li><li>2. System validates email format and ensures password is at least 8 characters.</li><li>3. Upon successful registration, Aarav is redirected to login page.</li><li>4. Error messages shown if email is in use or inputs are invalid.</li></ol>	3
US5	User Login	Aarav Sharma wants to log in with his email and password, So that he can access his dashboard.	<ol style="list-style-type: none"><li>1. Aarav can enter email and password on a login form.</li><li>2. System validates credentials and logs Aarav in if correct.</li><li>3. Aarav is redirected to the dashboard upon successful login.</li><li>4. Error message shown if credentials are incorrect.</li></ol>	2
US6	Save Profile Data	Aarav Sharma wants to save his profile data, So that the system can use it for recommendations.	<ol style="list-style-type: none"><li>1. Profile form (built in Sprint 1) now saves data to the backend.</li><li>2. Aarav can edit and update his profile.</li><li>3. Confirmation message shown after saving.</li></ol>	3
TS2	Backend API Integration	As a developer needs to integrate a free API (e.g., Yahoo Finance) to fetch historical stock data, So that the team can use it for recommendations.	<ol style="list-style-type: none"><li>1. Backend fetches historical stock data for 5 sample stocks (e.g., AAPL, GOOGL).</li><li>2. Data includes 30 days of historical prices and trends.</li><li>3. Data is cached in the database.</li><li>4. Error handling for API failures.</li></ol>	5

# PRODUCT BACKLOG

Story ID	Feature	User Story	Acceptance Criteria	Story Points
TS3	Database Schema Setup	Sanjana Reddy needs to create a database schema for users, profiles, and historical data, So that the team can store and retrieve data.	<ol style="list-style-type: none"><li>1. Schema includes tables for Users, Profiles, and HistoricalData.</li><li>2. Database uses a free solution (e.g., SQLite).</li><li>3. Basic CRUD operations implemented for user and profile data.</li></ol>	3
US7	Historical Trends Display	Thomas Shelby wants to see historical trends for recommended stocks, So that he can understand the basis for recommendations.	<ol style="list-style-type: none"><li>1. Dashboard displays a line chart showing 30-day price trend for each stock.</li><li>2. Chart uses historical data from the database.</li><li>3. Chart includes labels for dates and prices.</li></ol>	5
US8	Market News Display	Thomas Shelby wants to see recent market news, So that he can stay informed.	<ol style="list-style-type: none"><li>1. Dashboard includes a section with market news headlines.</li><li>2. News fetched from a free API (e.g., NewsAPI) and displayed as a list.</li><li>3. Each news item includes title, source, and link to the article.</li></ol>	5
US9	Personalized Recommendations	Thomas Shelby wants to see personalized investment recommendations, So that he can make informed decisions.	<ol style="list-style-type: none"><li>1. Recommendations replace the placeholder UI from Sprint 1.</li><li>2. Recommendations are based on historical trends and user profile (e.g., risk tolerance).</li><li>3. If no recommendations are available, a message like "No recommendations at this time" is shown.</li></ol>	5

# PRODUCT BACKLOG

Story ID	Feature	User Story	Acceptance Criteria	Story Points
TS4	Recommendation Logic	As a developer needs to implement a rule-based recommendation system, So that users receive personalized suggestions.	<ol style="list-style-type: none"><li>1. Algorithm uses historical trends (e.g., 30-day moving average) and user risk tolerance.</li><li>2. Example rule: Recommend stocks with upward trends for low-risk users.</li><li>3. Logic is tested with sample profiles and data.</li></ol>	5
TS5	News API Integration	As a developer needs to integrate a free news API (e.g., NewsAPI), So that the team can display market news.	<ol style="list-style-type: none"><li>1. Backend fetches news articles related to finance.</li><li>2. News data is cached for 24 hours.</li><li>3. Error handling for API failures.</li></ol>	3

# SPRINT 1 BACKLOG

Story ID	Feature	User Story	Acceptance Criteria	Story Points
US1	Basic Dashboard UI	Aarav Sharma wants to see a basic dashboard layout, So that he can understand the structure of the app.	<ol style="list-style-type: none"><li>1. Dashboard has sections for recommendations, trends, and news (placeholders).</li><li>2. Layout is clean with a header, sidebar, and main content area.</li><li>3. UI is responsive for desktop and mobile.</li></ol>	5
US2	Profile Setup UI	Aarav Sharma wants to input his risk tolerance and budget in a form, So that he can simulate setting up his profile.	<ol style="list-style-type: none"><li>1. Form includes dropdown for risk tolerance (Low, Medium, High) and input for budget.</li><li>2. Form has a "Save" button that shows a confirmation message (no backend saving yet).</li><li>3. Error message shown if budget is invalid (e.g., negative).</li></ol>	3
US3	Recommendation Placeholder UI	Thomas Shelby wants to see a placeholder for recommendations, So that he can visualize where his investment suggestions will appear.	<ol style="list-style-type: none"><li>1. Dashboard has a section titled "Recommendations".</li><li>2. Section shows 3 mock recommendations (e.g., "Stock: AAPL, Suggestion: Buy").</li><li>3. Each recommendation has a button labeled "View Details" (non-functional for now).</li></ol>	3
TS1	Front-End Framework Setup	As a developer needs to set up a front-end framework (e.g., React), So that the team can build the UI efficiently.	<ol style="list-style-type: none"><li>1. Project is initialized with React (or similar framework).</li><li>2. Basic routing is set up for dashboard and profile pages.</li><li>3. CSS framework (e.g., Tailwind or Bootstrap) is integrated for styling.</li></ol>	5

Total Sprint 1.

16



# TEST CASES SPRINT 1

Test Case ID	Story ID	Feature	Test Description	Test Steps	Expected Result	Actual Result	Status
TC1.1	US1	Basic Dashboard UI	Verify that the dashboard displays sections for recommendations, trends, and news.	Launch the InvestIQ application, navigate to the dashboard page, and observe if sections are present.	All sections are visible and correctly labeled.	Sections for recommendations, trends, and news are displayed as expected.	✅ Pass
TC1.2	US1	Basic Dashboard UI	Ensure that the dashboard has a header, sidebar, and main content area.	Open the dashboard and verify the presence of the header, sidebar, and main content.	The layout includes a header, sidebar, and content area.	All UI elements are properly structured.	✅ Pass
TC1.3	US1	Basic Dashboard UI	Validate UI responsiveness on different devices.	Open the app on desktop, resize the window, then open on a mobile device and verify layout adjustments.	Dashboard adjusts properly for both desktop and mobile screens.	UI responds correctly on different screen sizes.	✅ Pass
TC2.1	US2	Profile Setup UI	Check if the profile form includes a dropdown for risk tolerance and an input for budget.	Navigate to the profile setup page and check for the presence of the risk tolerance dropdown and budget input field.	The form contains all necessary fields.	Dropdown and input field are present.	✅ Pass

# TEST CASES SPRINT 1

Test Case ID	Story ID	Feature	Test Description	Test Steps	Expected Result	Actual Result	Status
TC2.2	US2	Profile Setup UI	Validate the "Save" button functionality.	Enter data in the profile form, click the "Save" button, and observe the confirmation message.	A confirmation message appears after saving.	The confirmation message is displayed as expected.	✅ Pass
TC2.3	US2	Profile Setup UI	Ensure error handling for invalid budget input.	Enter a negative or non-numeric budget, click "Save," and check if an error message appears.	An error message should be displayed.	Proper error message is shown when input is invalid.	✅ Pass
TC3.1	US3	Recommendation Placeholder UI	Verify the presence of the "Recommendations" section on the dashboard.	Open the dashboard and look for the "Recommendations" section.	The section is visible.	"Recommendations" section appears in the correct location.	✅ Pass
TC3.2	US3	Recommendation Placeholder UI	Ensure that three mock recommendations are displayed.	Open the dashboard and check if three stock recommendations are visible.	Three placeholder recommendations should be displayed.	Three mock recommendations appear as expected.	✅ Pass

# TEST CASES SPRINT 1

Test Case ID	Story ID	Feature	Test Description	Test Steps	Expected Result	Actual Result	Status
TC3.3	US3	Recommendation Placeholder UI	Validate that each recommendation has a "View Details" button.	Open the dashboard and check each recommendation for a "View Details" button.	All recommendations should have a button.	Each recommendation has a correctly labeled "View Details" button.	✅ Pass
TC4.1	TS1	Front-End Framework Setup	Ensure the project initializes successfully with React.	Clone the repo, run the project setup command, and start the application.	The project should compile and start without errors.	Project initialized and started successfully.	✅ Pass
TC4.2	TS1	Front-End Framework Setup	Verify basic routing between dashboard and profile pages.	Start the app, click on "Profile" from the dashboard, then click on "Dashboard" from the profile page.	The app should navigate between pages correctly.	Navigation between pages is smooth and functional.	✅ Pass
TC4.3	TS1	Front-End Framework Setup	Check if the CSS framework is applied correctly.	Inspect UI elements and ensure styling is consistent with the CSS framework used.	UI elements should reflect Tailwind/Bootstrap styles.	Styling is properly applied.	✅ Pass

# *STORIES COMPLETED IN SPRINT 1*

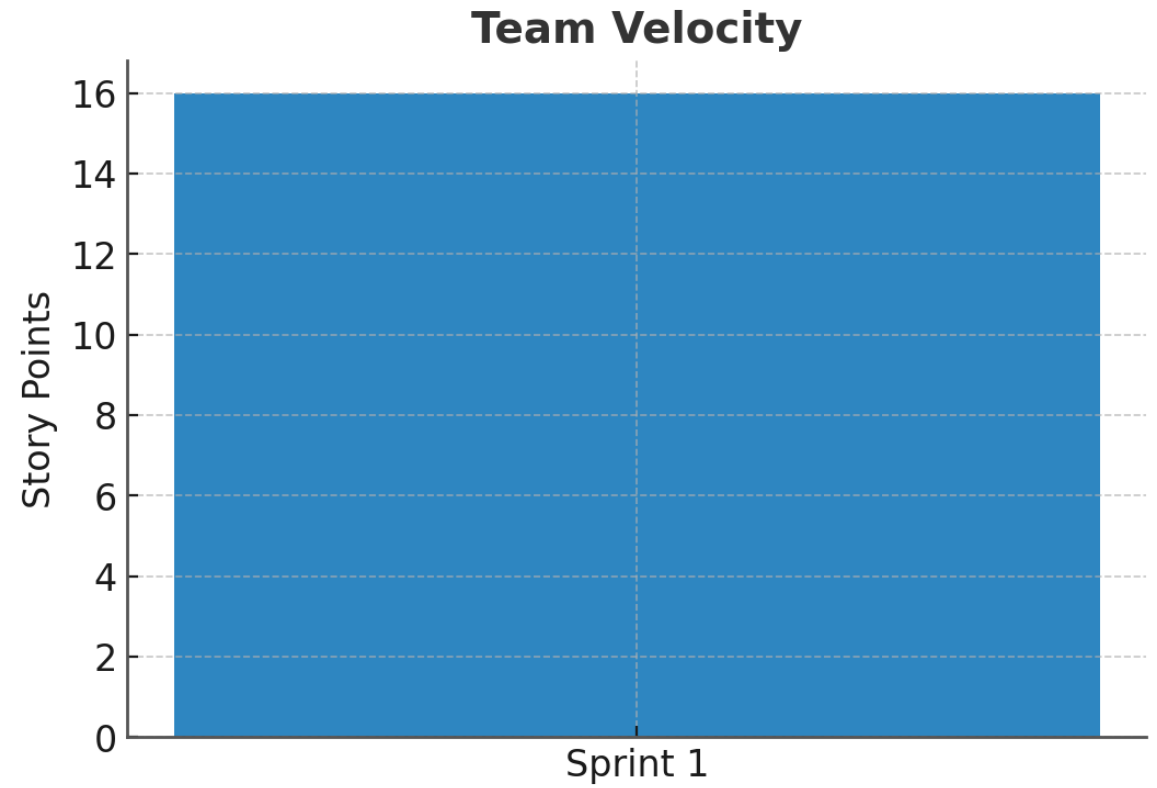
**US1** – Basic  
Dashboard UI

**US2** – Profile  
Setup UI

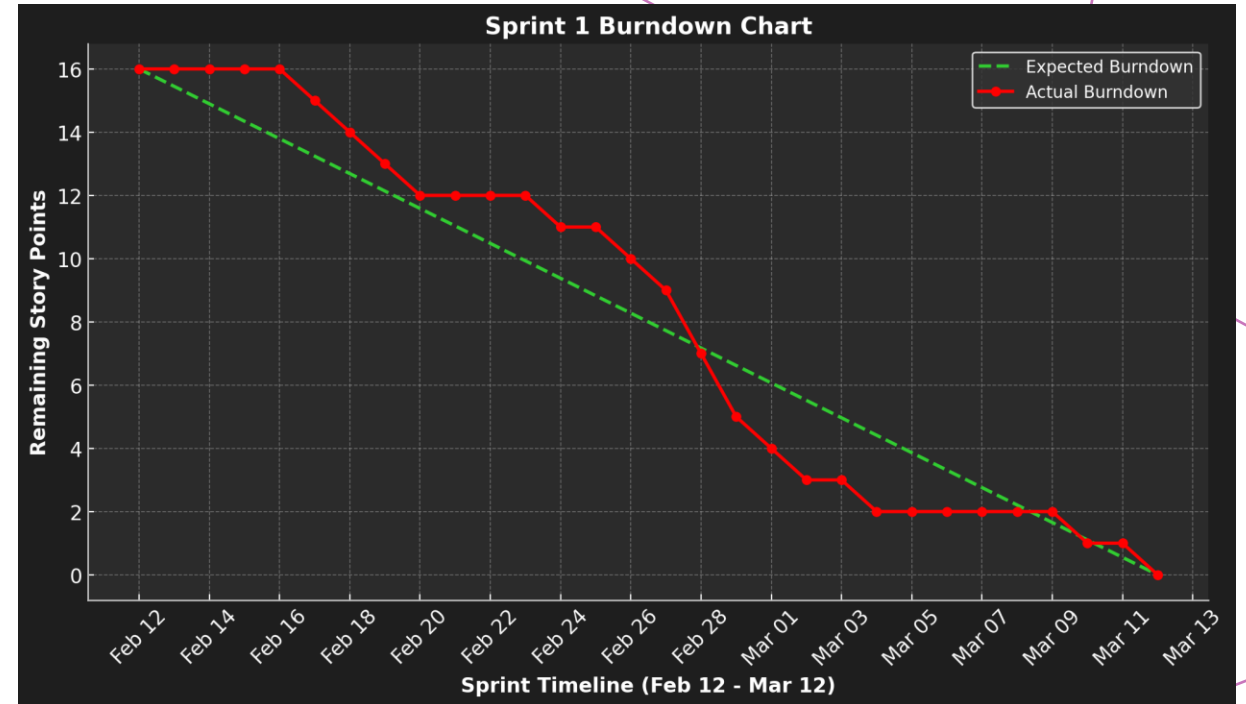
**US3** –  
Recommendation  
Placeholder UI

**TS1** – Front-End  
Framework Setup

# *TEAM VELOCITY*



# BURNDOWN CHART



# *COMPLETED/COMMITTED RATIO - SPRINT 1*

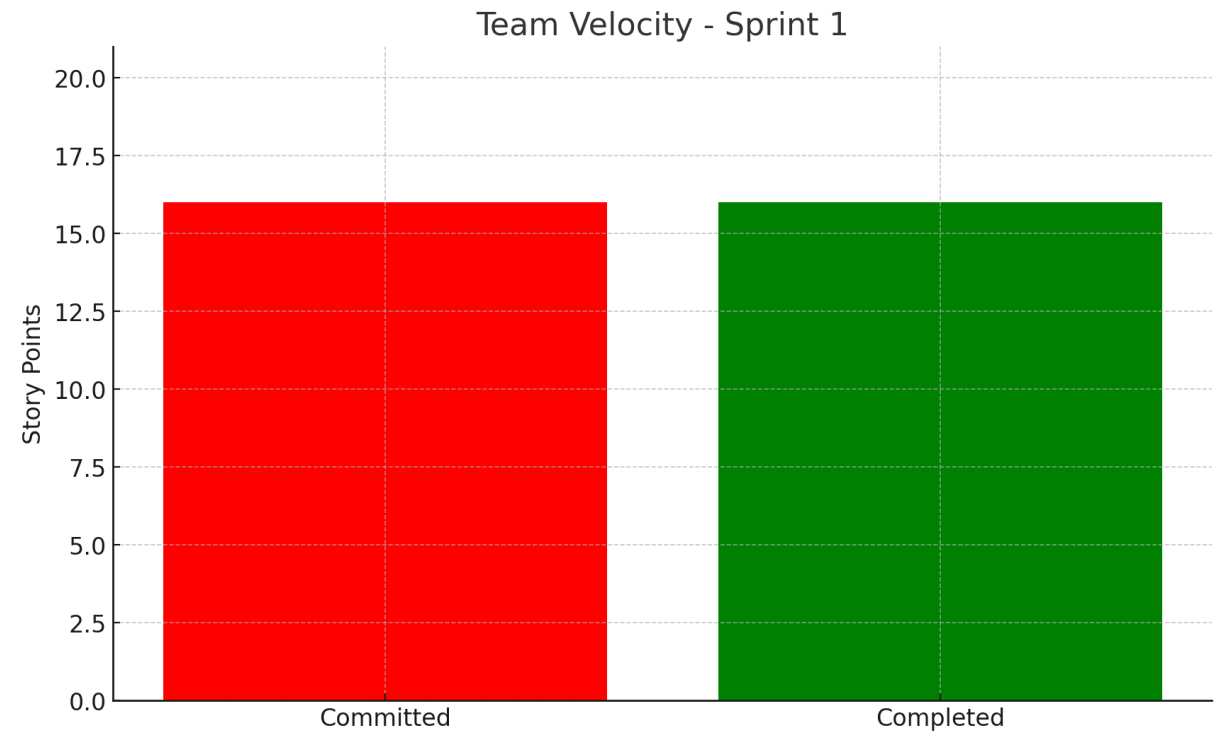
Committed Story  
Points: 16

Completed Story  
Points: 16

Completed/Committed  
Ratio:  $(16/16) \times 100 =$   
100%



*COMPLETED/COMMITTED  
RATIO - SPRINT 1*



# RETROSPECTIVE

The screenshot shows a web browser window displaying an IdeaBoardz retrospective board for a project named "InvestIQ". The board is organized into three main columns: "What went well" (green), "What can be improved" (yellow), and "Action Items" (purple). Each column contains several sticky notes with text and a "+ 0" score. The browser's address bar shows the URL "ideaboardz.com/for/InvestIQ/5511366". The Windows taskbar at the bottom shows the system clock as 11:52 PM and the weather as 42°F, partly cloudy.

**InvestIQ** Export Login

### What went well +

Group split tasks well + 0	learned tools Quickly + 0
Delivered core on time + 0	team stayed motivated + 0
Chat kept us aligned + 0	Brainstorming sessions cool design + 0
fixed bugs fast + 0	Used free Resources + 0
Met Basic Requirements + 0	

### What can be improved +

Tasks Took too long + 0	workload was uneven + 0
Documentation was lagging + 0	Testing missed small bugs + 0
Setup delayed coding start + 0	

### Action Items +

Break tasks, add buffer + 0	pair up for tasks + 0
Pre-set tools together + 0	Note Decisions in documents + 0
Test mid and end + 0	

Windows taskbar: 42°F Partly cloudy, Search, 11:52 PM, Group voice call

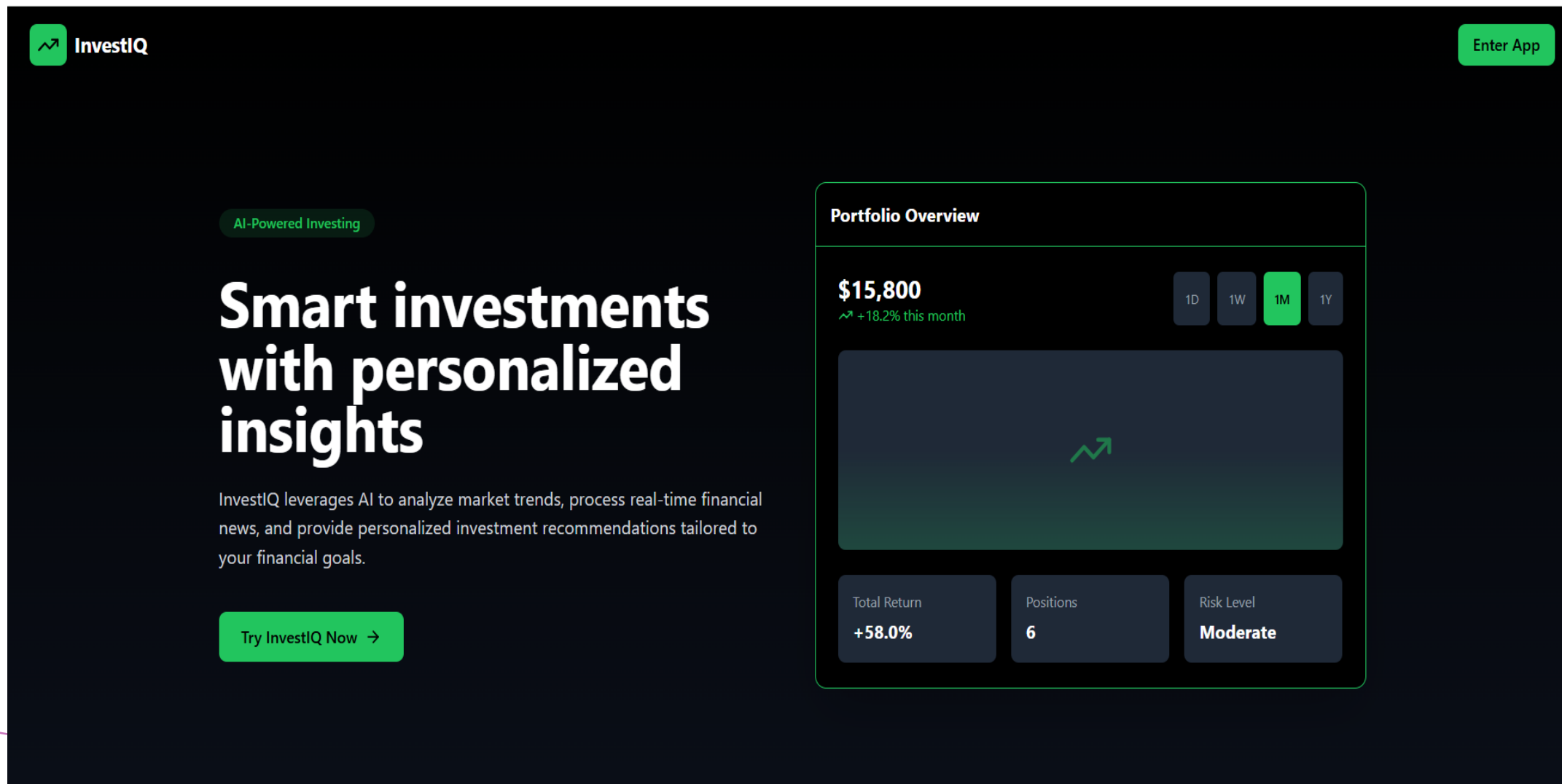
# SPRINT 2 PLANNING

Story ID	Feature	User Story	Acceptance Criteria	Story Points
US4	User Registration	Aarav Sharma wants to register with his email and password, So that he can access the InvestIQ platform.	<ol style="list-style-type: none"><li>1. Aarav can enter email and password on a registration form.</li><li>2. System validates email format and ensures password is at least 8 characters.</li><li>3. Upon successful registration, Aarav is redirected to login page.</li><li>4. Error messages shown if email is in use or inputs are invalid.</li></ol>	3
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# SPRINT 2 PLANNING

Story ID	Feature	User Story	Acceptance Criteria	Story Points
TS3	Database Schema Setup	Sanjana Reddy needs to create a database schema for users, profiles, and historical data, So that the team can store and retrieve data.	<div>1. Schema includes tables for Users, Profiles, and HistoricalData.</div> <div>2. Database uses a free solution (e.g., SQLite).</div> <div>3. Basic CRUD operations implemented for user and profile data.</div>	3

# SCREENSHOTS



# SCREENSHOTS

InvestIQ leverages AI to analyze market trends, process real-time financial news, and provide personalized investment recommendations tailored to your financial goals.

[Try InvestIQ Now →](#)

Total Return

**+58.0%**

Positions

**6**

Risk Level

**Moderate**

## About InvestIQ

InvestIQ is an AI-powered investment assistant that analyzes stock market trends, processes real-time financial news, and provides personalized investment insights and risk alerts. Unlike traditional investment platforms that only offer raw data and generic analytics, our application leverages AI-driven time series analysis and natural language processing to deliver real-time, context-aware financial recommendations tailored to users' personal financial goals and life events.

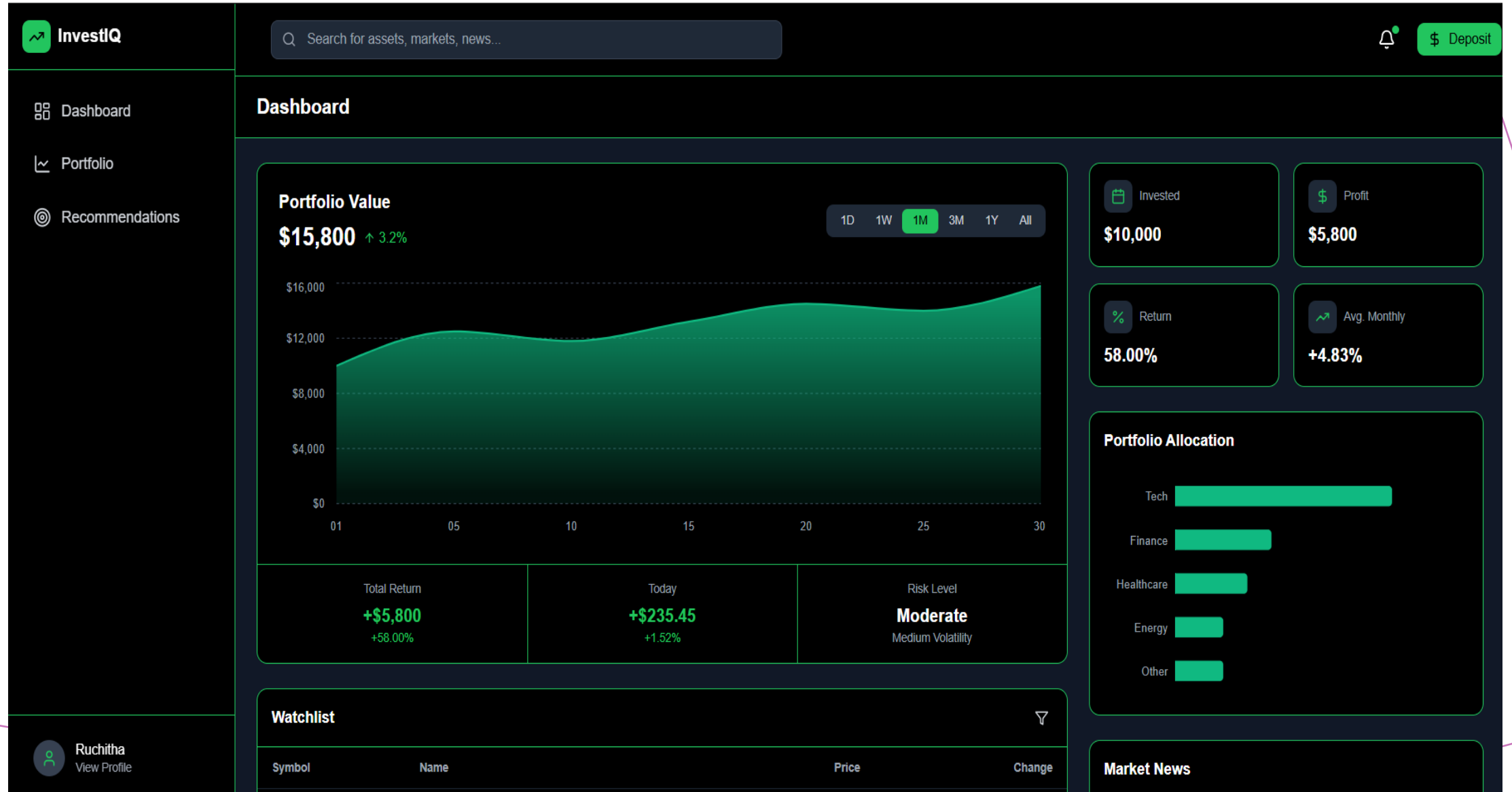
[Explore the App](#)

InvestIQ - Capstone Project

Professor Henry Wong - Spring 2025

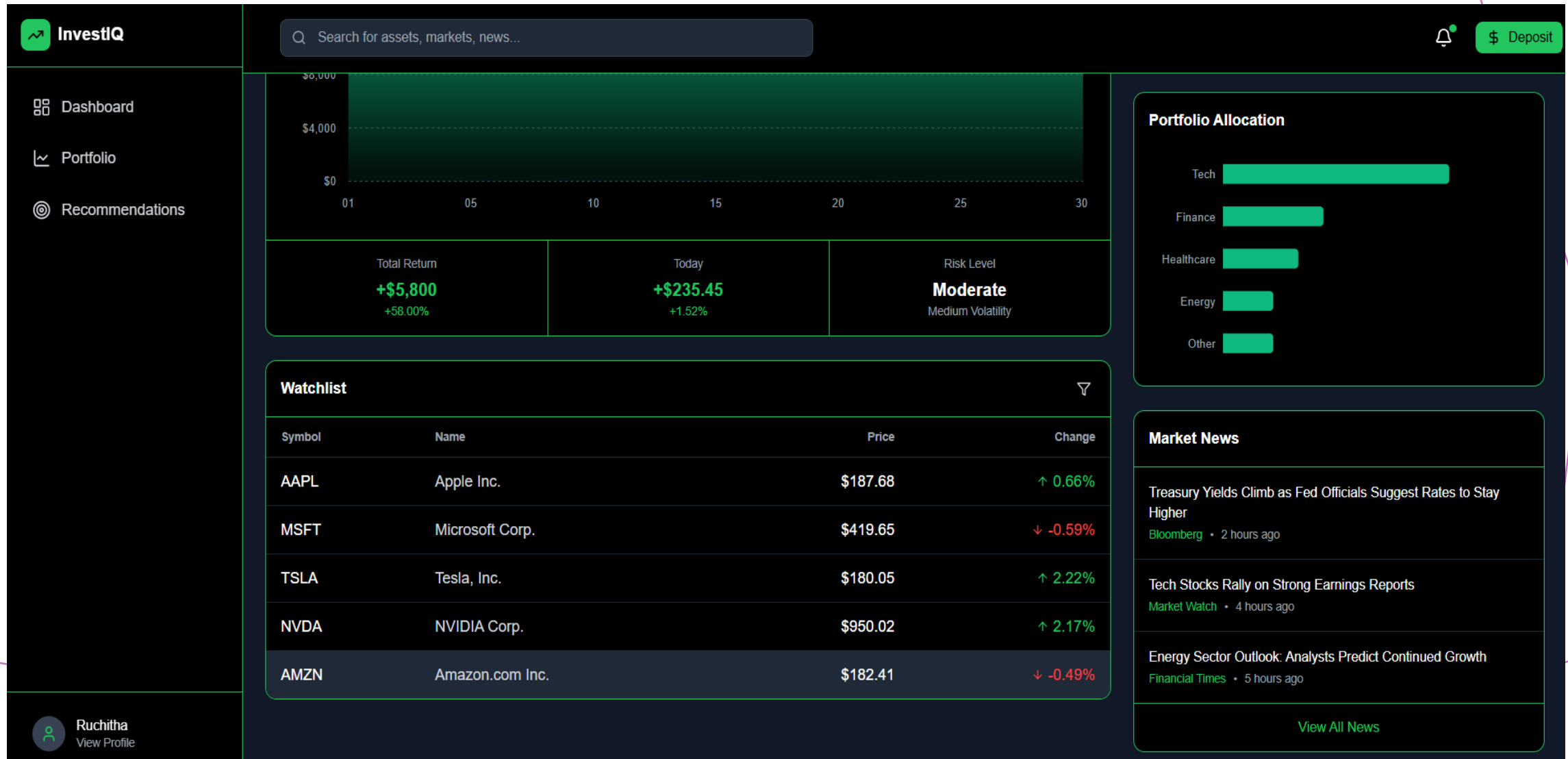
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# SCREENSHOTS

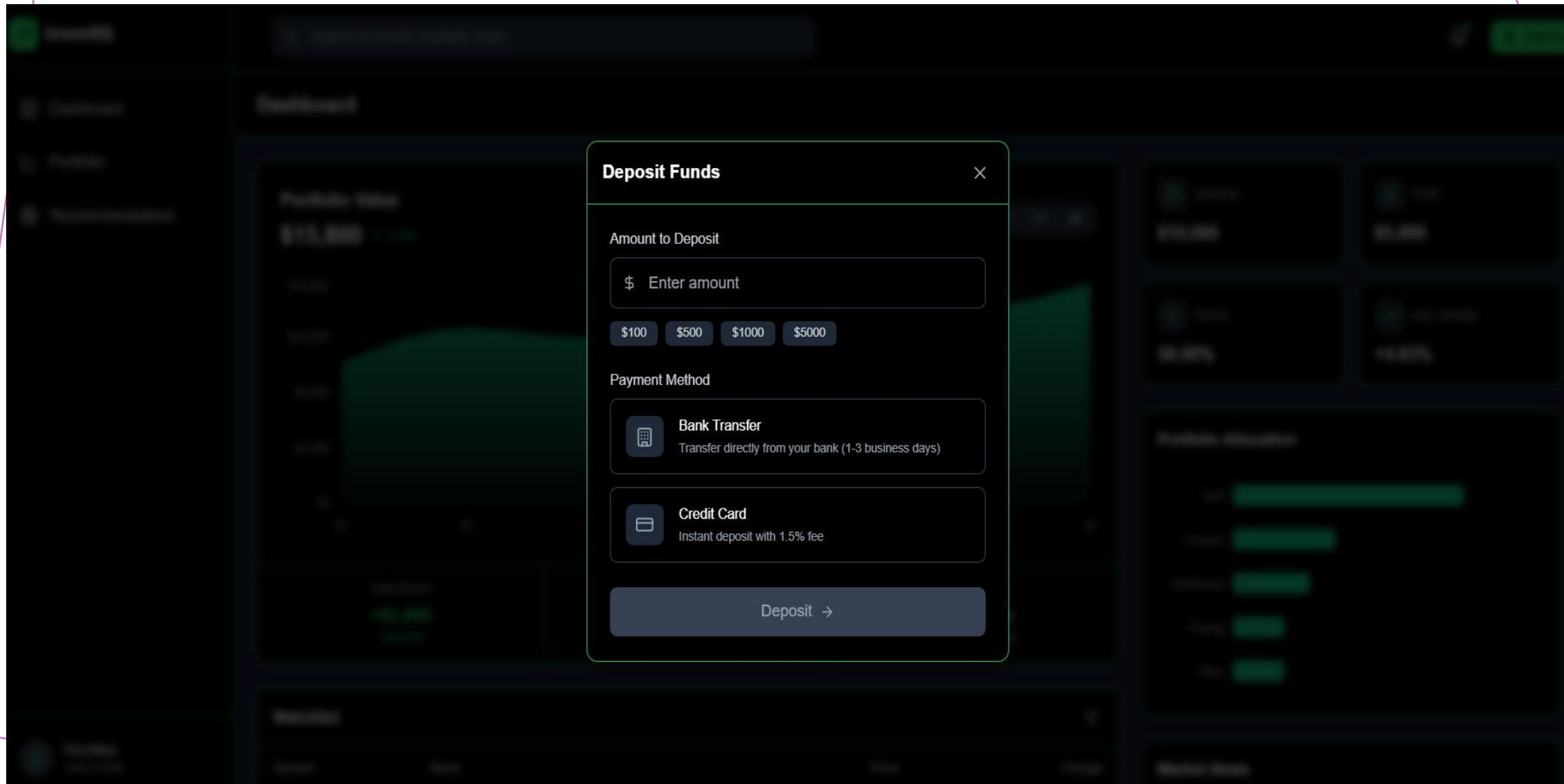




# SCREENSHOTS



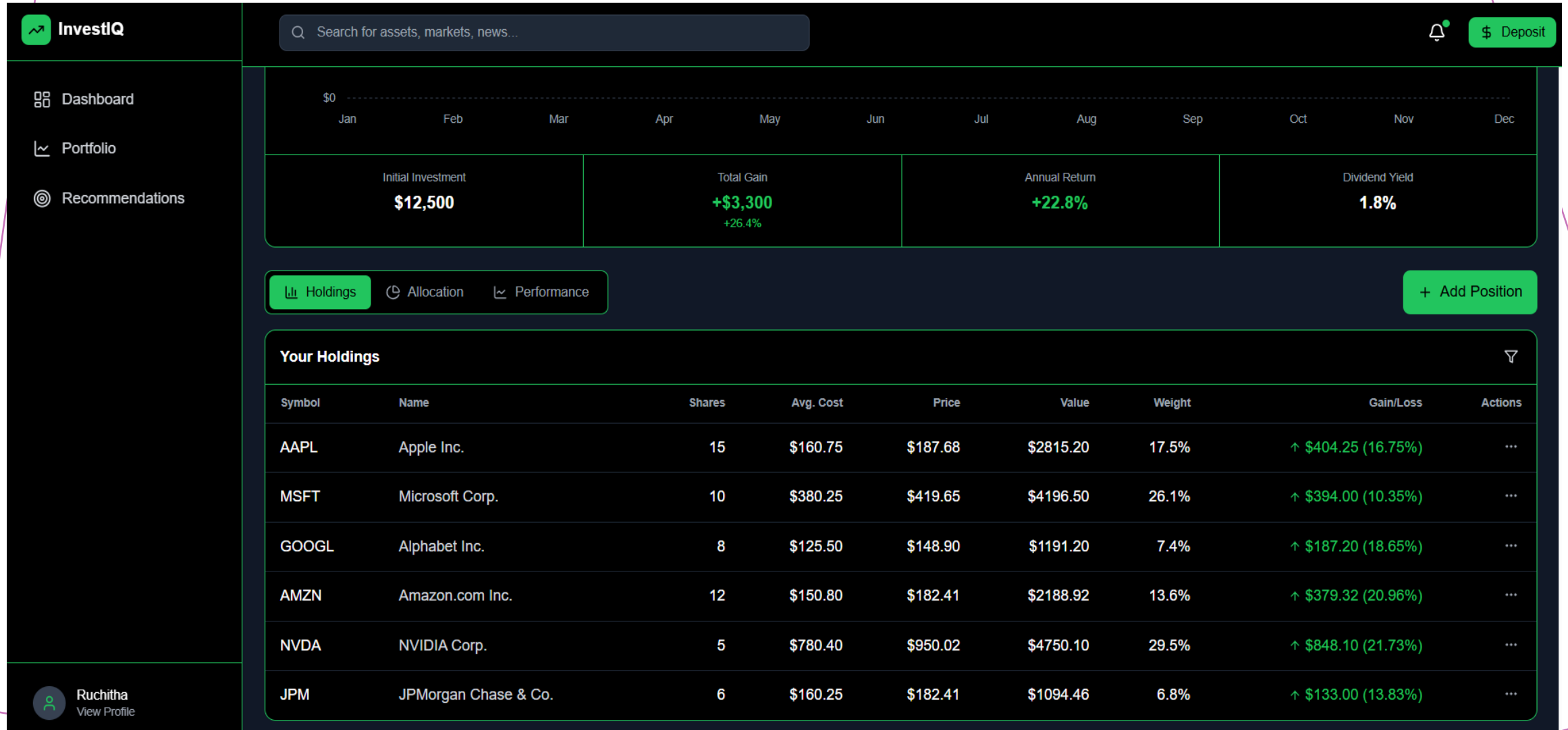
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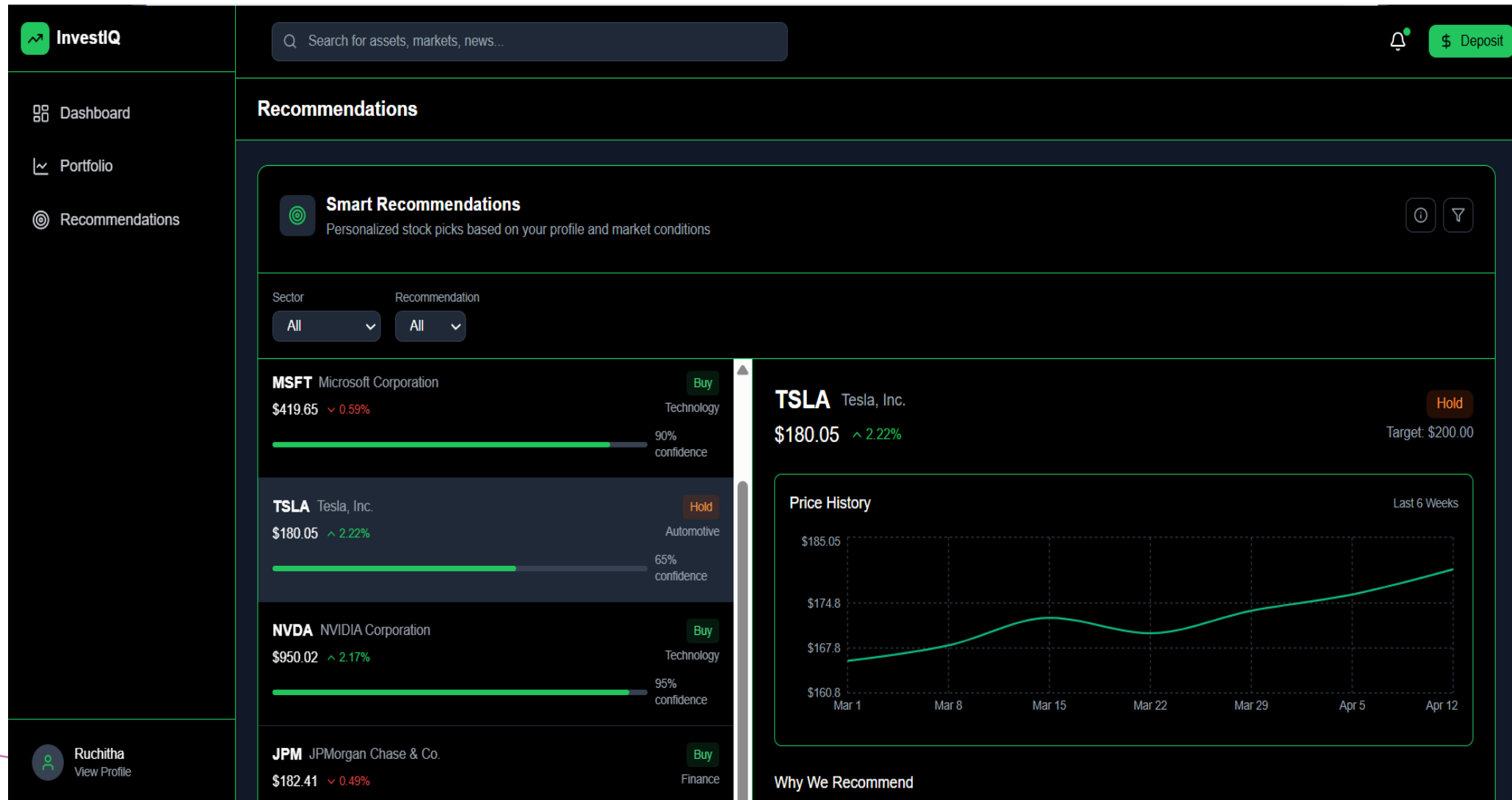
# SCREENSHOTS



# SCREENSHOTS



# SCREENSHOTS



The screenshot shows a web application interface for a financial planner. At the top, there is a dark blue header bar containing a search bar on the left and navigation icons (a bell and a dollar sign) on the right. Below the header, a dark grey sidebar on the left contains the word "Profile". The main content area has a dark blue background and features three tabs at the top: "Investment Preferences" (highlighted in green), "Security", and "Notifications". Under the "Investment Preferences" tab, there is a section titled "Investment Preferences" with a target icon and the subtitle "Configure your investment strategy and goals". This section is divided into two columns. The left column, titled "Investment Goal", lists three options: "Retirement Planning" (with a shield icon), "Wealth Growth" (with a percentage icon), and "Income Generation" (with a dollar sign icon). Each option includes a brief description. The right column, titled "Risk Tolerance", lists three options: "Conservative", "Moderate", and "Aggressive", each with a descriptive sentence. A "Learn more" link is located next to the "Risk Tolerance" title. Below these columns, there are two rows of settings. The first row is titled "Investment Time Horizon" and contains three buttons: "Short-term (< 3 years)", "Medium-term (3-7 years)", and "Long-term (7+ years)". The second row is titled "Initial Investment Budget" and contains a single input field with a dollar sign icon and the placeholder text "Enter your total investment budget". At the bottom left, the text "Tax Bracket" is visible.

# *WIKI PAGE LINK*

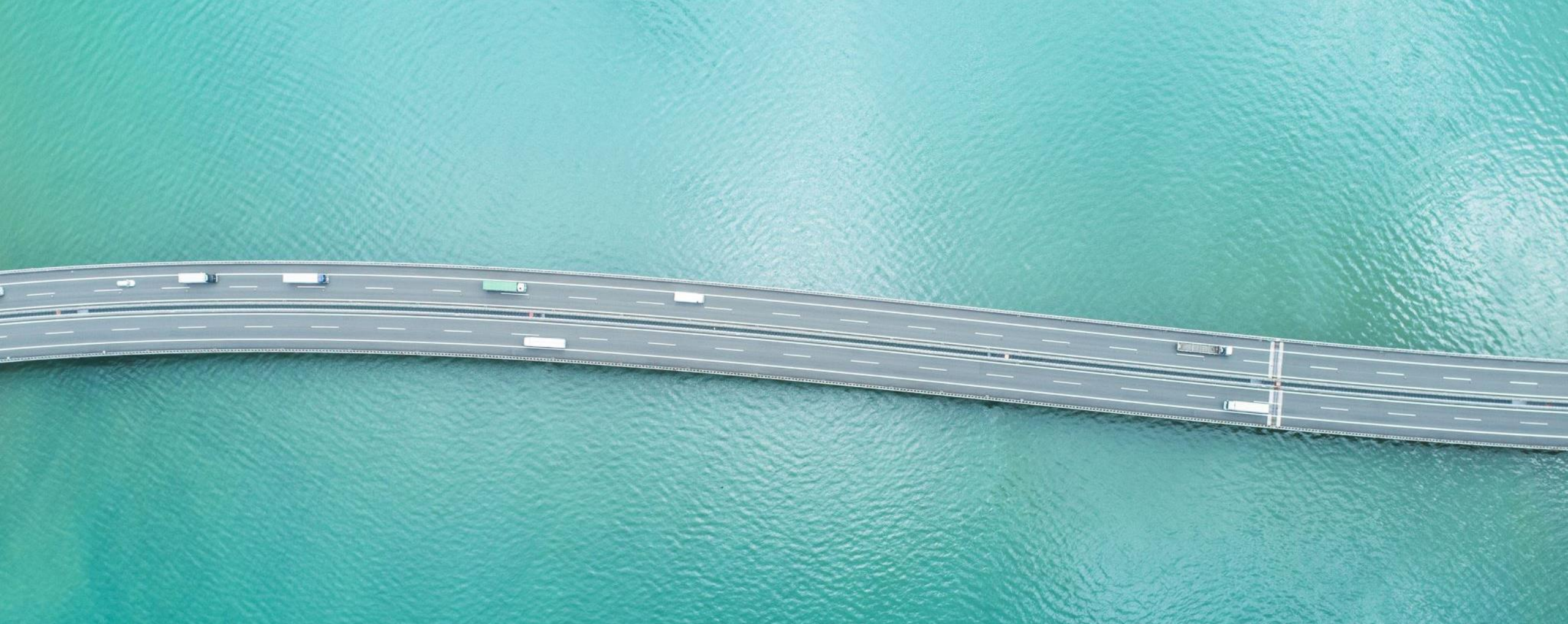
<https://github.com/htmw/2025S-Techno-Stack>



*LIVE DEMO*



<https://2025-s-techno-stack.vercel.app/>



*THANK YOU*