




INVESTMATE

AGENDA

 new/updates (check the bottom of the slide)

- Team Members
- Improvements
- Problem Statement
- Project Description
- Team Agreement
- Personas
- MVP
- Technologies
- Algorithms
- Diagrams
- User Stories
- Sprint 3 - Recap
- Product Backlog
- Sprint Summary
- Test Cases
- Sprint 4
- Metrics
- Retrospective
- Product demo screenshots
- Important API's
- Github Link
- Wiki Link
- References

Team Member Roles and Responsibilities



Venkatesh Nidumukkala
Backend Developer



Ankit Mhatre
Project Manager / ML Engineer



Mani Chandana Kilaru
Front End Developer



Tejaswi Koppula
Backend Developer



Uma Maheshwari Bichinepally
UI/UX Developer



Charan Raju m
Tester

IMPROVEMENTS FROM FEEDBACK

1. Added User stories
2. Remove market Analysis
3. Removed tech jargons from MVP
4. Technologies explained
5. AP and user stories on same page
6. Added User story Id
7. Added Test case Id
8. Mapped Test case Id and User Story Id

IMPROVEMENTS FROM FEEDBACK

9. Revamped Test cases page (looked ugly prev)
10. Added completion status
11. Fixed calculation for story point completion(extra 5 points last time)
12. Added Average velocity (Missing last time)
13. Multiple Burndown charts
14. Prevented Text Chopping
15. Only used User Story as the title

IMPROVEMENTS FROM FEEDBACK

(from others teams as well)

16. Added a little tough test cases
17. Added heading on every page
18. Added User Stories “So”
19. Recapped previous sprint properly
20. Fixed previous burndown charts
21. Have a big product backlog
22. Completed and incomplete are two different slides

PROBLEM STATEMENT

In the contemporary world of finance, a considerable number of young individuals aged 18 to 25 are perplexed by the dilemma of pursuing a career in this global trend, while experiencing various challenges in finding sources of practical experience and knowledge. Despite acquiring the principles taught in academic institutions, individuals encounter difficulties implementing them in real-life scenarios. This creates a proficiency gap between their educational knowledge and investment strategies, which arises from the complexities in the structure and the fear of monetary loss, a significant factor that should be addressed in the education platform. It is imperative to develop an easily understandable education platform that adopts a learner-based approach to bridge this gap.

PROBLEM DESCRIPTION

Project Name:	Investmate
Team:	Pace Super Kings
Project Description:	<p>For young individuals aged 18 to 25 navigating the complexities of modern finance, the proficiency gap between academic learning and practical investment strategies poses a significant challenge. This gap, stemming from the intricate nature of financial systems and the fear of monetary loss, highlights the need for an educational platform.</p> <p>The solution is an accessible, learner-focused application that demystifies financial concepts and bridges the theoretical-practical divide.</p> <p>Unlike traditional educational resources that may not fully address real-world application.</p> <p>this platform aims to empower young investors with the confidence and knowledge to engage effectively in the global financial landscape.</p> <p>our application helps everyone to have perfect investment strategies.</p>
Benefit Outcomes:	<p>There are numerous advantages and results from putting in place an educational platform designed to help young people understand the complexity of finance:</p> <ol style="list-style-type: none">1. Enhanced Financial Literacy: The platform would help users become more knowledgeable about financial terms, concepts, and tactics, enabling them to make well-informed choices about saves, investments, and financial planning.2. Increased Confidence: The platform would increase users' confidence in navigating financial markets and successfully managing their own finances by offering real-world examples and practical knowledge.3. Decreased Risk Aversion: Users may grow more tolerant of risk and feel more at ease investigating investing options as they learn more about financial concepts and obtain real-world experience through case studies or simulated trading.4. Improved Ability to Make Decisions: Users can improve their skills with individualized feedback and interactive learning courses.
Github Link:	https://github.com/htmw/2024S-pace-super-kings

TEAM AGREEMENT

- Each team member shall actively listen to and consider one another's opinions and perspectives, fostering an environment of open communication and constructive feedback. We will engage in respectful dialogue, valuing diverse viewpoints.
- Decisions regarding project workflow will be made collectively through discussions and deliberations. We will ensure that all voices are heard, and the majority opinion will guide our actions, promoting a sense of ownership and commitment to the project.
- We are committed to upholding the highest standards of professionalism at all times. Inappropriate behavior, such as disrespect, discrimination, or harassment, is strictly prohibited. Any instances of misconduct shall be promptly reported to the team leader or project supervisor for appropriate action, ensuring a safe and inclusive working environment for all team members.
- Recognizing the unique strengths and expertise of each team member, we will leverage our collective talents to contribute effectively to the project. We will actively seek opportunities to collaborate, support, and assist one another, fostering a culture of mutual respect and cooperation. Through our combined efforts, we will strive for excellence in all aspects of our work.
- Regular team meetings will be crucial forums for discussion, planning, and decision-making. We will actively participate in these meetings, sharing updates on our progress, addressing challenges, and brainstorming solutions collaboratively.
- All team members must attend all scheduled meetings. In the event of unavoidable conflicts, timely communication and proactive efforts to reschedule or catch up on missed discussions will be prioritized, ensuring that no team member is left behind.
- We are committed to meeting all assigned tasks and deadlines promptly, demonstrating reliability and accountability in our work. Should any team member encounter difficulties or require assistance, we will proactively seek help from our peers, fostering a culture of support and collaboration.
- Recognizing the importance of timely completion, we understand that extensions beyond agreed deadlines will be granted with seriousness. We will prioritize effective time management and proactive communication to ensure the successful execution of our project deliverables.
- Clear and transparent communication is essential for effective collaboration. We will utilize Slack as our primary communication platform, actively engaging in discussions, sharing updates, and seeking clarification when needed.
- All team members are expected to participate in Slack discussions regularly, responding promptly to messages and actively contributing to the exchange of ideas. Through our collective efforts, we will maintain open lines of communication, fostering a culture of transparency and collaboration.





PERSONAS



PERSONA - 1



- Name: Priya
- Age: 23
- Occupation: College student in the final year, aspiring to start her own business.
- Investment Experience: Minimal experience.
- Goals: To acquire investment management skills for better financial management.
- Challenges: Unable to balance academic responsibilities, entrepreneurial planning and investment learning.

PERSONA - 2



- Name: Sara
- Age: 20
- Occupation: College student majoring in English Literature.
- Investment Experience: None.
- Goals: Interested in learning about personal finance and investing to start saving for the better future
- Challenges: Unable to understand the financial terms

PERSONA - 3

- Name: Michael
- Age: 25
- Occupation: College student majoring in finance.
- Investment Experience: No practical experience.
- Goals: To gain hands-on experience in the stock market using his classroom knowledge.
- Challenges: Finds it difficult to apply his theoretical knowledge in real-world





MINIMAL VIABLE PRODUCT
(MVP)



MINIMAL VIABLE PRODUCT (MVP)

- An online platform for stock market enthusiasts, to learn in a module by module manner
- A trading simulator for novice traders to learn practically in a simulated environment for the trader to not lose real money.
- Daily Risk Assessment based on the orders placed for understanding progress.





TECHNOLOGIES



FRONTEND



- Component based reusable UI elements
- Rich Ecosystem of libraries
- Wide Community support



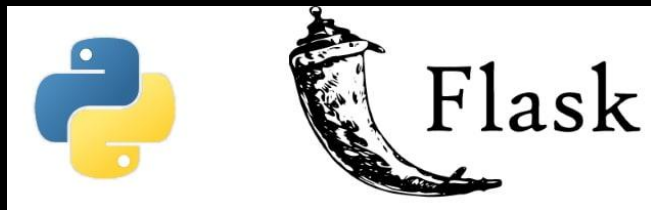
- 16 types, animation ready, light weight.
- Free for Educational and commercial use.
- Interoperable with ReactJS



BACKEND



- Well suited for microservices architecture
- Asynchronous I/O, event driven architecture.
- Express.js support, reduces web server development efforts



- Light-weight microweb framework in Python
- Multiple Concurrent request support
- Easy integration with PyTorch specially YOLOv8



STORAGE and DATABASES



- Flexible Schema, JSON like.
- Document-Oriented Design(hierarchical), well suited to our needs
- Lesser learning curve, if familiar with JSON
- Faster Content Delivery.
- For communication with market prediction algorithm, b/w NodeJS and Flask server
- Access control lists and bucket policies.



DEPLOYMENT PLATFORM



- Well suited for microservices architecture
 - Asynchronous I/O, event driven architecture.
 - Express.js support, reduces web server development efforts
-
- Free for a year with Github education



DEVOPS



- Provided isolation for application and dependencies
- Easy to maintain consistent environment across dev cycle.
- Declarative way to define and manage multi-container applications.
- Reducing complicated deployment efforts.



- Continuous Deployment(reducing ttd to 25s)
- DNS panel and SSL certificates included.
- Static site Hosting(reducing complex server infra)



EXTRAS



- Slack for team communication



- Automated Testing
- Collaborative
- Environment variables support
- Documentation ready



MACHINE LEARNING



- Wide range of pretrained models for NLP tasks
- Potentially beneficial for starting w/o a model
- Tensorflow for testing the model with Google's compute infrastructure



- Ease of use, reducing model setup time by a lot.
- Extensively customizable to fine tune to our needs.
- 5 labels, supports streaming and images both.



ALGORITHMS

YOLO v8

The YOLO v8 Stock Market Pattern Detection model is an object detection model based on the YOLO (You Only Look Once) framework. It is designed to detect various chart patterns in real-time stock market trading video data. The model aids traders and investors by automating the analysis of chart patterns, providing timely insights for informed decision-making. The model has been fine-tuned on a diverse dataset and achieved high accuracy in detecting and classifying stock market patterns in live trading scenarios.

LSTM

Using Seaborn and Matplotlib, analyzing the risk of a stock, based on its previous performance history. Also predicting future stock prices through a Long Short Term Memory (LSTM) method.





Stockmarket Pattern Recognition YOLOv8 Detection

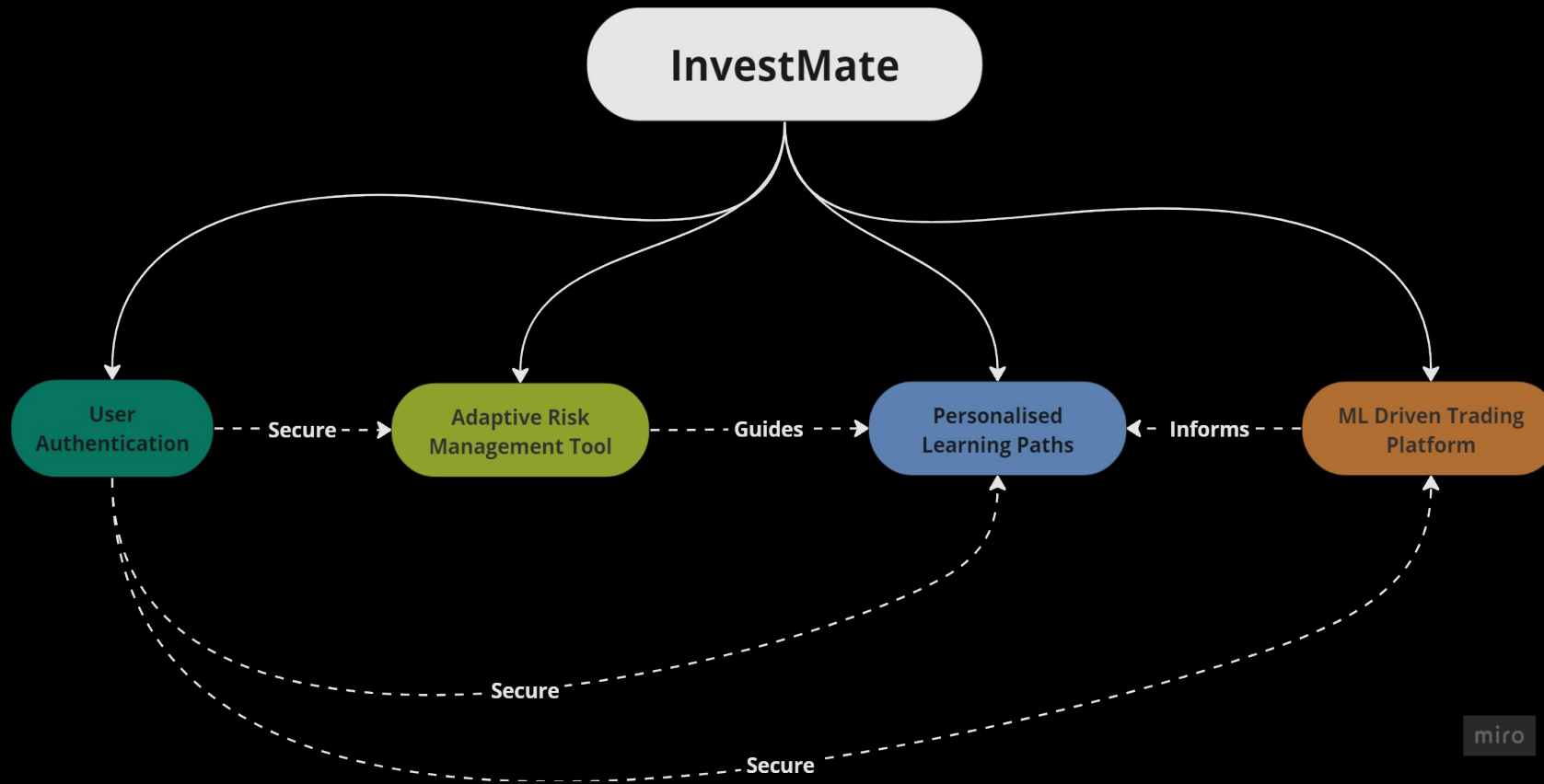




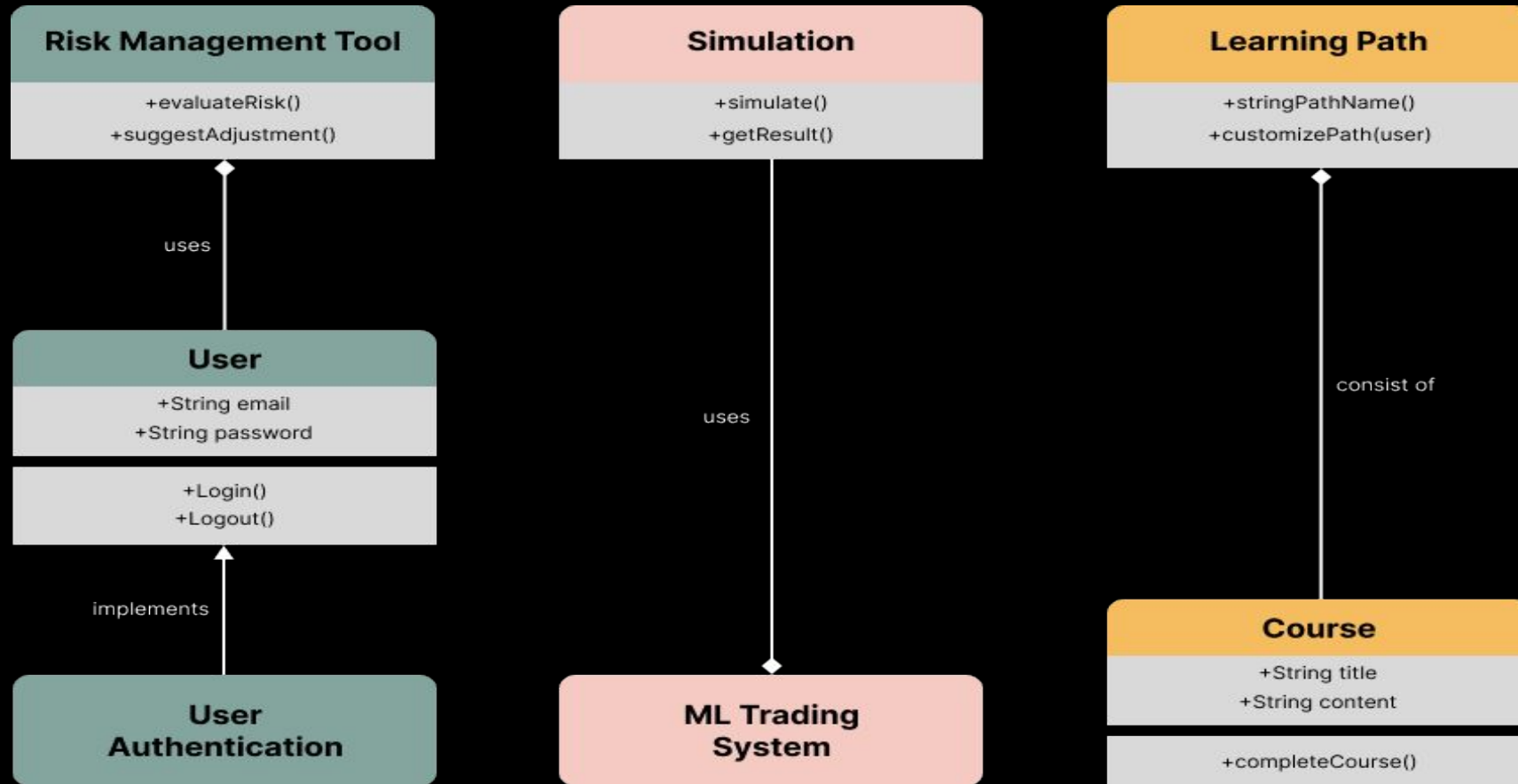
DIAGRAMS



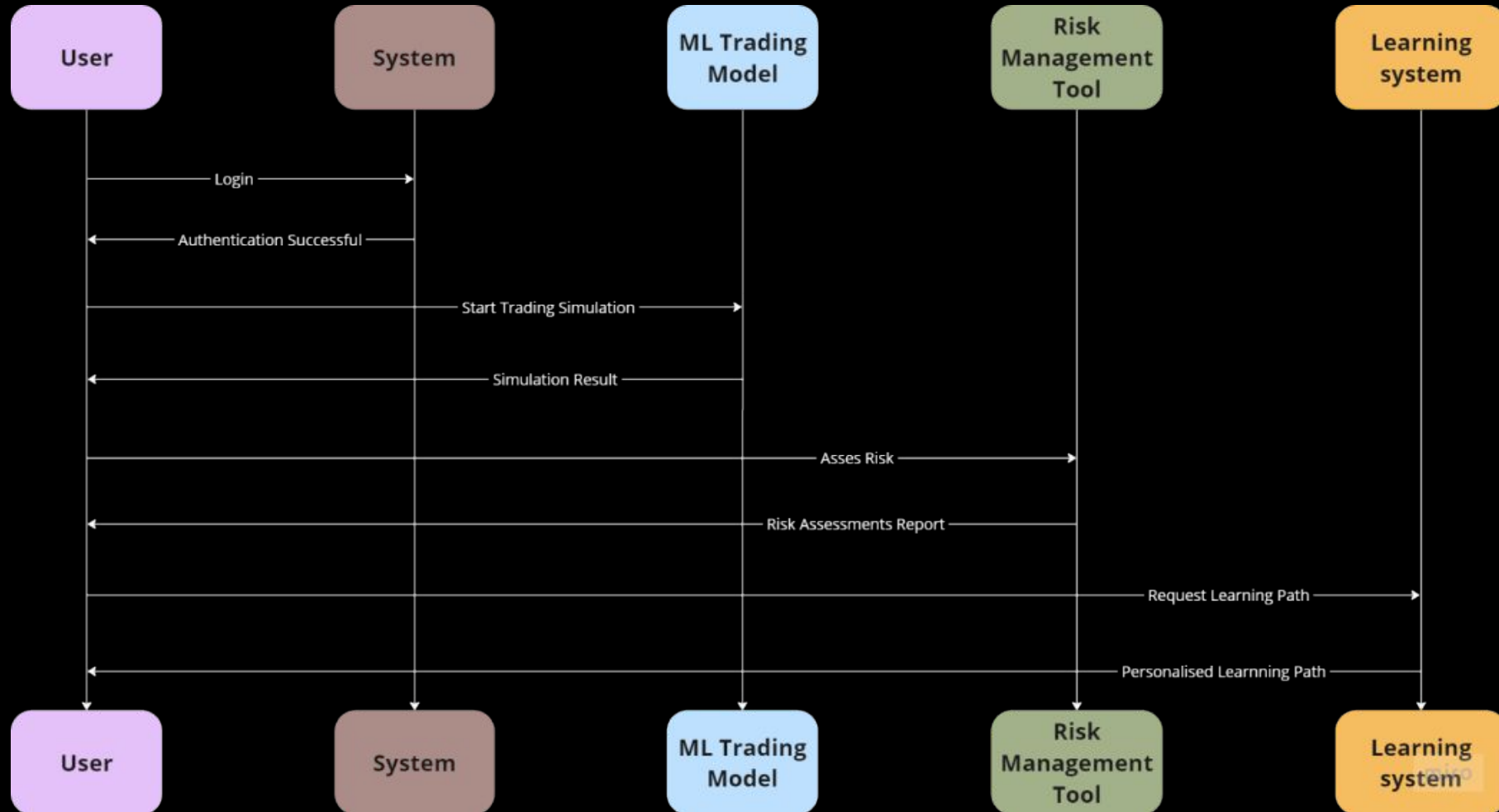
CONCEPTUAL DIAGRAM



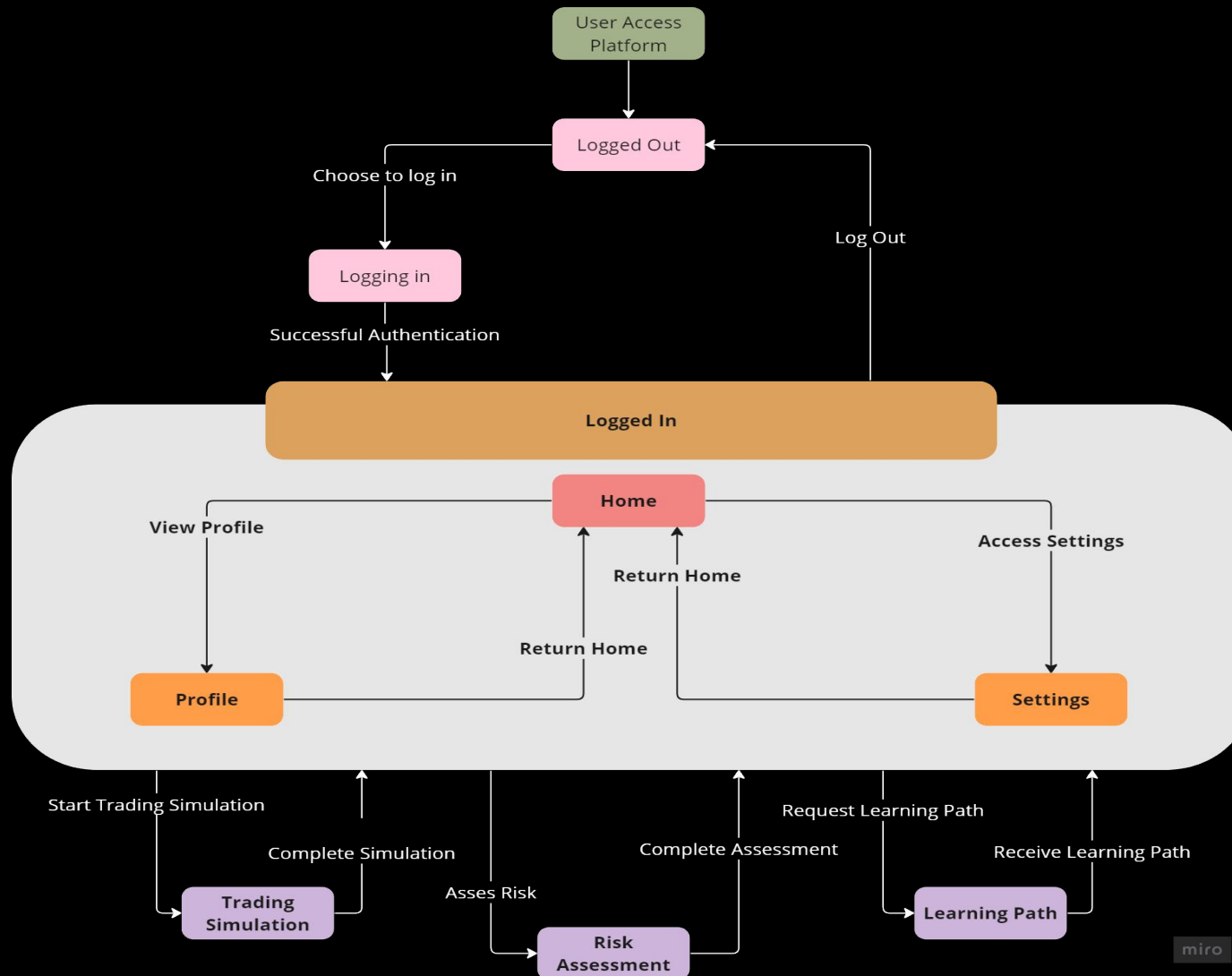
CLASS DIAGRAM



SEQUENCE DIAGRAM



STATE DIAGRAM



CONTEXT DIAGRAM



USER STORIES

User Story ID	Scenario	Summary	Acceptance Criteria	Feature
IV1	As a new user want to create an account			
	Create an Account	The user wants to create an account to access the stock market simulator platform.	Create an account with username, password, potentially email. for Account verification.	Auth
IV2	As a novice investor want to understand the basic concepts of the market			
	Understand the basic concepts of the market	The user wants to learn about the stock market before investing simulated money.	The platform shows chapters module by module for learning about the market analysis	Learning Pathways
IV3	As a novice investor Set Up a Simulated Investment Account			
	Set Up a Simulated Investment Account	The user wants to create a simulated investment account to practice trading stocks.	Can access the trading engine offered by the platform	Trading Engine
IV4	As a Novice Investor Access the platform			
	Access the platform	The user wants an individual access to the portal, where he/she can return to for the past trades	Investmate platform allows platform to be used a trading platform offered by exchanges	Auth

USER STORIES

User Story ID	Scenario	Summary	Acceptance Criteria	Feature
IV5	As a Novice Investor Update personal profile			
	Update personal profile	The user wants to update his/her profile for trading.	Update the profile and fine tune, personal data.	Auth
IV6	As a Novice Investor Search and Research Stocks			
	Search and Research Stocks	The user wants to research stocks before buying them in their simulated portfolio.	The user is able to search Stocks, retrieve charts, change the data range of the charts and the candle type	Trading Engine
IV7	As a Novice Investor Understand the stock chart pattern			
	Understand the stock chart pattern	The user wants to understand the pattern of the currently displayed stock .	- Platform answers, the current market graph pattern	AI Chat Bot
IV8	As a Novice Investor Understand daily risk index			
	Understand daily risk index	The user wants to understand the change in his/her risk index over time.	- Platform calculates daily risk	Risk Assessment(Research)

USER STORIES

User Story ID	Scenario	Summary	Acceptance Criteria	Feature
IV9	As a Novice Investor Buy and Sell Stocks in Smaller Quantities			
	Buy and Sell Stocks in Smaller Quantities	The user wants to start with smaller simulated trades to build confidence.	- Platform allows buying/selling in fractional shares or smaller lot sizes. - Educational resources explain fractional shares.	Trading Engine
IV10	As a Novice Investor Track placed orders			
	Track placed orders	The user wants to easily understand their simulated portfolio's performance.	Go to the orders tab and see a list of all the orders placed in the history	Trading Engine
IV11	As a Novice Investor Practise unlimited trades			
	Practise unlimited trades	The user wants to practise as much as he can, keeping in mind the money limit, but still being able to start a fresh	- Able to top up the account unlimited amount of times	Trading Engine
IV12	As a Novice Investor Backtest Investment Strategies			
	Backtest Investment Strategies	The user wants to test and evaluate different investment strategies using historical data in a simulated environment.	Tools available to create and backtest investment strategies using historical market data. Compare accuracy over time	Stock Analysis

USER STORIES

User Story ID	Scenario	Summary	Acceptance Criteria	Feature
IV13	As a Novice Investor Analyze Portfolio Risk with Advanced Metrics			
	Analyze Portfolio Risk with Advanced Metrics	The user wants to perform a deeper analysis of their simulated portfolio's risk profile.	Access detailed reports and visualizations to understand potential risks associated with portfolio holdings.	Risk Assessment
IV14	As a Novice Investor Get answers for trading questions			
	Get answers for trading questions	The user wants answers related to stock market as an financial instrument.	- Platform answers stock market related question	AI Chat Bot
IV15	As a Novice Investor Access the platform from any location			
	Access the platform from any location	The user wants to connect to the platform from not only one particular network/location	- Accessible platform from any physical location	Dev-Ops



RECAP



SPRINT 3 - Recap



Orders				
Stock Name	Rate (USD)	Quantity	Time	Status
MS (BUY)	10	2	18:54:0	pending
NVDA (BUY)	10	2	18:35:40	pending
AAPL (BUY)	10	1	18:18:10	pending
AAPL (BUY)	10	1	18:17:47	pending
AAPL (BUY)	10	8	18:16:13	pending
AAPL (BUY)	10	1	18:14:44	pending
AAPL (BUY)	10	2	18:11:14	pending
AAPL (BUY)	10	1	18:11:3	pending

- Able to search real time stock tickers
- Place orders
- Built an exchange to handle trades (buy and sell)
- Able to add (virtual) money to the demo account.
- View stock data for last 180 days
- Learning modules, for a novice investor to learn new market concepts.





PRODUCT BACKLOG



PRODUCT BACKLOG

Sprint	Points	Story ID	Feature	As a	I want	So that
2	13	IV1	Auth	New User	to create an Account	Persist my data and later continue from the same, maintain confidentiality
3	5	IV2	Learning Pathways	Novice Investor	to understand the basic concepts of the market	I can learn module by module for learning about the market analysis
2	1	IV3	Trading Engine	Novice Investor	to set up a Simulated Investment Account	I can access the trading engine offered by the platform
2	5	IV4	Auth	Novice Investor	to be able to access the platform	the platform allows platform to be used a trading platform offered by exchanges
2	5	IV5	Auth	Novice Investor	to be able to update personal profile	I can fine tune, personal data for any offering from the platform
3	2	IV6	Trading Engine	Novice Investor	to search and Research Stocks	I am able to search Stocks, retrieve charts, change the data range of the charts and the candle type
4	13	IV7	AI Chat Bot	Novice Investor	to understand the stock chart pattern	I know what the current market graph pattern is.

Sprint 2



Sprint 3



Sprint 4



Sprint 5



PRODUCT BACKLOG

Sprint	Points	Story ID	Feature	As a	I want	So that
3	2	IV8	Risk Assessment(Research)	Novice Investor	to understand daily risk index	I measure my improvement
3	5	IV9	Trading Engine	Novice Investor	to buy and Sell Stocks in Smaller Quantities	i can learn placing orders in real markets
3	5	IV10	Trading Engine	Novice Investor	to track placed orders	to watch the changing prices, and decide to sell
3	5	IV11	Trading Engine	Novice Investor	to practise unlimited trades	there is no hindrance in my learning journey
5	8	IV12	Stock Analysis	Novice Investor	to backtest Investment Strategies	to learn diverse trading strategies
4	8	IV13	Risk Assessment	Novice Investor	to Analyze Portfolio Risk with Advanced Metrics	to measure my progress and change my strategy in real markets
4	8	IV14	AI Chat Bot	Novice Investor	to get answers for trading questions	to understand why things happen a certain way

Sprint 2



Sprint 3



Sprint 4



Sprint 5





SPRINT SUMMARY



SPRINT 2

User Story Id	User Story	Points	Status
IV1	Create an Account	13	COMPLETE
As a new user, I want all the trades and progress related to me persist for me individually			
IV3	Set Up a Simulated Investment Account	1	COMPLETE
As a registered novice investor, I want to able to start trading and search for stocks			
IV4	Access the platform	5	COMPLETE
As a registered novice investor, I want to able to access learning modules and the risk assessment daily			
IV5	Update personal profile	5	COMPLETE
As a registered novice investor, I want to able to access information specific to me, and be able to change it.			



SPRINT 2 - Burndown

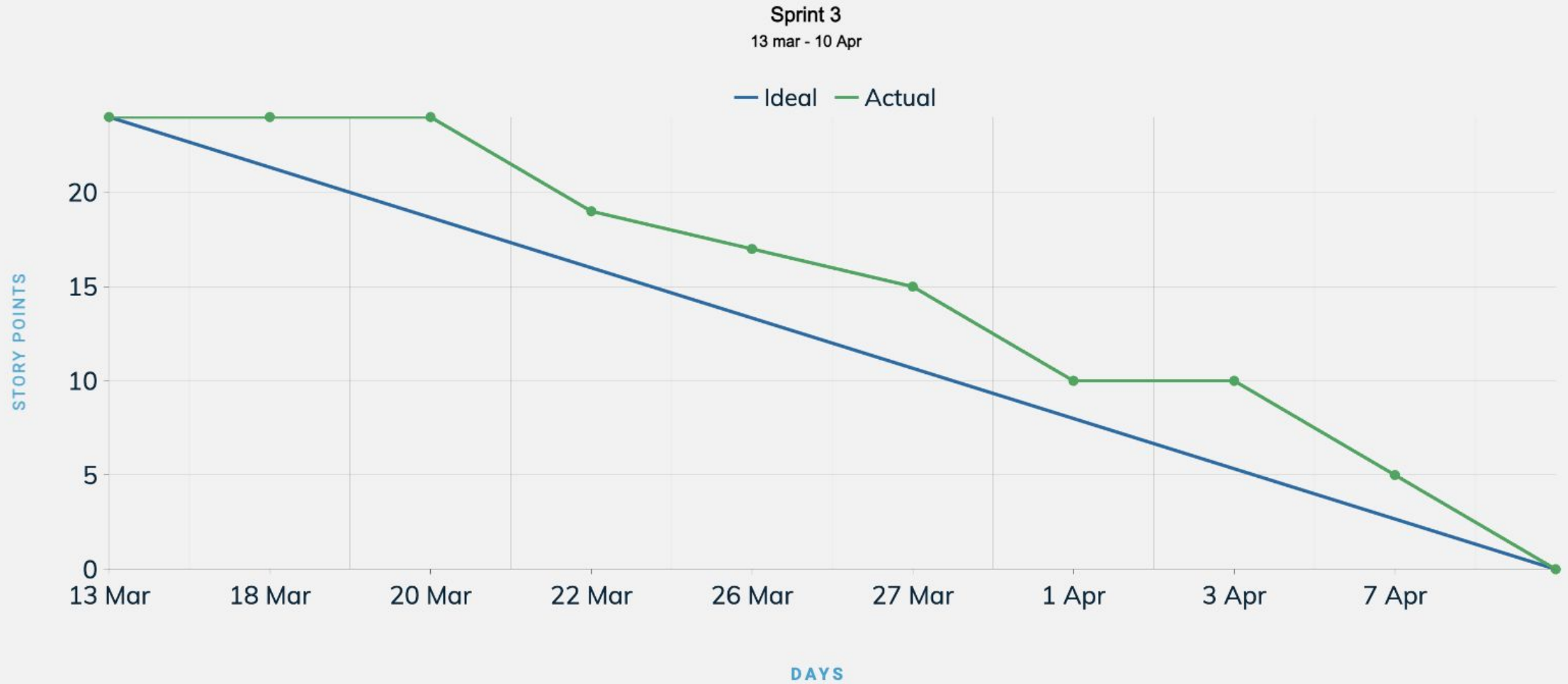


SPRINT 3

User Story Id	User Story	Points	Status
IV2	Understand the basic concepts of the market	5	COMPLETE
As a novice Investor, I want to learn about the basic fundamentals of the stock financial instrument			
IV6	Search and Research Stocks	2	COMPLETE
As a novice Investor, I want to be able to search stocks, and see their past stock data for at least 60 days			
IV8	Understand daily risk index (Research)	2	COMPLETE
As a novice Investor, I want to be able to understand and calculate my daily risk wrt my trading patterns			
IV9	Buy and Sell Stocks in Smaller Quantities	5	COMPLETE
As a novice Investor, I want to place trades both buy and sell orders			
IV10	Track placed orders	5	COMPLETE
As a novice Investor, I want to be able to glance over through my already placed orders			
IV11	Practise unlimited trades	5	COMPLETE
As a novice Investor, I want to never run out of demo currency, and practice unlimited number of times			



SPRINT 3 - Burndown



SPRINT 4 BACKLOG

Estimation	User Story ID	Feature	User Story	Acceptance Criteria	Description
13	IV7	AI Chat Bot	Understand the stock chart pattern	- Platform answers, the current market graph pattern	The user wants to understand the pattern of the currently displayed stock .
8	IV13	Risk Assessment	Analyze Portfolio Risk with Advanced Metrics	- Advanced risk analysis tools with metrics like Value at Risk (VaR) and Monte Carlo simulations. - Access detailed reports and visualizations to understand potential risks associated with portfolio holdings.	The user wants to perform a deeper analysis of their simulated portfolio's risk profile.
8	IV14	AI Chat Bot	Get answers for trading questions	- Platform answers stock market related question	The user wants answers related to stock market as an financial instrument.
8	IV15	Dev-Ops	Access the platform from any location	- Accessible platform from any physical location	The user wants to connect to the platform from not only one particular network/location





TEST CASES



TEST CASES - Sprint 4

Test Case ID	User Story ID	Description	Test Steps	Expected Results	Actual Results	Status
TCIV-8	IV7	User opens a stock chart for a specific company (e.g., Apple). The platform successfully identifies and displays the current chart pattern (e.g., Head and Shoulders).	1. User navigates to the stock chart for a particular company (e.g., Apple).	The platform displays the stock chart and identifies a pattern (e.g., Head and Shoulders) with a visual representation and/or textual label.	The platform displays the stock chart and identifies the expected pattern.	PASS
TCIV-9	IV7	User opens a stock chart with limited data points. The platform displays a message indicating insufficient data to determine a pattern.	1. User navigates to the stock chart for a company with minimal historical data (e.g., newly IPO'd company).	The platform displays the stock chart with a message indicating insufficient data for pattern recognition.	The platform displays the stock chart with the expected message about insufficient data.	FAIL
TCIV-10	IV7	User opens a completely flat stock chart. The platform displays a message indicating no clear pattern detected.	1. User navigates to the stock chart for a company with a flat price movement over a period.	The platform displays the stock chart with a message indicating no clear pattern detected.	The platform displays the stock chart with the expected message about no clear pattern.	PASS



TEST CASES - Sprint 4

Test Case ID	User Story ID	Description	Test Steps	Expected Results	Actual Results	Status
TCIV-11	IV14	User asks the chatbot a question about a specific stock market term (e.g., "What is a P/E Ratio?"). The chatbot provides a clear and accurate definition.	1. User interacts with the chatbot and asks a question about a defined term (e.g., "What is a P/E Ratio?").	The chatbot retrieves and displays a clear and accurate definition of the term (e.g., Price-to-Earnings Ratio).	The chatbot retrieves and displays the expected definition of the term.	Pass
TCIV-12	IV14	User asks the chatbot a question outside its knowledge base (e.g., "What will the stock market do tomorrow?"). The chatbot acknowledges its limitations and offers resources for further research.	1. User interacts with the chatbot and asks a question beyond its knowledge (e.g., "What will the stock market do tomorrow?").	The chatbot acknowledges it cannot predict the future and offers resources for further research (e.g., market news, analyst reports).	The chatbot provides the expected response acknowledging limitations and offering resources.	Pass
TCIV-13	IV14	User asks the chatbot a question with misspelled terminology (e.g., "Whats a PE ratio?"). The chatbot recognizes the misspelling and provides the correct answer (P/E Ratio definition).	1. User interacts with the chatbot and asks a question with a misspelling (e.g., "Whats a PE ratio?").	The chatbot recognizes the misspelling, corrects it internally (e.g., P/E Ratio), and provides a clear definition of the intended term.	The chatbot recognizes the misspelling, corrects it, and delivers the expected definition.	Pass

TEST CASES - Sprint 4

Test Case ID	User Story ID	Description	Test Steps	Expected Results	Actual Results	Status
TCIV-14	IV14	User asks the chatbot a question with an open-ended format (e.g., "Is this stock a good buy?"). The chatbot avoids providing financial advice and directs the user to conduct their own research while offering relevant information (e.g., historical performance, analyst ratings).	1. User interacts with the chatbot and asks an open-ended question about a stock's buying potential.	The chatbot avoids giving financial advice, encourages the user to do their own research, and offers relevant data points (e.g., historical price charts, analyst ratings).	The chatbot provides the expected response, avoiding advice and offering relevant information.	Fail
TCIV-15	IV15	User logs in to the platform from a web browser on a laptop computer. The platform loads successfully.	1. User opens a web browser on a laptop and attempts to log in to the platform.	The platform successfully authenticates the user and displays the main interface.	The platform allows user login and displays the expected interface.	Pass
TCIV-16	IV15	User logs in to the platform from a mobile app on a smartphone using a cellular network connection. The platform loads successfully.	1. User opens the platform's mobile app on a smartphone with a cellular data connection and attempts to log in.	The platform successfully authentic		Pass





SPRINT 4



SPRINT 4 - Stories Complete

User Story Id	User Story	Points	Status
IV7	Understand the stock chart pattern	13	COMPLETE
As a novice Investor, I want to understand the pattern of the currently displayed stock .			
IV14	Get answers for trading questions	8	COMPLETE
As a novice Investor, I want answers related to stock market as an financial instrument.			
IV15	Access the platform from any location	8	COMPLETE
As a novice Investor, I want to connect to the platform from not only one particular network/location			



SPRINT 4 - Stories Not complete

User Story Id	User Story	Points	Status
IV13	Analyze Portfolio Risk with Advanced Metrics	8	INCOMPLETE
As a novice Investor, I want to perform a deeper analysis of their simulated portfolio's risk profile.			

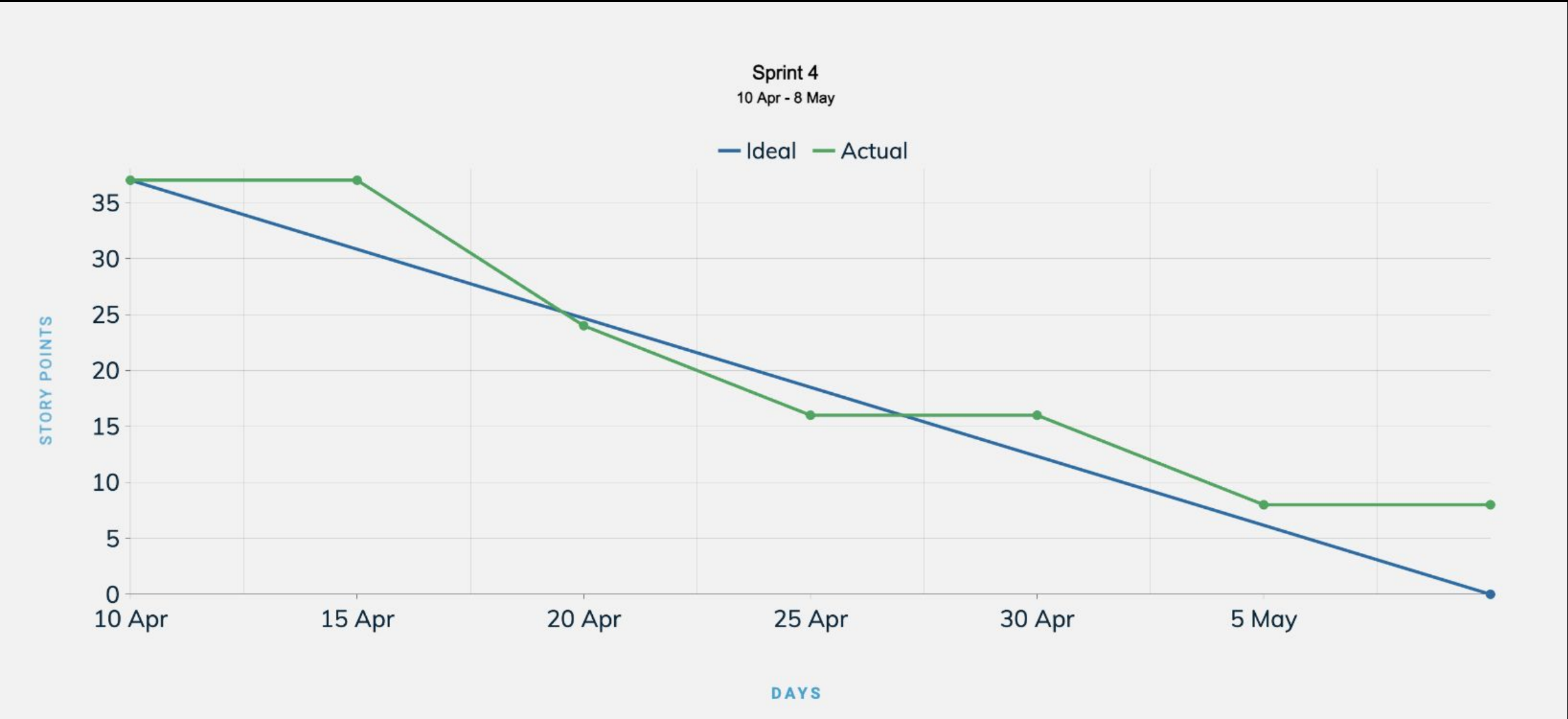




METRICS



SPRINT 4 - Burndown

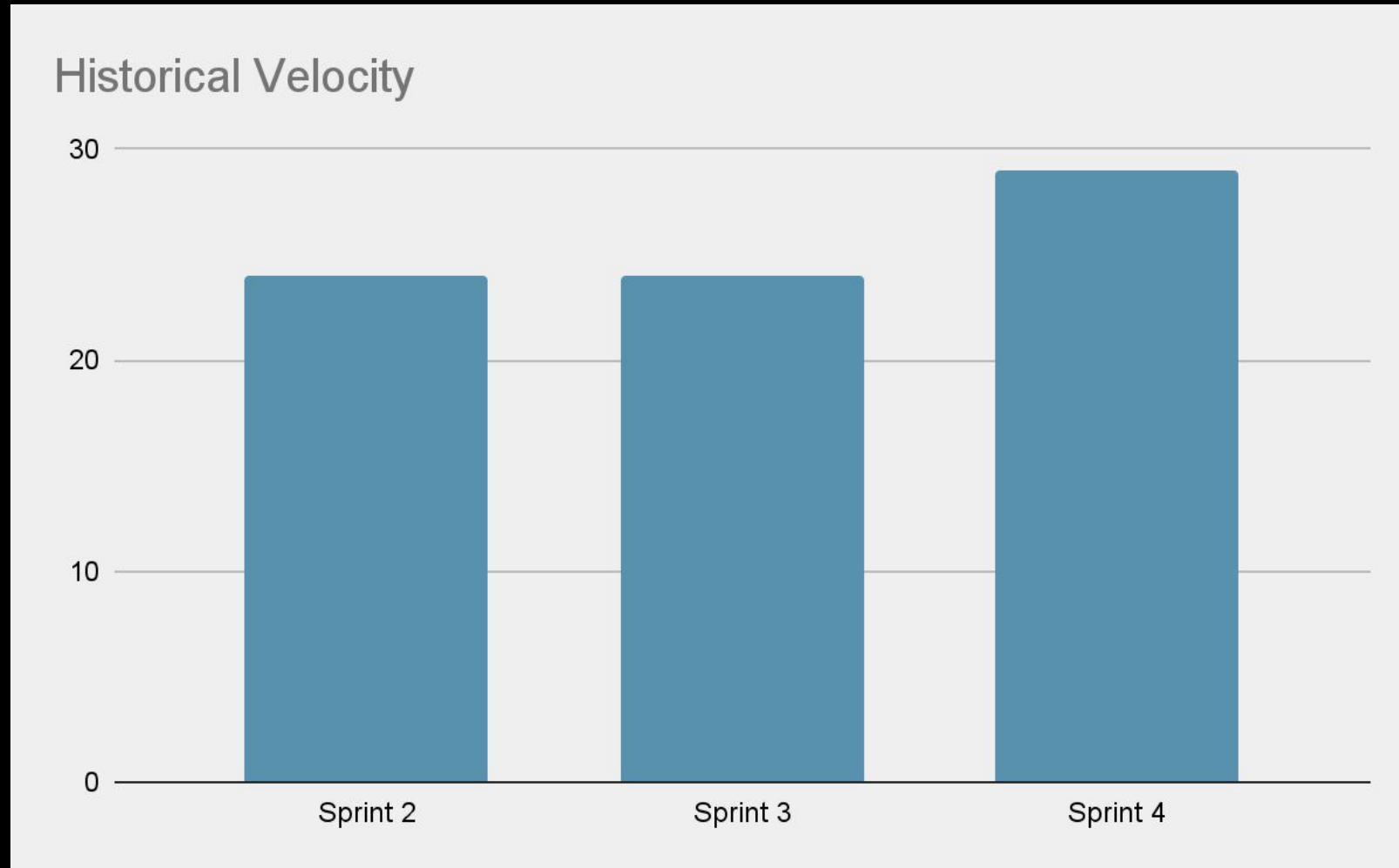


TEAM VELOCITY

- Sprint 2 – 24 story points
- Sprint 3 – 24 story points
- (current) Sprint 4 – 29 story points
- (average) – 25.67 story points
- (historical) – 24 story points



HISTORICAL VELOCITY

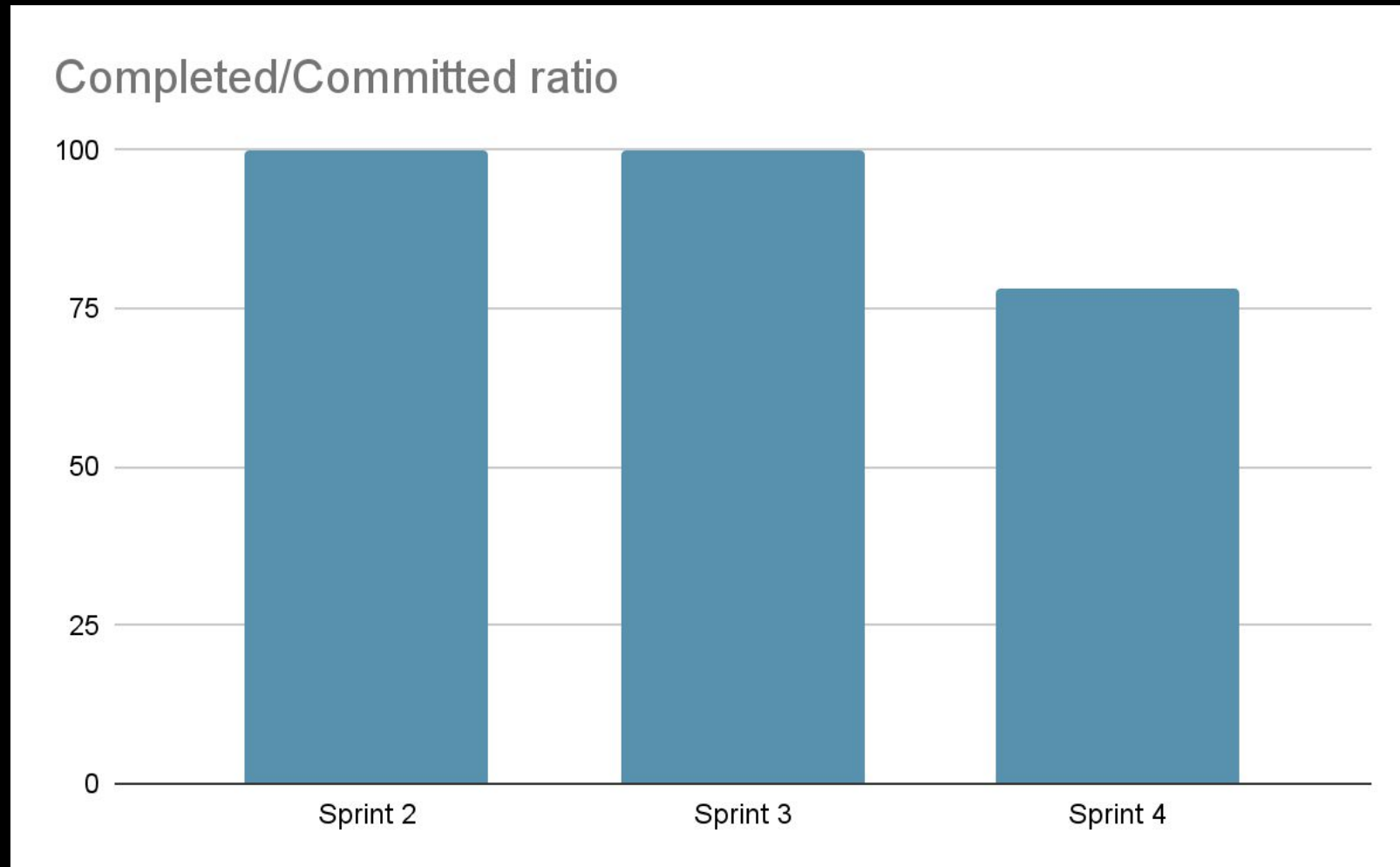


COMPLETED/COMMITTED RATIO

- Sprint 2 – 100%
- Sprint 3 – 100%
- (current) Sprint 4 – **78.3%**
- (average) – **92.76%**
- (historical) – **100%**



HISTORICAL VELOCITY





RETROSPECTIVE



RETROSPECTIVE





PROJECT DEMO SCREENSHOTS



Free and Open

stock market and financial education

Welcome to InvestMate – your ultimate stock market companion! Dive into a world of learning and simulation tailored for young minds aged 18 to 25. Explore real-time market data, practice trading strategies, and master pattern recognition with ease. Join our vibrant community and empower yourself with the knowledge and skills to navigate the financial world confidently. Start your journey with InvestMate today!

[Get started →](#)

Welcome Back to InvestMate

Your gateway to financial empowerment

Sign in to your InvestMate account and continue your journey towards financial empowerment. With InvestMate, you can explore learning modules, analyze stocks, utilize risk management tools, and interact with our AI-powered chatbot to enhance your investment strategies. Join our community of learners and investors today.

Welcome Back!

Sign into your account

Username

ankitmhatre@hotmail.com

Password

Login

[Forget Password ?](#)

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

Unlock Your Investment Potential with InvestMate

Start Your Journey to stock market Mastery

Discover the world of stock market investing with InvestMate. Gain access to comprehensive learning modules, advanced trading strategies, risk management tools, and an AI-powered chatbot designed to enhance your knowledge and guide your investment decisions. Sign up now to unlock a wealth of resources and embark on your path to financial success.

Sign into your account

First Name

Last Name



Email



Birth Date



Password



Sign Up

[Already have an account? Sign In](#)

Free and Open

stock market and financial education

Welcome to InvestMate – your ultimate stock market companion! Dive into a world of learning and simulation tailored for young minds aged 18 to 25. Explore real-time market data, practice trading strategies, and master pattern recognition with ease. Join our vibrant community and empower yourself with the knowledge and skills to navigate the financial world confidently. Start your journey with InvestMate today!

[Get started →](#)

Explore InvestMate



Learn



Stock Simulator



Risk Calculator



Learning Modules

1

Introduction to Stock

5 min read

Discover the essential role of the stock market in securing financial stability. Learn its basics, operations, and intermediaries in this module, providing a comprehensive foundation for beginners venturing into the world of stock trading.

[View module](#)

2

Stock Trading Basics

5 min read

Stock trading basics involve buying and selling shares of companies. Investors aim to profit from price changes. Key terms include stocks, shares, and dividends. Understanding market trends, company fundamentals, and effective risk management is crucial for success.

[View module](#)

3

Managing a Portfolio

5 min read

Effectively managing your stock portfolio involves diversification, risk assessment, and periodic review. Balancing high-risk, high-reward investments with stable assets can mitigate losses. Regularly reassessing your portfolio ensures alignment with financial goals and risk tolerance.

[View module](#)

1

Introduction to Stocks

Quick Links

[The stock market](#)[How does the stock market work](#)[Getting to know the stock exchanges](#)[How to buy and sell stocks](#)[What owning a stock means](#)[What is a penny stock?](#)

Discover the essential role of the stock market in securing financial stability. Learn its basics, operations, and intermediaries in this module, providing a comprehensive foundation for beginners venturing into the world of stock trading.

Understanding the stock market is essential for anyone looking to secure their financial stability and potentially grow their wealth over time. The stock market serves as a crucial component of the global economy, facilitating the buying and selling of securities such as stocks and bonds. By providing a platform for companies to raise capital and investors to participate in ownership, the stock market plays a pivotal role in allocating resources efficiently within the economy.

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\$8530

+800 -635

Hi, Ankit



Search Stock Name..



Chatbot



Analyzing...

Q. What do you think does the current chart depicts?

1) Head and Shoulder

2) Hanging man

Ask..

SEND

Today's Stock History

Stock Name	Rate (USD)	Earn
INFY	1500	-2650 (150%)
IBM	2560	+2650 (10%)
IBM	2560	+3652 (80%)

Future Trade

Avbl Balance 210.800 USDT

Price

USDT

Size

USDT ▾

TP/SL

\$8530

+800 -635

Hi, Ankit



Search Stock Name..



Analyze with AI

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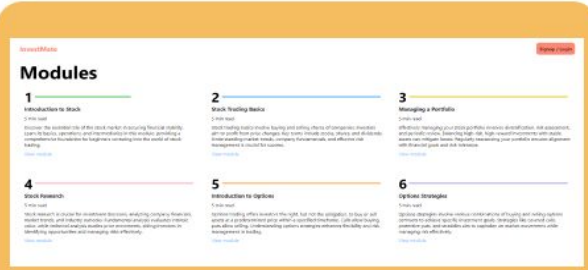
Hammer



Oh Sorry, that was a wrong answer?

Ask..

SEND



Learning Modules



Generate Charts



Minimal UI

Beginner Friendly



Safe



Secure

InvestMate



Pattern
Recognition



Risk Assessment

AI Stock Simulator

AI Powered



Zero Latency Stock Pattern
Predictor



Chat Assistance

IMPORTANT API's

- Yahoo Finance (<https://finance.yahoo.com>)
- Financial Modelling Prep (<https://financialmodelingprep.com>)
- Alphavantage (<https://www.alphavantage.co/>)
- News API (<https://newsapi.org>)
- Apex Charts (<https://apexcharts.com/>)
- Hugging Face (<https://huggingface.co/foduucom/>)
- PyPi.com
- NodeJS (<https://nodejs.org/>)
- Investopedia (<https://www.investopedia.com/>)
- Bootstrap (<https://www.mdbootstrap.com/>)



PROJECT API SCREENSHOTS



POST {{investmate_py_server}}/detect_pattern

Send

Params Authorization Headers (9) Body Scripts Settings

Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL JSON

Beautify

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2   .... "image": "https://dev-nytrr.s3.us-east-1.amazonaws.com/dev/investmate/dfa10dd1-b67c-4eee-b5b2-cfa5167bf0e7.png?
      X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Content-Sha256=UNSIGNED-PAYLOAD&
      X-Amz-Credential=AKIA4MTWI4QQH5SEY6GB%2F20240507%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20240507T000356Z&
      X-Amz-Expires=7200&X-Amz-Signature=4623e6a089a7c026d2b0efabfd2cdab6f2739f7a09da966012ed8717e7fb49&
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3 }
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      "sequence": 0
    },
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        "y2": 349.6815185546875
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      "sequence": 1
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        "x2": 995.52490234375,
        "y1": 67.69462585449219,
        "y2": 186.03182983398438
      },
      "sequence": 2
    }
  ]
}
```

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      "label_index": 5.0
    },
    {
      "label": "W_Bottom",
      "label_index": 5.0
    },
    {
      "label": "Head and shoulders top",
      "label_index": 1.0
    }
  ]
}
```

GITHUB



<https://github.com/htmw/2024S-pace-super-kings>



WIKI

<https://github.com/htmw/2024S-pace-super-kings/wiki>

REFERENCES

- [The Random Forest Model for Analyzing and Forecasting the US Stock Market in the Context of Smart Finance](#)
- [Learning Through Equity Trading Simulation](#)
- [Conducting Financial Risk assessment](#)

**DEMO IN THE
NEXT VIDEO**

THANK YOU
