Project Title: “eBlotter – The trade Management system”

Case:

As Is System:

- **Current State Description:**
  - The client currently relies on the VPM software for trade management.
  - Data inaccuracies and potential financial consequences arise from inexperienced users.

To Be System:

- **Proposed System Description:**
  - Introducing a new, user-friendly eBlotter Trade Management System.
  - Aims to minimize data mishandling risks and enhance user proficiency.
  - Seamless integration with VPM ensures efficient trade transfer and recording.
  - Emphasis on data accuracy, security, and real-time management capabilities.

Document 1- Business case document

1. **Why is this project initiated?**
   - The client is currently using software called VPM, which serves as a repository for all historical and present trade records, including their quantity and positions. At present, trades are being directly booked into the VPM system.
   - The risk of losing or missing real-time data is higher when new users or employees are not proficient with the VPM software. Mishandling by inexperienced users could lead to data loss or incorrect amendments and updates to trade or position data while working on real-time data.
   - The client requires a new separate software solution for entering, booking, and allocating all trades. Instead of directly booking trades in VPM, this new application will allow users to handle trade booking and allocations.
   - This new application will be integrated with VPM, enabling approved trades to be seamlessly sent from the new software to VPM.

2. **What are the current problems?**
   - The client faces a significant risk of data loss or inaccuracies in real-time data due to inexperienced users or employees lacking proficiency with the VPM software.
   - Such mishandling may result in incorrect amendments and updates to trade or position data, leading to potential financial and operational consequences.

3. **With this project how many problems could be solved?**
   - This projects holds potential of solving all the risk and accuracy problems within the trade management system for client.

4. **What are the resources required?**

People	Budget	Time
• Project Manager (from client community) • Business Analyst (ITS) • Software Developer(ITS) • Database Administrator (ITS) • User Training Specialist (ITS) • Quality Assurance Tester (ITS)	• Hardware: Rs. 10,00,000.00 • Software: Rs. 30,00,000.00 • Training: Rs. 5,00,000.00 • Services: Rs. 20,00,000.00 • Total Budget not to exceed Rs. 65,00,000.00	• Implementation to be completed within **6 months**

5. **Organizational change is required to adopt this technology**
    - Training sessions to familiarize users with the new application and its functionalities.
    - Establishing new processes and guidelines for trade booking and allocation using the new software.
    - Ensuring proper communication and support during the transition period to ensure a smooth adoption.

6. **How to identify stakeholders?**
    - Identifying individuals or groups impacted by the project, such as trade managers, IT staff, and end-users.
    - Understanding their interests, concerns, and potential influence on the project's success.
    - Engaging in direct communication with the identified stakeholders to gather feedback and address their needs.
    - Prioritizing stakeholders based on their level of influence and importance in the project's success.

Document 2: BA Strategy

1. **Elicitation Techniques:**
    - **Interviews and workshops** with key stakeholders, including end-users, project manager, IT teams, and other relevant personnel, to gather detailed requirements.
    - **Document analysis** to review existing system documentation, trade processes, and data flows.
    - **Observation techniques** to understand the current trade management practices and identify pain points.

2. **Stakeholder Analysis (RACI/ILS):**
    - Identify all stakeholders involved in the project, including their roles and responsibilities, using RACI (Responsible, Accountable, Consulted, and Informed) matrix.
    - Implement ILS (Information, Location, Support) matrix to understand how stakeholders are connected, where they are located, and their support needs.

3. **Documents to Write:**
    - Prepare a comprehensive **Business Requirements Document (BRD)** that includes all gathered requirements, system functionalities, and user expectations.
    - Create **Functional Requirements Document (FRD)** to outline specific functionalities and features required in the new application.
    - Develop **Use Cases** to describe system interactions and user journeys.
    - Write **Test Plans** and **Test Cases** to ensure thorough testing during the Quality Assurance phase.

4. **Sign-off Process:**

- Share the BRD, FRD, and other relevant documents with stakeholders for review and feedback.
- Incorporate feedback and changes as necessary.
- Obtain formal sign-off from all relevant stakeholders to indicate their approval of the documents and project scope.

5. **Client Approvals and Communication Channels:**
   - Schedule regular meetings with the client and other stakeholders to provide project updates and discuss progress.
   - Use email, video conferencing, and collaboration tools for effective communication.
   - Set up a centralized communication channel to ensure consistent and transparent communication.

6. **Change Request Management:**
   - Establish a change control process to manage and prioritize change requests.
   - Analyze the impact of each change request on the project timeline, budget, and scope.
   - Obtain approval from the appropriate stakeholders before implementing any changes.

7. **Project Progress Updates:**
   - Develop a project dashboard or status report to provide a visual representation of project progress and key milestones.
   - Regularly update stakeholders on project status, risks, and mitigation plans.

8. **UAT - Client Project Acceptance Form:**
   - Work closely with the User Training Specialist to prepare training materials for end-users.
   - Facilitate User Acceptance Testing (UAT) in collaboration with the Quality Assurance Tester.
   - Obtain sign-off from the client on the UAT results using a formal acceptance form to signify their satisfaction with the new application.

Document 3- Functional Specifications

Project name	**Trade Management System**
Customer name	**FinBridge Partners Ltd**
Project Version	**Trade Management System – V1.0**
Project Sponsor	**Mr. John Smith (CFO) FinBridge Partners LTD**
Project Manager	**Mr.Ashutosh Lashkare**
Project Initiation date	**11th May 2023**

Functional Requirement specifications:

Req ID	Requirement name	Requirement Description	Priority
FR0001	User Authentication	Enable users to log in securely with their credentials to access the trade management system.	7
FR0002	Navigation Tabs	Provide four tabs - "Trade Booking," "Trade Approval," "Send to VPM “and” Trade History" - for easy navigation within the system.	9
FR0003	Trade Booking	Allow users to enter trade details in designated fields under the "New Trade" option within the "Trade Booking" tab.	9
FR0004	Trade Approval Workflow	Implement a workflow where booked trades are routed to authorized individuals in the "Trade Approval" tab for review and approval.	7
FR0005	Trade Status Update	Automatically update the trade status from "Waiting for Approval" to "Approved" upon successful approval by authorized users.	7
FR0006	Integration with VPM	Enable seamless integration with the VPM software to transfer approved trades from the "Send to VPM" tab.	8
FR0007	Trade Search Functionality	Allow users to search for past and present trades based on criteria such as Trade Date, Settle Date, Trader Name, and Security Symbol Name.(Any of them)	6
FR0008	Trade Details Display	Display comprehensive trade details and information when a trade is searched and selected by the user.	7

Document 4- Requirement Traceability Matrix(RTM)

Req ID	Req Name	Req description	Design	D1	T1	D2	T2	UAT
FR0001	User Authentication	Enable users to log in securely with their credentials to access the trade management system.	Yes	Yes	Yes	In Progress	No	No
FR0002	Navigation Tabs	Provide four tabs - "Trade Booking," "Trade Approval," "Send to VPM “and” Trade History" - for easy navigation within the system.	Yes	Yes	Yes	Yes	No	No
FR0003	Trade Booking	Allow users to enter trade details in designated fields under the "New Trade" option within the "Trade Booking" tab.	Yes	Yes	Yes	Yes	Yes	In progress
FR0004	Trade Approval Workflow	Implement a workflow where booked trades are routed to authorized individuals in the "Trade Approval" tab for review and approval.	Yes	yes	Yes	Yes	Yes	Yes
FR0005	Trade Status Update	Automatically update the trade status from "Waiting for Approval" to "Approved" upon successful approval by authorized users.	Yes	Yes	Yes	Yes	In progress	No
FR0006	Integration with VPM	Enable seamless integration with the VPM software to transfer approved trades from the "Send to VPM" tab.	Yes	Yes	Yes	In progress	No	No
FR0007	Trade Search Functionality	Allow users to search for past and present trades based on criteria such as Trade Date, Settle Date, Trader Name, and Security Symbol Name (by entering any of them).	Yes	In progress	No	No	No	No
FR0008	Trade Details Display	Display comprehensive trade details and information when a trade is searched and selected by the user.	Yes	In Progress	No	No	No	No

Document 5- BRD Template

Business Requirement Document

Trade Management System - eBlotter

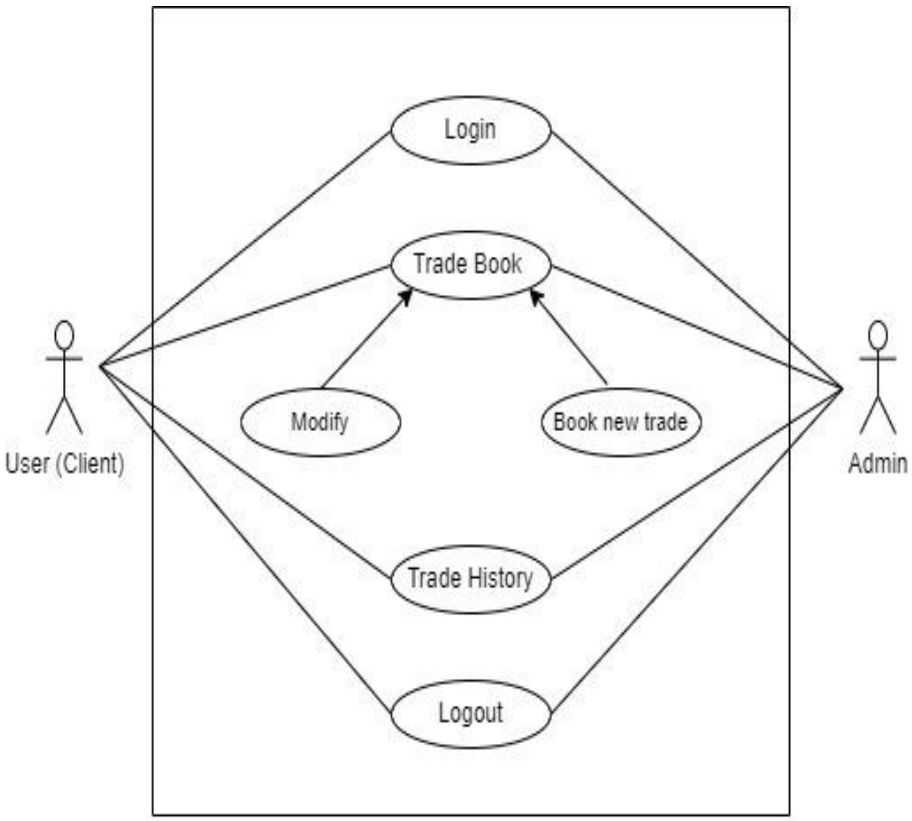
Version: V2.0.30

Last Updated: 26/07/2023

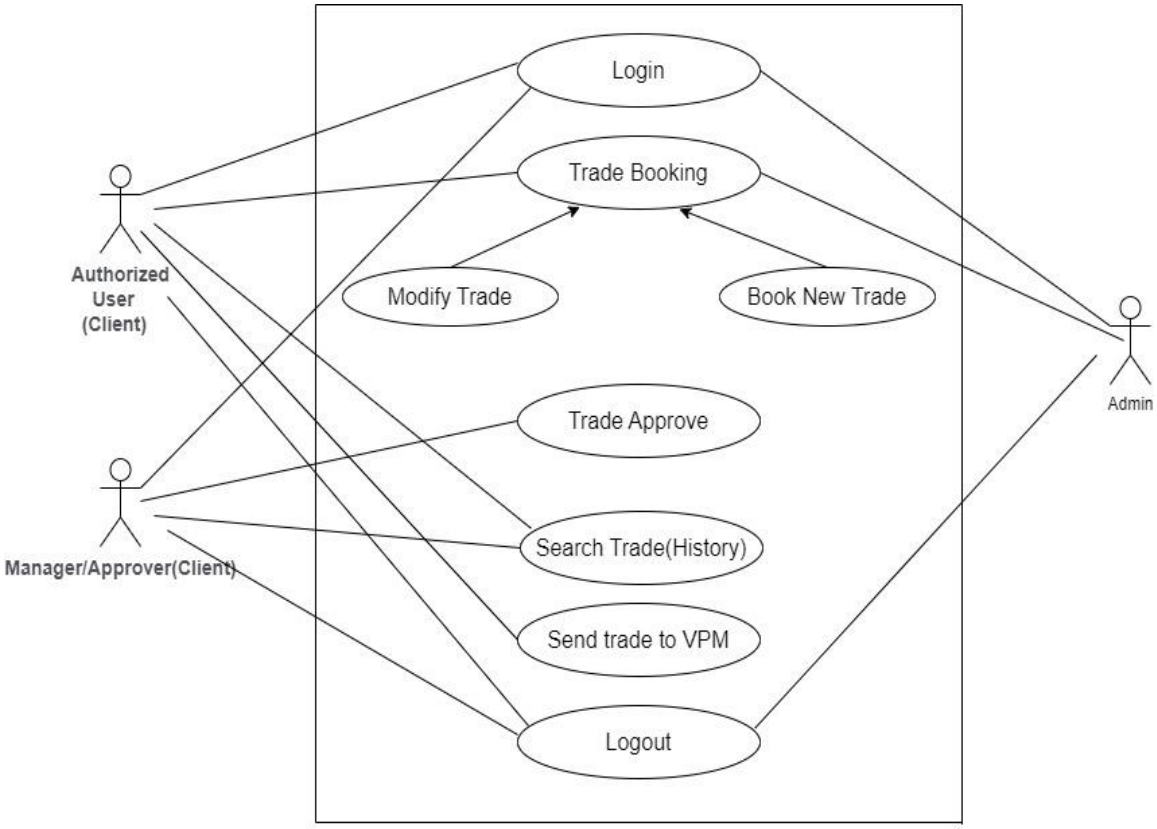
Contents

Use case diagrams

As IS system (VPM): Let's you directly work on the real time database which considered as bad safety habits. Also no approval system is present in the as is system.



To Be System (eBlotter): Can book trades in this application and it will get approved only if they are legitimate. After approval we can post trades directly to the real time data (VPM).



1. Document Revisions

Version	Date	Author	Description
2.0.30	26.7.2023	Ashutosh Lashkare	Initial Draft

2. Approvals

Name	Position	Signature	Date
FinBridge Partners Ltd	Smith Paul (CTO)		
Mr.Sagar Shaikh	Project Manager		
Mr.Ashutosh Lashkare	Business Analyst		

3. RASCI Chart for This Document

Name	Position	Responsible	Accountable	Support	Consulted	Informed
FinBridge Partners Ltd	Smith Paul (CTO)		R	S	C	I
Mr.Sagar Shaikh	Project Manager		A	S	C	I
Mr.Ashutosh Lashkare	Business Analyst	R		S	C	I

Codes Used in RASCI Chart

- R: Responsible
- A: Accountable
- S: Support
- C: Consulted
- I: Informed

2. Introduction

4.1 Business Goals

The primary goal of this project is to address the challenges faced by the client due to data inaccuracies and potential loss resulting from inexperienced users working with the existing VPM software. By developing a new software solution, the project aims to enhance trade management accuracy and reduce the risk associated with data mishandling.

4.2 Business Objectives

- Implement a user-friendly interface to facilitate efficient trade booking and allocation.
- Enable a streamlined trade approval workflow to ensure accurate and timely authorization.
- Integrate the new software seamlessly with the existing VPM system for data synchronization.
- Provide robust search functionality for retrieving past and present trade records.
- Enhance data accuracy and reduce potential financial and operational consequences.

4.3 Business Rules

- Only authorized users will have access to the trade management system.
- Trades must be approved by designated individuals before being sent to VPM.
- Trade status will be automatically updated upon approval.

4.4 Background

The client relies on the VPM software for trade record storage, but data inaccuracies and the risk associated with inexperienced users led to the initiation of this project.

4.5 Project Objective

The objective of this project is to develop new trade management software that addresses the client's challenges, providing a secure, user-friendly platform for trade booking, approval, and integration with the existing VPM system.

4.6 Project Scope

4.6.1 In Scope Functionality

- User authentication and secure login.
- Navigation tabs for easy access to key functionalities.
- Trade booking with required trade details.
- Trade approval workflow.
- Seamless integration with VPM.
- Comprehensive trade search functionality.
- Display of detailed trade information.

4.6.2 Out Scope Functionality

- Integration with external systems beyond VPM.
- Advanced analytics or reporting features.

5. Assumptions

- Adequate availability of client representatives for requirement validation.
- Availability of technical resources for software development.
- Access to historical trade data for testing and integration.
- The project will be executed within the specified budget and timeline.

6. Constraints

- The project budget is set at a maximum of Rs. 65, 00,000.00.
- The implementation period is limited to 6 months.

7. Risks

Technological Risks

- Compatibility issues between the new software and VPM.
- Technical glitches during integration.

Skills Risks

- Shortage of skilled developers for software implementation.

Political Risks

- Resistance from users towards adopting the new software.

Business Risks

- Data inaccuracies persisting despite the new software.

Requirements Risks

- Misinterpretation of requirements leading to incomplete functionalities.

Other Risks

- External market factors affecting project scope and timeline.

8. Business Process Overview

8.1 Legacy System (AS-IS)

The client currently uses the VPM software for trade record storage, leading to challenges with data accuracy and user proficiency.

8.2 Proposed Recommendations (TO-BE)

The proposed trade management software will offer enhanced functionality, accuracy, and user-friendliness, addressing the shortcomings of the existing system.

9. Business Requirements

Outlined in the previous section are the comprehensive business requirements for the new trade management software, including user authentication, navigation tabs, trade booking, approval workflow, integration with VPM, search functionality, and detailed trade information display.

10. Appendices

10.1 List of Acronyms

- VPM: Virtual Portfolio Management
- ITS: Information Technology Services
- BRS: Business Requirement Specification
- SRS: System Requirement Specification
- UAT: User Acceptance Testing

10.2 Glossary of Terms

- Trade Booking: The process of entering trade details into the system.
- Trade Approval: The workflow for reviewing and authorizing trades.
- VPM Software: Virtual Portfolio Management software used by the client.
- User Authentication: The process of verifying user identity for system access.

10.3 Related Documents

- Business Requirement Specification (BRS)
- System Requirement Specification (SRS)
- Project Plan and Timeline

Document 6- Use case specification document

Use case ID	**UC0001**
Use case Name	**Search Trade History**
Use case Description	This use case allows users to search for past and present trades based on various criteria in the Trade Management System.
Actors Primary Actors Secondary actors	Authorized Users
Basic flow	1. Authorized User logs in to the Trade Management System. 2. User navigates to the "Trade History" tab. 3. User enters search criteria, such as Trade Date, Settle Date, Trader Name, or Security Symbol Name. 4. The system retrieves and displays relevant trade records that match the entered criteria.
Alternate flow	If no trades match the search criteria, the system displays a message indicating no results found.
Exceptional flows	If the search criteria are invalid or incomplete, the system prompts the user to provide valid inputs.
Pre- conditions	1. The user is logged into the system. **2.** The user is aware of the trade date/symbol/Settle Date for the trade he is looking for.
Post-conditions	The system displays the search results containing relevant trade records.
Assumptions	The Trade Management System is properly configured with access rights and authentication mechanisms for authorized users.
Constraints	The search functionality should be efficient and capable of handling a large number of trade records.
Dependencies	The availability of the Trade Management System and its connection to the trade database.
Inputs and Outputs	**Inputs:** Search criteria entered by the user (Trade Date, Settle Date, Trader Name, or Security Symbol Name). **Outputs:** The system displays a list of trade records that match the search criteria.
Business rules	1. Only authorized users can access the "Trade History" tab and perform trade searches. **2.** The Trade Management System should adhere to the specified search criteria to fetch relevant trade records.
Miscellaneous information	The Trade Management System may provide additional options for refining the search results, such as sorting or filtering based on trade attributes.

Use case ID	**UC0002**
Use case Name	**Update Trade Details**
Use case Description	This use case enables authorized users to modify trade details in the Trade Management System.
Actors Primary Actors Secondary actors	Authorized Users
Basic flow	1. Authorized User logs in to the Trade Management System. 2. User navigates to the "Trade Booking" tab. 3. User searches for the trade to be updated using trade details. 4. User selects the trade to update. 5. User edits the required trade details, such as Trade Date, Settle Date, or Quantity. 6. User saves the changes.
Alternate flow	If the user decides not to update any trade details after selecting a trade, the system retains the original trade details.
Exceptional flows	If the selected trade is not editable (e.g., already approved or processed), the system displays a message indicating that the trade cannot be modified.
Pre- conditions	1. The user must be authenticated and have appropriate permissions to update trade details. 2. The Trade Management System should be operational and connected to the database.
Post-conditions	The Trade Management System updates and saves the modified trade details.
Assumptions	The Trade Management System has a well-defined authentication and authorization mechanism to ensure that only authorized users can update trade details.
Constraints	Users can only update trade details for trades that are in a pending or editable status.
Dependencies	The availability of the Trade Management System and its connection to the trade database.
Inputs and Outputs	**Inputs:** Trade details to be updated (Trade Date, Settle Date, Quantity, etc.) **Outputs:** The system confirms the successful update of trade details.
Business rules	Users can only modify trade details for trades that have not yet been approved or processed. The Trade Management System should validate and enforce data integrity rules while accepting updated trade details.
Miscellaneous information	The Trade Management System may provide an audit trail or log of trade detail updates for tracking and compliance purposes.

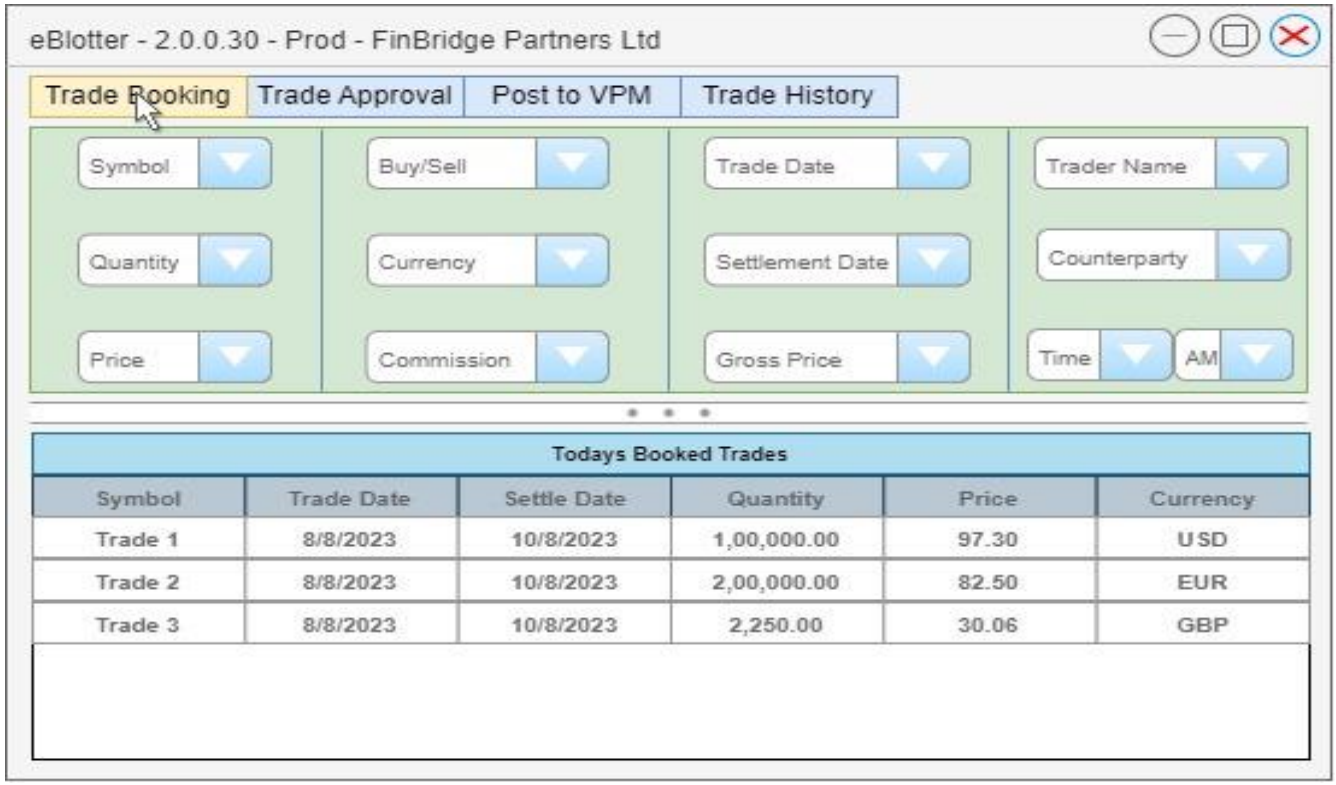
Use case ID	**UC0003**
Use case Name	**Approve Trade**
Use case Description	This use case allows authorized individuals to review and approve trades in the Trade Management System.
Actors Primary Actors Secondary actors	Authorized Users
Basic flow	1. Authorized User logs in to the Trade Management System. 2. User navigates to the "Trade Approval" tab. 3. User views a list of trades pending approval with their details. 4. User selects a trade for review. 5. User reviews the trade details and verifies its accuracy. 6. User approves the trade by selecting the "Approve" option.
Alternate flow	If the user decides not to approve the selected trade, they can choose not to take any action, and the trade status remains as "Waiting for Approval."
Exceptional flows	If the selected trade is not ready for approval (e.g., incomplete trade details), the system displays a message indicating that the trade cannot be approved until all required information is provided.
Pre- conditions	1. The user must be authenticated and have appropriate permissions to approve trades. 2. The Trade Management System should be operational and connected to the database.
Post-conditions	The Trade Management System updates the status of the approved trade to "Approved."
Assumptions	1. The Trade Management System has a well-defined approval workflow for trade processing. 2. Only authorized individuals have access to the "Trade Approval" tab and the ability to approve trades.
Constraints	Users can only approve trades that are in a pending approval status.
Dependencies	The availability of the Trade Management System and its connection to the trade database.
Inputs and Outputs	**Inputs:** User's approval decision for the selected trade. **Outputs:** The system confirms the successful approval of the trade.
Business rules	Trades can only be approved by authorized individuals with the appropriate permissions. The Trade Management System should enforce data integrity rules to prevent approval of trades with incomplete or incorrect information.
Miscellaneous information	The Trade Management System may record the date and time of trade approvals for auditing and tracking purposes.

Use case ID	**UC0004**
Use case Name	**Trade Booking**
Use case Description	This use case enables authorized users to book new trades in the Trade Management System.
Actors Primary Actors Secondary actors	Authorized Users
Basic flow	1. Authorized User logs in to the Trade Management System. 2. User navigates to the "Trade Booking" tab. 3. User selects the "New Trade" option. 4. User enters the trade details in the respective fields, such as Trade Date, Date, Trader Name, Security Symbol Name, and Quantity. 5. User verifies the entered trade details for accuracy. 6. User submits the new trade for booking.
Alternate flow	If the user decides not to proceed with booking a new trade after selecting the "New Trade" option, the system returns the user to the "Trade Booking" tab.
Exceptional flows	If the user attempts to submit a new trade without providing mandatory trade details, the system displays an error message and prompts the user to complete all required fields.
Pre- conditions	The user must be authenticated and have appropriate permissions to book trades. The Trade Management System should be operational and connected to the database.
Post-conditions	The Trade Management System saves the new trade with the provided details.
Assumptions	The Trade Management System has a well-defined data validation process to ensure the accuracy of entered trade details.
Constraints	Users can only book new trades with valid and complete trade information
Dependencies	The availability of the Trade Management System and its connection to the trade database.
Inputs and Outputs	**Inputs:** Trade details entered by the user (Trade Date, Settle Date, Trader Name, Security Symbol Name, Quantity etc.) **Outputs:** Confirmation of successful trade booking.
Business rules	Only authorized users with appropriate permissions can book new trades. The Trade Management System should enforce data integrity rules to prevent the submission of incomplete or incorrect trade details.
Miscellaneous information	The Trade Management System may generate a unique trade ID for each new trade booked for tracking and reference purposes.

Document7- Screens and pages

1. **Login Page**

2. **Trade Booking Screen**



3. Trade Search history Screen

4. Post to VPM Screen

Document 8- Tools-Visio and Axure

During the project, I utilized both Visio and Axure extensively to support various aspects of the development process.

Visio, with its powerful diagramming capabilities, proved to be an invaluable tool for creating process flowcharts, data flow diagrams, and system architecture visuals. It enabled me to effectively communicate complex concepts and relationships to stakeholders and team members, ensuring a shared understanding of project requirements and design.

Axure served as a robust prototyping tool, allowing me to create interactive wireframes and mockups that simulated the user interface and user interactions of the new software application. This greatly facilitated the iterative design process and elicited valuable feedback from users during usability testing sessions. Both Visio and Axure played instrumental roles in the success of the project, aiding in clear communication, efficient design iterations, and ultimately delivering a user-friendly and functional trade management solution to the client.

Document 9- BA experience

My experience as BA in following phases:

1. **Requirement Gathering:**
    - Employed the MOSCOW technique to prioritize requirements based on their criticality.
    - Recognized that client availability could pose a challenge during this phase, prompting the need to establish alternative points of contact for information retrieval.
    - Employed FURPS technique to validate requirements and promptly eliminated duplicated or redundant ones.
    - Utilized prototyping to refine and specify requirements further.

2. **Requirement Analysis:**
    - Developed UML diagrams for a visual representation of requirements.
    - Employed activity diagrams to illustrate the process flow, enabling effective communication with the team.
    - Facilitated open discussions with the team to address disagreements or modifications and ensure consensus on requirements.
    - Compiled Business and System Requirement Specifications (BRS and SRS) for comprehensive documentation.

3. **Design:**
    - Translated use case diagrams into test cases, addressing both positive and negative scenarios.
    - Engaged in consistent communication with the client to validate design and solution documents.
    - Ensured that all test cases were thoroughly prepared, as any omission could have far-reaching impacts on project development.
    - Meticulously prepared test data to facilitate testing processes.
    - Maintained and updated the Requirements Traceability Matrix (RTM) to track adherence to requirements.

4. **Development:**
    - Conducted Joint Application Design (JAD) sessions to foster collaboration and garner insights from stakeholders.
    - Addressed technical queries from the development team, bridging the gap between business requirements and technical implementation.
    - Tackled challenges such as team members resisting certain concepts or showing a lack of cooperation during JAD sessions. Handled such situations delicately and provided personalized explanations of their impact on the project.
    - Utilized the UML diagrams as reference points during the coding phase.
    - Managed the logistical complexity of coordinating regular meetings involving both the technical team and the client, ensuring seamless communication and sharing of insights**.**

5. **Testing:**
    - Derived comprehensive test cases from the established use cases, encompassing various scenarios.
    - Executed high-level testing to ensure that major functionalities were operating as expected.
    - Coordinated with the client to obtain relevant test data for accurate testing procedures.
    - Continued to update the RTM, serving as a critical document in tracking requirement fulfillment.
    - Secured client signoff and prepared them for the User Acceptance Testing (UAT) phase.

6. **Deployment:**
    - Integrated the RTM into the project closure document for transparent accountability.
    - Orchestrated the completion and distribution of user manuals to facilitate user adoption.
    - Led the planning and execution of training sessions, ensuring all stakeholders were well-prepared and engaged.

By meticulously following this well-defined roadmap, we have confidently navigated through each phase of the project using the waterfall model, leading us towards a successful implementation of the new trade management system.